A PROJECT REPORT SUBMITTED IN FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF BACHLOR IN COMPUTER APPLICATION (VOCATIONAL COURSE) BY BIHAR UNIVERSITY

A

Project

(based on BCA 601)

On

Educational website

Submitted To

B. R. A. Bihar University

In partial fulfillment of the Requirement of

BACHELOR OF COMPUTER APPLICATION

Session : 2020-2023

Submitted by

Our team :

CodeCraftMath

Under the guidance of

Prof. Prabhat Kumar

Team : CodeCraftMath

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CERTIFICATE

The report of the Project titled "**Educational Website** " for Laxmi Narayan Dubey. College submitted by **AMISHA KUMARI (Roll No: -214160)**, **AISHA GUPTA (Roll No : -214161) , TRISHNA KUMARI (Roll No: -214162) , KAJAL GUPTA (Roll No: - 214167)** of BCA 6th Semester of 2023 has been prepared under the supervision of Prof. prabhat Kumar for the partial fulfillment of the requirements for BCA degree in Laxmi Narayan Dubey College, Motihari .

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Signature

ACKNOWLEDGEMENT

We would like to express our sincere gratitude to Asst. Prof. Prabhat Kumar, Department of Computer Application of Laxmi Narayan Dubey College whose role as project guide was invaluable for the project.
We are extremely thankful for the keen interest he took in advising us, for the books and reference materials provided for the moral support extended to us. I am also indebted to our Head of the Department (BCA), Asst. Prof. prabhat Kumar for his unconditional help and inspiration.

Date: -…….

Submitted by

KAJAL GUPTA(Roll No: -214167),
AISHA GUPTA(Roll No.:- 214161),
TRISHNA GUPTA(Roll No.:-214162),
AMISHA KUMARI(Roll No:-214160),

CERTIFICATE OF ACCEPTANCE

The report of the Project titled "**Educational Website** " for Laxmi Narayan Dubey College submitted by **AMISHA KUMARI (Roll No: -214160)**, **AISHA GUPTA (Roll No : -214161) , TRISHNA KUMARI (Roll No: -214162) , KAJAL GUPTA (Roll No: - 214167)** of BCA 6th Semester of 2023 is hereby recommended to be accepted for the partial fulfilment of the requirements for BCA degree in Laxmi Narayan Dubey college Motihari.

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Signature

Contents

Abstract

This project introduces an innovative and all-encompassing education website tailored for Bachelor of Computer Applications (BCA) students. Focused on addressing the challenges associated with mastering both mathematical concepts and diverse programming languages, our platform serves as a comprehensive learning resource.

The primary objective of the website is to provide a centralized hub for BCA students, offering extensive coverage of the BCA syllabus alongside in-depth tutorials and practical exercises on various programming languages. Recognizing the pivotal role of mathematics in computer science education, our platform places special emphasis on simplifying complex mathematical concepts, making them accessible and engaging for learners.

Key features of the project include a structured curriculum that aligns with BCA requirements, interactive modules for mathematical problem-solving, and a diverse array of programming language tutorials. The platform aims to foster a holistic learning experience, seamlessly integrating theoretical knowledge with practical programming skills.

Through an intuitive and user-friendly interface, our website encourages active student engagement, promoting self-paced learning and facilitating a deeper understanding of both mathematical principles and programming languages. The project seeks to enhance the overall educational experience for BCA students, providing a reliable and accessible resource to support their academic journey.

In conclusion, this project represents a significant contribution to the field of online education, offering a specialized platform that uniquely addresses the needs of BCA students. By combining comprehensive coverage of the BCA syllabus with an emphasis on mathematics and programming proficiency, our education portal strives to empower learners and contribute to the advancement of computer science education.

Introduction

Our Education Website Project is developed By Kajal Gupta, Aisha Gupta, Amisha Kumari and Trishna Gupta .

This project to address this challenge through the creation of a comprehensive education portal designed specifically for BCA students. Our platform is meticulously crafted to serve as a one-stop solution, offering an immersive learning experience that seamlessly integrates the intricacies of the BCA syllabus with a special focus on mathematics and programming proficiency.

The significance of mathematics in computer science education cannot be overstated. Understanding mathematical principles not only forms the foundation for various algorithms and computational processes but also sharpens critical thinking and problem-solving skills. In parallel, mastering diverse programming languages is essential for BCA students to navigate the dynamic landscape of information technology.

Our education website is strategically structured to cater to these fundamental aspects of BCA education. We have meticulously curated a comprehensive curriculum that not only aligns with academic requirements but also goes beyond, providing students with practical insights and real-world applications. The platform incorporates interactive modules dedicated to simplifying complex mathematical concepts and tutorials covering a spectrum of programming languages, ensuring a well-rounded educational experience.

Through an intuitive and user-friendly interface, our project aims to empower BCA students with the tools and resources necessary to excel in their academic pursuits. By fostering a dynamic learning environment that encourages self-paced exploration and hands-on practice, our education portal seeks to bridge the gap between theoretical knowledge and practical application.

As we embark on this journey to enhance the educational landscape for BCA students, we are committed to contributing to the development of well-rounded professionals who not only grasp the theoretical underpinnings of their field but also possess the practical skills demanded by the ever-evolving IT industry. This project represents a significant stride towards creating a holistic and accessible learning platform, propelling BCA students towards success in their academic and professional endeavour.

Requirements

Two Major Requirement of Our Website are: -

- Platform
- Internet

Platform

Platforms create networks (versus products or services). They are ecosystems that enable and support the exchange of information, content, or products between two interdependent groups, typically producers and consumers. The concept of platforms isn't new. In fact, platforms are practically as old as civilization itself — dating back to the marketplaces and bazaars of Ancient Rome. In more recent years, shopping malls and auction houses have taken over this brick-and-mortar representation.

Platform business models grow faster and scale better. Platforms that follow the platform business model can grow or scale rapidly because they don't own the resources that create the value, i.e., the applications, content, service providers, or products. Our website is fully Platform Independent, platform independent means it can run without the help of any platforms or software. HTML codes are usually used in making website, which is now the best source for information and internet marketing.

Platform independence in software means that you can run the same code with little or no modification on multiple platforms.

It depends on what you define as "the platform". In some cases, this may be a specific hardware machine configuration. In other cases, it may be a "generic PC". In other cases, it may be a virtual machine and run time environment (which is the case with Java).

Nothing is "perfectly" platform-independent - there are always a few corner cases that can catch you out. For example, if you hard code file path separators rather than using the platform-independent File. path Separator in HTML then your code won't work on both Windows and Linux. As a programmer, you need to watch out for these things, always using the platform-independent option where possible and test properly on different platforms if you care about portability.

There are always some constraints on specific platforms that cannot be ignored. Examples are things like the maximum length of filenames or the available RAM on a system. No matter how much you try to be platform-independent, your code may fail if you try to run it on a platform that is too tightly constrained.

It's important to note that some languages are platform-independent at the source code level (C/C++ is a good example) but lose platform independence once the code is compiled (since native code is platform-specific). Java retains platform independence even after code is compiled because it compiles to platform-independent bytecode (the actual conversion to native code is handled at a later time after the bytecode is loaded by the JVM).

There are occasional bugs in language implementations that only occur on certain platforms. So even if your code is theoretically 100% portable, you still need to test it on different platforms to make sure you aren't running into any unusual bugs!

Internet

The Internet is a virtual networking medium that can be connected and used on various devices. It enables the users to send, receive, collect, store, update, delete, and more. Internet usage is expanding its boundaries every day. A few of the Internet's major uses are e-commerce, e-learning, knowledge sharing, social connectivity, etc. So, in this topic, we are going to learn about what are the uses of internet.

The Internet is the global system of interconnected computer networks that uses the Internet protocol suite (TCP/IP), to communicate between networks and devices. It is a network of networks that consists of private, public, academic, business, and government networks of local to global scope, linked by a broad array of electronic, wireless, and optical networking technologies. The Internet carries a vast range of information resources and services, such as the interlinked hypertext documents and applications of the World Wide Web (WWW), electronic mail, telephony, and file sharing.

Every website on the internet is built with a specific purpose or goal. The organizations and businesses through their websites, aim to provide information and services to their members and customers. Websites also have become a medium of entertainment like playing online games, watching movies, listening to music, and so on..

System planning (SDLC)

For the development of an educational website, considering the dynamic nature of educational content and potential changes in requirements, an **Agile or Iterative model** would be suitable. These models allow for flexibility, continuous feedback, and the ability to adapt to evolving needs. Agile, in particular, is well-suited for projects where there is a need for regular releases and continuous improvement based on user feedback.

However, the choice depends on the specific context of your project, team capabilities, and how well you can engage stakeholders throughout the development process. It may also be beneficial to incorporate elements of iterative development within an Agile framework to strike a balance between flexibility and structured progress.

why Agile is a beneficial approach for creating an educational platform:

1. **Adaptability to Changing Requirements:**
   - Educational content can evolve based on curriculum changes or pedagogical advancements. Agile's iterative cycles allow the development team to easily adapt to changing requirements, ensuring that the educational website remains up-to-date and aligned with educational standards.
2. **Frequent Stakeholder Collaboration:**
   - Agile emphasizes continuous collaboration with stakeholders, including educators, administrators, and students. Regular feedback loops ensure that the development team stays aligned with the educational goals and user expectations, resulting in a platform that better meets the needs of its users.
3. **User-Centric Design and Continuous Improvement:**
   - Agile's focus on user stories and regular releases enables a user-centric design approach. Features can be prioritized based on their impact on the end-users, allowing for continuous improvement through frequent iterations.

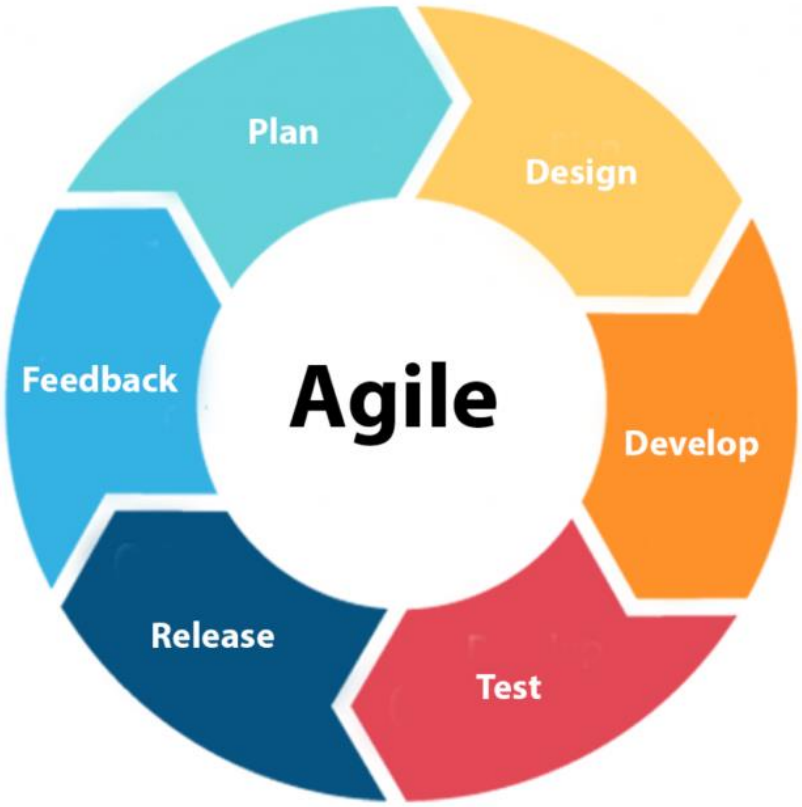
This ensures that the educational website is not only functional but also user-friendly and engaging.

4. **Rapid Prototyping and Early User Involvement:**
    - Agile encourages the development of minimal viable products (MVPs) in early iterations. This allows for rapid prototyping and early user involvement, enabling stakeholders to visualize and interact with the educational platform early in the development process. This early feedback loop helps in refining features and functionalities.

5. **Efficient Resource Utilization:**
    - Agile's incremental and modular approach enables the efficient use of resources. Development efforts can be prioritized based on the most valuable features, and the team can focus on delivering high-priority items in each iteration. This results in a more streamlined development process.

6. **Mitigation of Risks through Regular Reviews:**
    - Agile's emphasis on regular reviews and retrospectives allows the team to identify and mitigate risks early in the development process. This is crucial for an educational website where the accuracy of content and adherence to curriculum standards are paramount.

7. **Timely Response to Emerging Trends:**
    - The field of education is dynamic, with emerging trends and technologies. Agile allows for the incorporation of these trends in a timely manner. The development team can respond quickly to changes in educational methodologies or the introduction of new technologies, keeping the educational website at the forefront of innovation.



6 Stages of the Agile Development Life Cycle

1. Planning (Requirement gathering)
2. Design (design the requirement)
3. Development (construction/iteration)
4. Test
5. Release (Deployment)
6. Feedback

1. Requirements gathering (planning): In this phase, we must define the requirements. During the first step of the agile software development life cycle, the team scopes out and prioritizes projects. Some teams may work on more than one project at the same time depending on the department's organization we should explain business opportunities and plan the time and effort needed to build the project. Based on this information, we can evaluate technical and economic feasibility.

2. Design the requirements: When we have identified the project, work with stakeholders to define requirements. we can use the user flow diagram or the high-level UML diagram to show the work of new features and show how it will apply to your existing system.

3. Construction/ iteration: When the team defines the requirements, the work begins. Designers and developers start working on their project, which aims to deploy a working product. The product will undergo various stages of improvement, so it includes simple, minimal functionality.

4. Testing: In this phase, the Quality Assurance team examines the product's performance and looks for the bug.

5. Deployment: In this phase, the team issues a product for the user's work environment.

6. Feedback: After releasing the product, the last step is feedback. In this, the team receives feedback about the product and works through the feedback.

Agile software development sprint planning

Within the agile SDLC, work is divided into sprints, with the goal of producing a working product at the end of each sprint. A sprint typically lasts two weeks, or 10 business days. The workflow of a sprint should follow this basic outline:

Plan : The sprint begins with a sprint planning meeting, where team members come together to lay out components for the upcoming round of work. The product manager prioritizes work from a backlog of tasks to assign the team.

Develop: Design and develop the product in accordance with the approved guidelines. Test/QA. Complete thorough testing and documentation of results before delivery.

Deliver: Present the working product or software to stakeholders and customers. Assess. Solicit feedback from the customer and stakeholders and gather information to incorporate into the next sprint

In addition to sprint planning meetings, your team should gather for daily meetings to check in and touch base on the progress, hash out any conflicts, and work to keep the process moving forward.

Remain flexible and open to changes, too. After all, this methodology is called “agile” for a reason.

Bottom line: The goal of the agile software development life cycle is to create and deliver working software as soon as possible

Agile methodology has several benefits that make it a popular choice for software development projects. Here are some of them:

Facilitates and prioritizes decision-making: Agile methodology helps developers make correct decisions and understand which decisions are more critical. Boosts

productivity and collaboration: - Agile projects are split up into sprints, which helps developers focus on specific tasks and goals.

Reduces risks: - Agile methodology allows developers to identify issues early on in the project, which reduces risks.

Prevents surprises: - Agile methodology allows developers to adapt to changes in requirements and priorities. Agile methodology allows developers to test and refine their work throughout the development process, which results in better product quality

Technology Used

Front-end Design:

These three tools dominate web development. Every library or tool seems to be centred around HTML, CSS, and JS. So if we want to become a web developer, we need to learn them well.

We will also discover that websites are mostly built from these three languages.

But we are probably wondering what each one is and what it's really used for. What makes these languages so special and important? And what makes them so ubiquitous that you can't help but see them in every tutorial and topic based on web development?

Well, now you need wonder no more.

In this article, I will explain the basics of what HTML, CSS, and JavaScript are, how they make the Web work, and what they do on their own.

HTML, CSS, Bootstrap Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript, it forms a triad of cornerstone technologies for the World Wide Web. Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages.

HTML describes the structure of a web page semantically and originally included cues for the appearance of the document. Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language like HTML.CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .CSS file, and reduce complexity and repetition in the structural content. Bootstrap is a free and open-source front-end library for designing websites and web applications. It contains HTML- and CSS-based design templates for typography, forms, buttons, navigation and other interface components, as well as optional JavaScript extensions. Unlike many web frameworks, it concerns itself with front-end development only.

Client-side validation: JavaScript, jQuery Java Script often abbreviated as JS, is a high-level, interpreted programming language. It is a language which is also characterized as dynamic, weakly typed, prototype-based and multi-paradigm. Alongside HTML and CSS, JavaScript is one of the three core technologies of the World Wide Web. JavaScript enables interactive web pages and thus is an essential part of web applications. The vast majority of websites use it, and all major web browsers have a dedicated JavaScript engine to execute it.

Database: MySQL, MySQL is an open-source relational database management system. For proprietary use, several paid editions are available, and offer additional functionality.

Web Server: Apache the Apache HTTP Server, colloquially called Apache, is a free and open-source, cross-platform web server, released under the terms of Apache License Apache is developed and maintained by an open community of developers under the auspices of the Apache Software Foundation. The Apache HTTP Server is crossplatform; as of 1 June 2017 92% of Apache HTTPS Server copies run on Linux distributions. Version 2.0 improved support for non-Unix operating systems such as Windows and OS/2. Old versions of Apache were ported to run on OpenVMS and NetWare

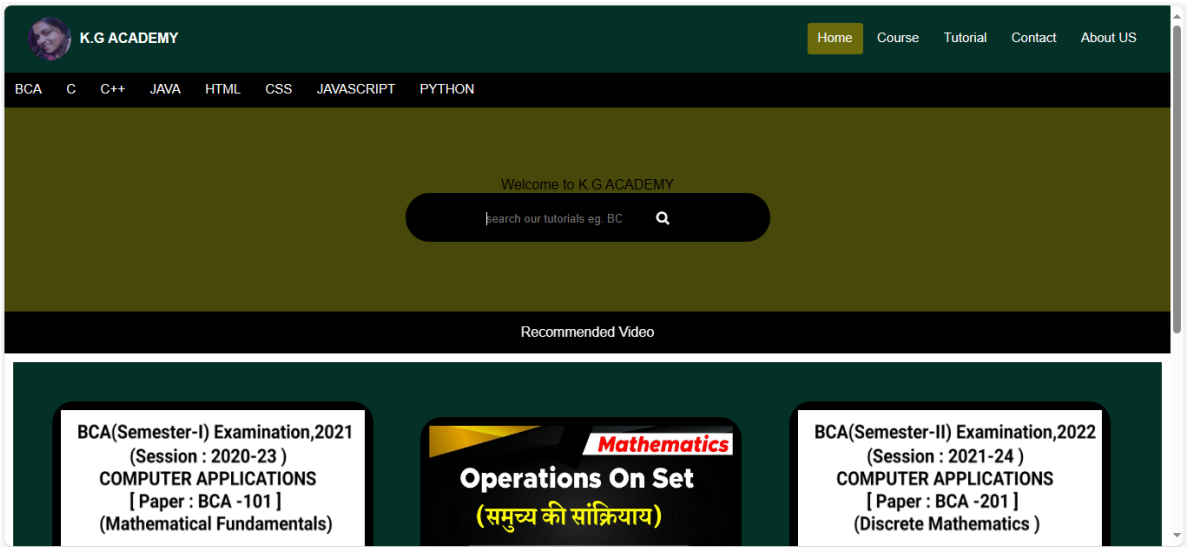
Source Code with ScreenShort

Home Page of our website :

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>WEBSITE</title>
    <link rel="stylesheet" href="kg.css">
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>


</head>

<body>
    <nav class="sticky">
        <div class="logo">
            <img src="logo.jpg" width="50" height="50px">
        </div>
        <div class="channel"> <b>K.G ACADEMY</b> </div>
        <div class="nav-links">

            <ul>
                <li class="active"><a href="kg.html">Home</a></li>
                <li><a href="course.html">Course</a></li>
                <li><a href="tutorial.html">Tutorial</a></li>
                <li><a href="contact.html">Contact</a></li>
                <li><a href="aboutus.html">About US</a></li>
            </ul>
        </div>
</nav>

    <div class="menu">
        <ul>
            <li><a href="bca.html">BCA</a></li>
            <li><a href="c.html">C</a></li>
            <li><a href="cPlus.html">C++</a></li>
            <li><a href="java.html">JAVA</a></li>
            <li><a href="htmlp.html">HTML</a></li>
            <li><a href="cssp.html">CSS</a></li>
            <li><a href="javascriptp.html">JAVASCRIPT</a></li>
            <li><a href="python.html">PYTHON</a></li>
        </ul>
    </div>
```

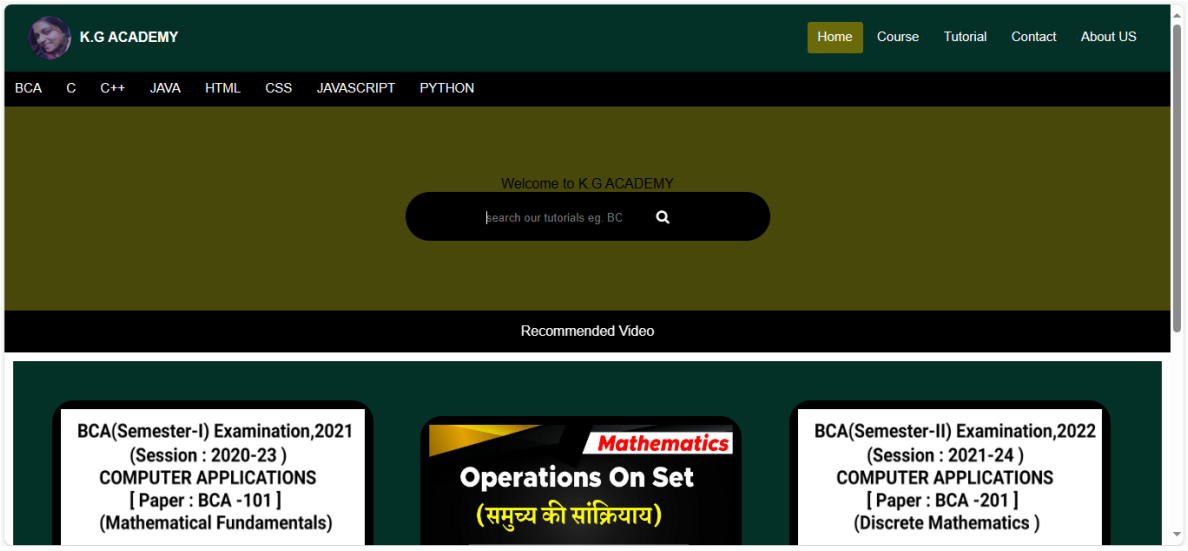
```
<div class="heading"> Welcome to K.G ACADEMY
        <div class="search-container">
            <div class="search-box">
                <input type="search" id="input-box" class="input-search"
placeholder="search our tutorials eg. BCA PYQ.... " autocomplete="off">
                <a href=""><i class="fa fa-search  icon-search"></i></a>
            </div>
            <div class="result-box">
            </div>
        </div>
    </div>
    <div>
        <div class="recommended"> Recommended Video</div>
        <div class="video-container">
            <div class="Videoes" id="Video1">
                <img src="thumbnail2.jpg" width="350" height="216" alt="img">
                <div class="text">
                    <p>In this video, we delve into the solutions of the first
semester mathematics question paper of
                        BRAB University. <br> </p>
                    <br>
                    <button class="button"><a href="recommendedvideo1.html"><b>START
Watching</b></a></button>
                </div>
            </div>
            <div class="Videoes " id="Video2">
                <img src="thumbnail.jpg" width="350" height="216" alt="img">
                <div class="text">
                    <p>In this video, we delve into the operation on set with using
VENN DIAGRAM. <br> </p>
                    <br>
                    <button class="button"><a href="recommendedvideo2.html"><b>START
Watching ! </b></a>
                    </button>

                </div>
            </div>
            <div class="Videoes" id="Video3">
                <img src="thumbnail1.jpg" width="350" height="216" alt="img">
                <div class="text">
                    <p>In this video, we delve into the solutions of the second
semester mathematics question paper of
                        BRAB University. <br> </p>
                    <br>
                    <button class="button"><a href="recommendedvideo3.html"><b>START
Watching ! </b></a>
                    </button>
                </div>
            </div>
        </div>
    </div>
```

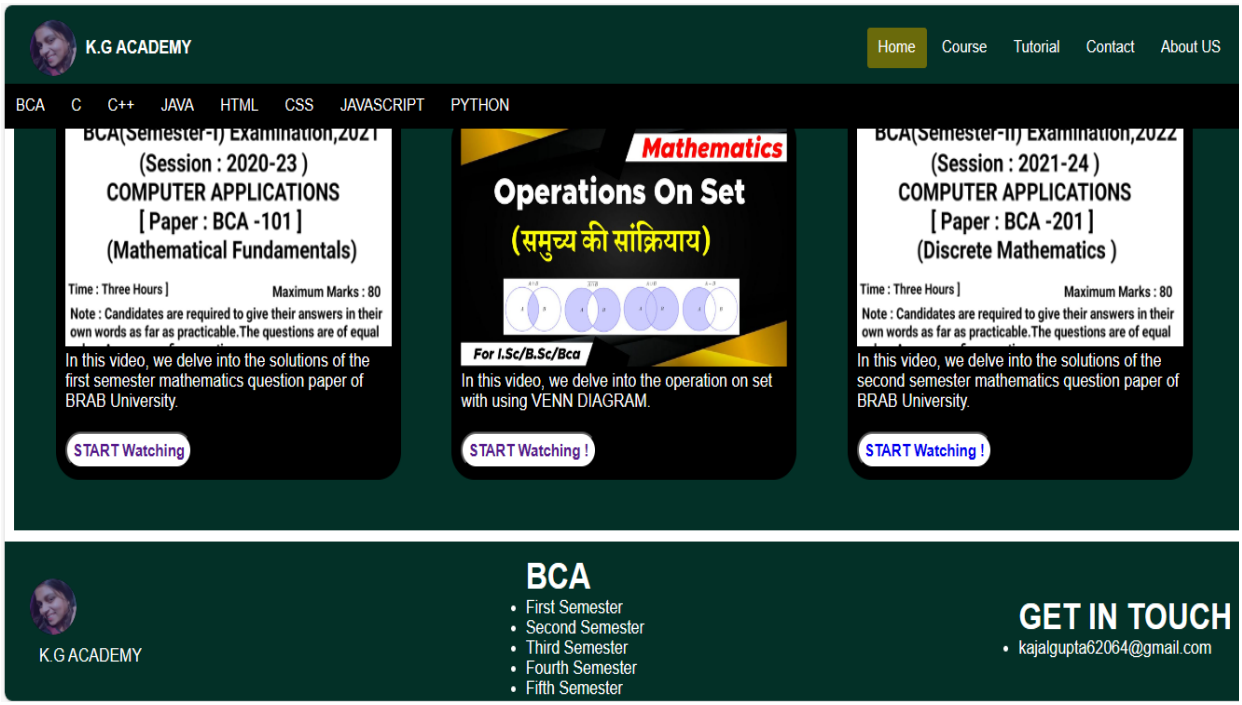
```
<!--footer part-->
    <footer class="footer">
        <div class="footer-container">
            <div class="column1">
                <div class="logo">
                    <img src="logo.jpg" width="50" height="50px">
                </div>
                <div class="channel">K.G ACADEMY</div>
            </div>
            <div class="column2">
                <h1>BCA </h1>
                <ul>
                    <li><a href="firstSemester.html">First Semester</a></li>
                    <li><a href="secondSemester.html">Second Semester</a></li>
                    <li><a href="thirdSemester.html">Third Semester</a></li>
                    <li><a href="fourthSemester.html">Fourth Semester</a></li>
                    <li><a href="fifthSemester.html">Fifth Semester</a></li>
                </ul>
            </div>
            <div class="column3">
                <h1>GET IN TOUCH</h1>
                <ul>
                    <li>kajalgupta62064@gmail.com</li>
                </ul>
            </div>
        </div>
    </footer>
    <script>
        src="kg.js"
    </script>
</body>

</html>
```



Home Tab :

Home page is the first look of our website when any user come in our website, they can see home page first, home page consists some another tab and one search bar and some video .





Course Tab :

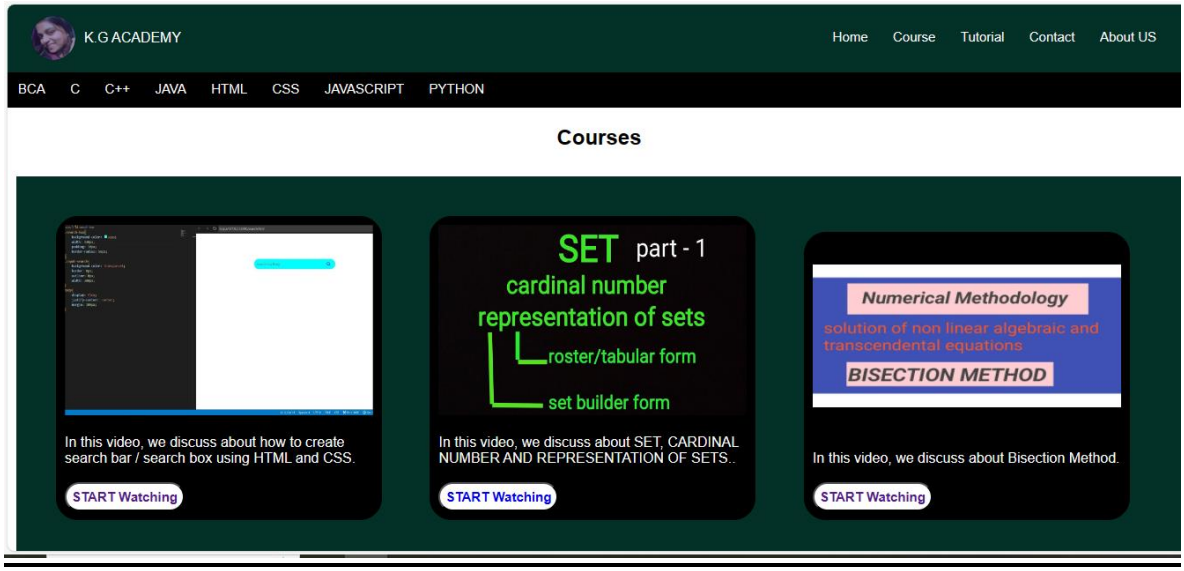
Course tab include all the video solutions of previous year questions of BCA course and some project .

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>WEBSITE</title>
    <link rel="stylesheet" href="kg.css">
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>


</head>

<body>
    <nav class="sticky">
        <div class="logo">
            <img src="logo.jpg" width="50" height="50px">
        </div>
        <div class="channel">K.G ACADEMY</div>
        <div class="nav-links">

            <ul>
                <li><a href="kg.html">Home</a></li>
                <li><a href="course.html">Course</a></li>
                <li><a href="tutorial.html">Tutorial</a></li>
                <li><a href="contact.html">Contact</a></li>
                <li><a href="aboutus.html">About US</a></li>
            </ul>
        </div>

    </nav>

    <div class="menu">
        <ul>
            <li><a href="bca.html">BCA</a></li>
            <li><a href="c.html">C</a></li>
            <li><a href="cPlus.html">C++</a></li>
            <li><a href="java.html">JAVA</a></li>
```

```
            <li><a href="htmlp.html">HTML</a></li>
            <li><a href="cssp.html">CSS</a></li>
            <li><a href="javascriptp.html">JAVASCRIPT</a></li>
            <li><a href="python.html">PYTHON</a></li>
        </ul>
    </div>
    <div class="coursepage">
        <h2>Courses</h2>
    </div>
    <div class="video-container">
        <div class="Videoes" id="Video1">
            <img src="searchbarproject.jpg" width="350" height="216"
alt="img">
            <div class="text"><br>
                <p>In this video, we discuss about how to create search bar /
search box using HTML and CSS. <br> </p>
                <br>
                <button class="button"><a href="searchbox.html"><b>START
Watching</b></a></button>
            </div>
        </div>
        <div class="Videoes" id="Video1">
            <img src="set.jpg" width="350" height="216" alt="img">
            <div class="text"><br>
                <p>In this video, we discuss about SET, CARDINAL NUMBER AND
REPRESENTATION OF SETS.. <br> </p>
            <br>
                <button class="button"><a href="set.html"><b>START
Watching</b></a></button>
            </div>
        </div>
        <div class="Videoes" id="Video1">
            <img src="numerical Methodology.jpg" width="350" height="216"
alt="img">
            <div class="text"><br>
                <p>In this video, we discuss about Bisection Method. <br> </p>
            <br>
                <button class="button"><a
href="numericalmethodology.html"><b>START Watching</b></a></button>
            </div>
        </div>
    </div>
    <footer class="footer">
        <div class="footer-container">
            <div class="column1">
                <div class="logo">
                    <img src="logo.jpg" width="50" height="50px">
                </div>
```

```
            <div class="channel">K.G ACADEMY</div>
        </div>
        <div class="column2">
            <h1>BCA PYQ</h1>
            <ul>
                <li><a href="firstSemester.html">First Semester</a></li>
                <li><a href="secondSemester.html">Second Semester</a></li>
                <li><a href="thirdSemester.html">Third Semester</a></li>
                <li><a href="fourthSemester.html">Fourth Semester</a></li>
                <li><a href="fifthSemester.html">Fifth Semester</a></li>
            </ul>
        </div>
        <div class="column3">
            <h1>GET IN TOUCH</h1>
            <ul>
                <li>kajalgupta62064@gmail.com</li>
            </ul>
        </div>
    </div>
</footer>
</body>

</html>
```

Screenshot of course tab



Tutorial Tab :

Explore our Tutorial Tab, your comprehensive repository of BCA semester notes. Designed exclusively for BCA students, this hub offers a centralized location for accessing all semester notes, simplifying your academic journey. Whether you're revising for exams or seeking additional resources, our thoughtfully curated content ensures that every BCA student can access the semester notes they need, fostering a streamlined and efficient learning experience. Dive into a wealth of knowledge, organized by semester, and empower your studies with easily accessible, expertly compiled BCA course materials—all in one convenient location."

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>WEBSITE</title>
    <link rel="stylesheet" href="kg.css">
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>


</head>

<body>
    <nav class="sticky">
        <div class="logo">
            <img src="logo.jpg" width="50" height="50px">
        </div>
        <div class="channel">K.G ACADEMY</div>
        <div class="nav-links">

            <ul>
                <li><a href="kg.html">Home</a></li>
                <li><a href="course.html">Course</a></li>
                <li><a href="tutorial.html">Tutorial</a></li>
                <li><a href="contact.html">Contact</a></li>
                <li><a href="aboutus.html">About US</a></li>
            </ul>
        </div>
```

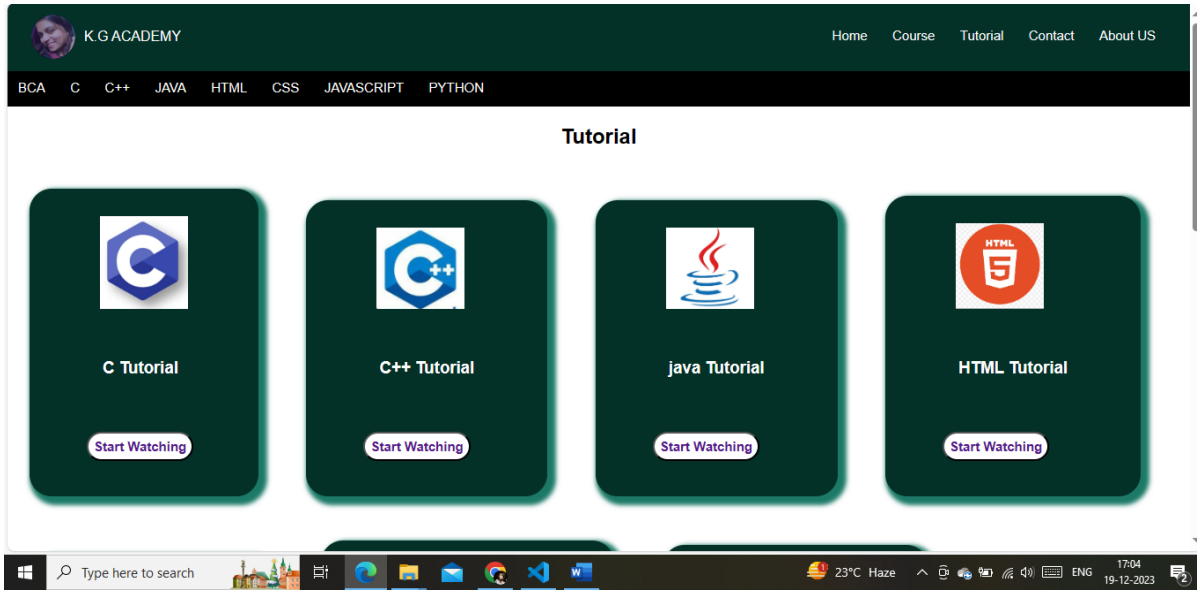
```
    </nav>

    <div class="menu">
        <ul>
            <li><a href="bca.html">BCA</a></li>
            <li><a href="c.html">C</a></li>
            <li><a href="cPlus.html">C++</a></li>
            <li><a href="java.html">JAVA</a></li>
            <li><a href="htmlp.html">HTML</a></li>
            <li><a href="cssp.html">CSS</a></li>
            <li><a href="javascriptp.html">JAVASCRIPT</a></li>
            <li><a href="python.html">PYTHON</a></li>
        </ul>
    </div>
    <div class="coursepage">
        <h2>Tutorial</h2>
    </div>
    <div class="tutorialContainer">
        <div class="coursebox">
            <img src="c logo.jpeg" width="100px" alt="">
        </div>
        <div class="coursename">
            <h3>C Tutorial </h3>
        </div>
        <div class="coursebutton">
            <button class="button"><a href="c.html"><b>Start
Watching</b></a></button>
        </div>

    </div>

    <div class="tutorialContainer">
        <div class="coursebox">
            <img src="cplus logo.jpeg" width="100px" alt="">
        </div>
        <div class="coursename">
            <h3>C++ Tutorial </h3>
        </div>
        <div class="coursebutton">
            <button class="button"><a href="cPlus.html"><b>Start
Watching</b></a></button>
        </div>

    </div>


    <div class="tutorialContainer">
        <div class="coursebox">
```

```
            <img src="javalogo.jpeg" width="100px" alt="">
        </div>
        <div class="coursename">
            <h3>java Tutorial </h3>
        </div>
        <div class="coursebutton">
            <button class="button"><a href="java.html"><b>Start
Watching</b></a></button>
        </div>

    </div>
    <div class="tutorialContainer">
        <div class="coursebox">
            <img src="html logo.jpeg" width="100px" alt="">
        </div>
        <div class="coursename">
            <h3>HTML Tutorial </h3>
        </div>
        <div class="coursebutton">
            <button class="button"><a href="htmlp.html"><b>Start
Watching</b></a></button>
        </div>

    </div>
    <div class="tutorialContainer">
        <div class="coursebox">
            <img src="css logo.jpeg" width="100px" alt="">
        </div>
        <div class="coursename">
            <h3>CSS Tutorial </h3>
        </div>
        <div class="coursebutton">
            <button class="button"><a href="cssp.html"><b>Start
Watching</b></a></button>
        </div>

    </div>
    <div class="tutorialContainer">
        <div class="coursebox">
            <img src="js logo.jpeg" width="100px" alt="">
        </div>
        <div class="coursename">
            <h3>JavaScript Tutorial </h3>
        </div>
        <div class="coursebutton">
            <button class="button"><a href="javascriptp.html"><b>Start
Watching</b></a></button>
        </div>
```

```
    </div>

    <div class="tutorialContainer">
        <div class="coursebox">
            <img src="python logo.jpeg" width="100px" alt="">
        </div>
        <div class="coursename">
            <h3>Python Tutorial </h3>
        </div>
        <div class="coursebutton">
            <button class="button"><a href="python.html"><b>Start
Watching</b></a></button>
        </div>
    </div>

    <div class="tutorialContainer">
        <div class="coursebox">
            <img src="bca logo.jpeg" width="100px" alt="">
        </div>
        <div class="coursename">
            <h3>BCA Tutorial </h3>
        </div>
        <div class="coursebutton">
            <button class="button"><a href="bc.html"><b>Start
Watching</b></a></button>
        </div>

    </div>
    <footer class="footer">
        <div class="footer-container">
            <div class="column1">
                <div class="logo">
                    <img src="logo.jpg" width="50" height="50px">
                </div>
                <div class="channel">K.G ACADEMY</div>
            </div>
            <div class="column2">
                <h1>BCA PYQ</h1>
                <ul>
                    <li><a href="firstSemester.html">First Semester</a></li>
                    <li><a href="secondSemester.html">Second Semester</a></li>
                    <li><a href="thirdSemester.html">Third Semester</a></li>
                    <li><a href="fourthSemester.html">Fourth Semester</a></li>
                    <li><a href="fifthSemester.html">Fifth Semester</a></li>
                </ul>
            </div>
            <div class="column3">
```

```
                <h1>GET IN TOUCH</h1>
                <ul>
                    <li>kajalgupta62064@gmail.com</li>
                </ul>
            </div>
        </div>
    </footer>
</body>

</html>
```

Screenshot of Tutorial tab of our website



Contact Tab :

There are linkedin, github ,telegram links in the contact tab through which you can connect with us.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>WEBSITE</title>
    <link rel="stylesheet" href="kg.css">
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
<link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
</head>
<body>
    <nav class="sticky">
        <div class="logo">
        <img src="logo.jpg" width="50" height="50px"  >
        </div>
        <div class="channel">K.G ACADEMY</div>
        <div class="nav-links">

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                <li><a href="tutorial.html">Tutorial</a></li>
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                <li><a href="aboutus.html">About US</a></li>
            </ul>
        </div>

    </nav>

    <div class="menu">
        <ul>
            <li><a href="bca.html">BCA</a></li>
            <li><a href="c.html">C</a></li>
            <li><a href="cPlus.html">C++</a></li>
            <li><a href="java.html">JAVA</a></li>
            <li><a href="htmlp.html">HTML</a></li>
            <li><a href="cssp.html">CSS</a></li>
            <li><a href="javascriptp.html">JAVASCRIPT</a></li>
            <li><a href="python.html">PYTHON</a></li>
```

```
        </ul>
    </div>
    <div class="contactContainer">
        <div class="contact">
           <center><h3>Feel Free To Contact Me ! </h3>
            <img src="logo.jpg" width="200px" height="200px" class="contactus"
>
            <div class="contactlink">

                <a href="https://www.linkedin.com/in/kgacademy">
                <img src="linkedin.jpg" height="50px" width="50px" alt=""
></a>

                <a href="http://github.com/1guptakajal">
                <img src="github.jpg" height="50px" alt="" style="margin-left:
30px;margin-right: 30px;">
            </a>

            <a href="https://t.me/mathbykg">
                <img src="telegram.jpeg" height="50px" alt="" >
            </a>


            </div>
         </center>
            </div>
    </div>

    <footer class="footer">
        <div class="footer-container">
            <div class="column1">
                <div class="logo">
                    <img src="logo.jpg" width="50px" height="50px">
                </div>
                <div class="channel">K.G ACADEMY</div>
            </div>
            <div class="column2">
                <h1>BCA PYQ</h1>
                <ul>
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                    <li><a href="thirdSemester.html">Third Semester</a></li>
                    <li><a href="fourthSemester.html">Fourth Semester</a></li>
                    <li><a href="fifthSemester.html">Fifth Semester</a></li>
                </ul>
            </div>
            <div class="column3">
                <h1>GET IN TOUCH</h1>
```
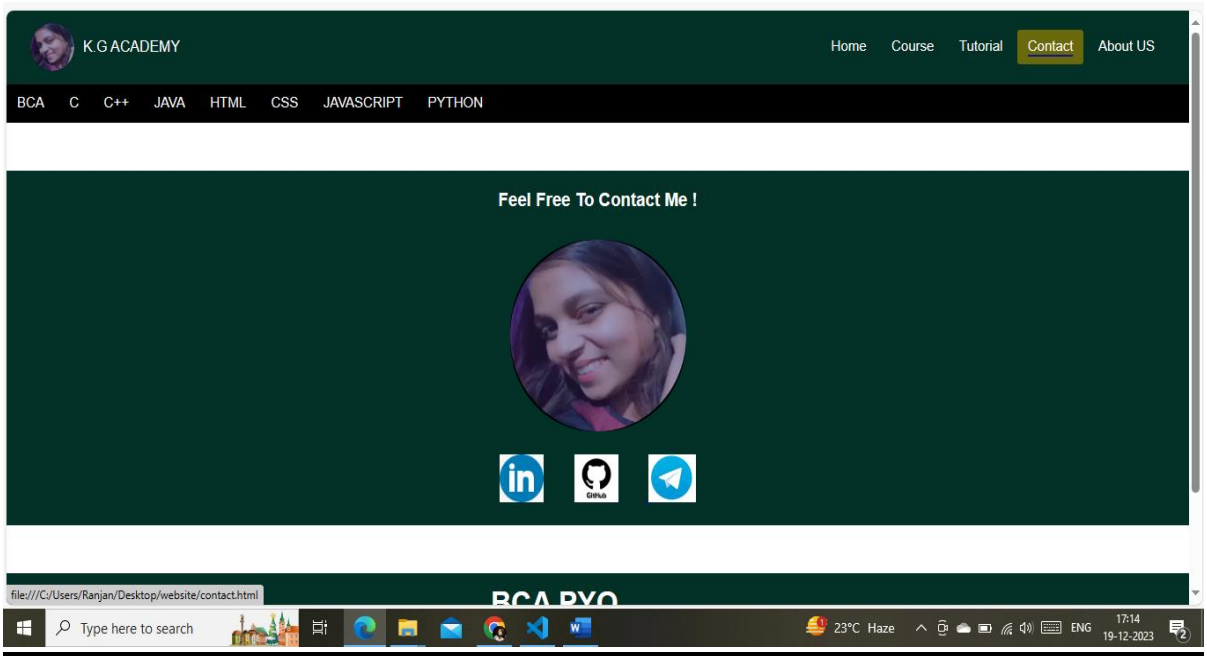

```
                <ul>
                    <li>kajalgupta62064@gmail.com</li>
                </ul>
            </div>
        </div>
    </footer>
</body>
</html>
```

Screenshot of Contact tab of our website



BCA Tab :

Welcome to our dedicated BCA tab, your gateway to a structured and organized learning experience for Bachelor of Computer Applications students. Within the BCA tab, discover a seamlessly navigable interface featuring distinct tabs for each of the six semesters. Each tab serves as a portal to a treasure trove of knowledge, neatly categorized by semester. Dive into specific topics by clicking on the relevant tab, effortlessly accessing comprehensive resources tailored to your academic journey.

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
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    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
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    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>


</head>

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    <nav class="sticky">
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        </div>
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        <div class="nav-links">

            <ul>
                <li><a href="kg.html">Home</a></li>
                <li><a href="course.html">Course</a></li>
                <li><a href="tutorial.html">Tutorial</a></li>
                <li><a href="contact.html">Contact</a></li>
                <li><a href="aboutus.html">About US</a></li>
            </ul>
        </div>

    </nav>

    <div class="menu">
        <ul>
            <li><a href="bca.html">BCA</a></li>
            <li><a href="c.html">C</a></li>
            <li><a href="cPlus.html">C++</a></li>
            <li><a href="java.html">JAVA</a></li>
            <li><a href="htmlp.html">HTML</a></li>
            <li><a href="cssp.html">CSS</a></li>
            <li><a href="javascriptp.html">JAVASCRIPT</a></li>
            <li><a href="python.html">PYTHON</a></li>
        </ul>
    </div>
    <div class="bcacontent">
        <div class="sidebar">
```

```
            <header>
                <h2>BCA </h2>
                <h5>(BRAB University)</h5>
            </header>
            <div class="BCA1"> <b>FIRST SEMESTER </b>
                <UL>
                    <li><a href="bca.html">MATHEMATICAL FOUNDATION</a></li>
                    <li><a href="computerfundamental.html">COMPUTER
FUNDAMENTALS</a></li>
                    <li><a href="businesscommunication.html">BUSINESS
COMMUNICATION & INFORMATION</a></li>
                    <li><a href="c.html">C PROGRAMMING</a></li>
                    <li><a href="labondos.html">LAB ON DOS & WINDOWS</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>SECOND SEMESTER</b>
                <UL>
                    <li><a href="discrete.html">DISCRETE MATHEMATICS</a></li>
                    <li><a href="computer.html">COMPUTER ARCHITECTURE</a></li>
                    <li><a href="datastructure.html">DATA STRUCTURE THROUGH
C</a></li>
                    <li><a href="systemanalysis.html">SYSTEM ANALYSIS AND
DESIGN</a></li>
                </UL>
            </div>

            <div class="BCA1"> <b>THIRD SEMESTER</b>
                <UL>
                    <li><a href="fundamentalsofmanagement.html">FUNDAMENTALS
OF MANAGEMENT AND BUSINESS ACCOUNTING</a>
                    </li>
                    <li><a href="databasemanagement.html">DATABASE MANAGEMENT
SYSTEM</a></li>
                    <li><a href="cPlus.html">OBJECT ORIENTED PROGRAMMING USING
C++</a></li>
                    <li><a href="numericalmethodology.html">NUMERICAL
METHODOLOGY</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>FOURTH SEMESTER</b>
                <UL>
                    <li><a href="java.html">JAVA PROGRAMMING</a></li>
                    <li><a href="computergraphics.html">COMPUTER GRAPHICS AND
MULTIMEDIA</a></li>
                    <li><a href="os.html">OPERATING SYSTEM AND LINUX</a></li>
```

```
                    <li><a href="softwareengineering.html">SOFTWARE
ENGINEERING PRINCIPLES</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>FIFTH SEMESTER</b>
                <UL>
                    <li><a href="rdbms.html">RELATIONAL DATABASE MANAGEMENT
SYSTEM</a></li>
                    <li><a href="python.html">ARTIFICIAL INTELLIGENCE THROUGH
PYTHON PROGRAMMING</a></li>
                    <li><a href="htmlp.html">WEB
TECHNOLOGY(HTML,CSS,JAVASCRIPT)</a></li>
                    <li><a href="computernetwork.html">COMPUTER
NETWORK,SECURITY AND CYBER LAW</a></li>
                </UL>
            </div>
        </div>
        <div class="unit1">
            <br>
            <h2><u>Unit 1 : Differential calculus. </u></h2> <br>
            <h3>=> Successive Differention </h3><br>
            <p>
            <h2>
                <center> <B><u>Introduction </u></B></center>
            </h2>
            Successive Differentiation is the process of differentiating a
given function successively
            times and the results of such differentiation are <br> called
successive derivatives. The
            higher order differential coefficients are of atmost importance in
scientific and
            engineering applications.
            </p>
            <div><br>
                <h4> Let f(x) be a differentiable function and let its
successive derivatives be denoted by f'(x)
                    ,f''(x),f'''(x) ....f <sup>n</sup>(x)
                    <br>Common notations of higher order Derivatives of y=f(x)
<br>
                    <br>
                    1<sup>st</sup> Derivative: f'(x) or y' or y<sub>1</sub> or
Dy or dy/dx <br>
                    2<sup>nd</sup> Derivative: f''(x) or y'' or y<sub>2</sub>
or D<sup>2</sup>y or
                    d<sup>2</sup>y/dx<sup>2</sup>
                    <br>
                    ..... <br>
```

```
                    n<sup>nd</sup> Derivative: f <sup>n</sup>(x) or y
<sup>n</sup> or y <sub>n</sub> or D<sup>n</sup>y
                    or d<sup>n</sup>y/dx<sup>n</sup>
                    <br>
                    <br>

                </h4>
            </div>
            <div>
                <h3>Example : find the n <sup>th</sup> derivative of
e<sup>ax</sup> <br><br>
                    Solution : </h3>
                <div class="solution">let y=e<sup>ax</sup> <br>
                    y1=ae<sup>ax</sup> <br>
                    y2=a<sup>2</sup>e<sup>ax</sup>
                    <br>.....
                    <br>yn=a<sup>n</sup>e<sup>ax</sup>
                </div>
            </div>
            <div>
                <h4>
                    <u>QUESTION FOR PRACTICE</u><br><br>
                    Find the n <sup>th</sup> derivative of following. <br><br>
                    1. y=sin6x cos4x <br>
                    2. y=sinax+cosax <br>
                    3. y=(sinx) <sup>4</sup> <br>
                    4. y=tan<sup>-1</sup>x/a <br>
                    5. y=1/(1-5x+6x<sup>2</sup> )
                </h4>
                <BR><br></BR>
            </div>
            <div>
                <h3>=> Leibnitz Theorem</h3>
                <img src="leibnitz theorem.png" alt="">
                <br><br>
                <h4><u>QUESTION FOR PRACTICE.</u></h4> <br>
                1. if y=log(x+&radic;1+x <sup>2</sup> ) <br>
                prove that
(1+x<sup>2</sup>)y<sub>n+2</sub>+(2n+1)xy<sub>n+1</sub>+n<sup>2</sup>y<sub>n</
sub>=0 <br>
                2.if y=sin(m sin <sup>-1</sup>x ) <br>prove that
                (1-
x<sup>2</sup>)y<sub>n+2</sub>=(2n+1)xy<sub>n+1</sub>+(n<sup>2</sup>-m
<sup>2</sup>)y<sub>n</sub> <br>
            </div>
            <div>
                <br>
```

```
                <h3>=> EXPANSION OF FUNCTION OF ONE VARIABLE IN TAYLOR'S AND
MECLAURIN'S INFINITE SERIES</h3> <br>
                <img src="taylor.png" alt="">
                <br><br>
                <img src="maclaurin.png" alt="">
            </div>
            <div>
                <br> <br>
                <h3>=> MAXIMA AND MINIMA OF FUNCTIONS OF ONE VARIABLE </h3>
<br>
                Let c be a point in a domain D of a function f. Then f(c) is
the <br>
                ⇒ absolute maximum value of f on D if f(c) ≥ f(x) for all x
in D. <br>
                ⇒ absolute minimum value of f on D if f(c) ≤ f(x) for all x
in D. <br>
                <br>
                <h3>Definition :</h3> <br>
                Let c be a point in a domain D of a function f. Then f(c) is
the <br>
                ⇒ local maximum value of f iff(c) ≥ f(x) when x is near c.
<br>
                ⇒ local minimum value of f iff(c) ≤ f(x)when x is near c.
<br>
                <br>
                <h3>Critical point :</h3>
                <br>A critical point of a function f is a point c in the
domain of f such that either f ‘(c) = 0
                or f ‘(c) does not exists.
                If f has local maximum value or minimum value at c, then c is
a critical point of f. <br><br>
                <h3>Example :</h3><br>
                Q). Find the absolute maximum and absolute minimum of <br><br>
                1.f(x) = x – logx on [ 1/2, 2] <br>
                <h4>Solution :</h4> <br>
                f(x) = x – logx is continuous on [ 1/2, 2] <br>
                f’(x) = 1 –1/x <br>
                f’(x) = 0 ⇒ 1 –1/x= 0 <br>
                ⇒(x–1)/x= 0 <br>
                ⇒ x = 1 is the critical point. <br>
                The value of f(x) at critical point is <br>
                f(1) = 1 – log1 = 1 – 0 = 1 <br>
                The values of f(x) at the end points of the intervals are <br>
                f (1/2) =1/2– log 1/2 =1/2–(–0.6931) <br>
                = 1.1931 <br>
                f(2) = 2 – log 2 <br>
                = 2 – 0.6931 <br>
                = 1.3068 <br>
```

```
                Absolute maximum value is f(2) = 1.3068 <br>
                Absolute minimum value is f(1) = 1 <br>

            </div>

        </div>
    </div>

    <footer class="footer">
        <div class="footer-container">
            <div class="column1">
                <div class="logo">
                    <img src="logo.jpg" width="50" height="50px">
                </div>
                <div class="channel">K.G ACADEMY</div>
            </div>
            <div class="column2">
                <h1>BCA </h1>
                <ul>
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                    <li><a href="thirdSemester.html">Third Semester</a></li>
                    <li><a href="fourthSemester.html">Fourth Semester</a></li>
                    <li><a href="fifthSemester.html">Fifth Semester</a></li>
                </ul>
            </div>
            <div class="column3">
                <h1>GET IN TOUCH</h1>
                <ul>
                    <li>kajalgupta62064@gmail.com</li>
                </ul>
            </div>
        </div>
    </footer>
</body>
```
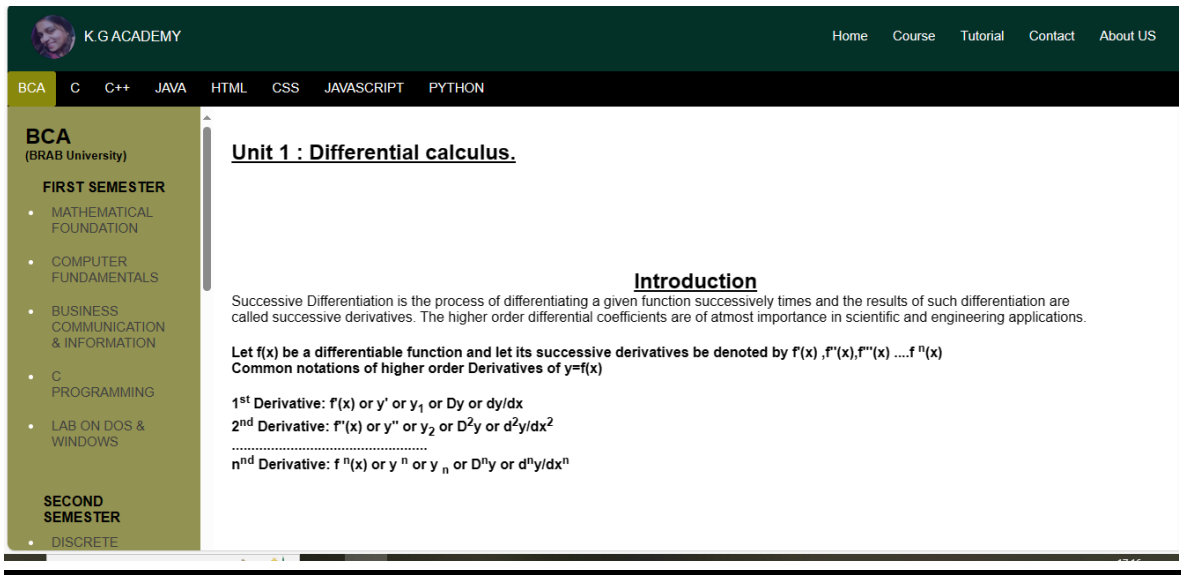

Screenshot of BCA Tab



Computer fundamental code and screenshot

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>WEBSITE</title>
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    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
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    <nav class="sticky">
        <div class="logo">
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        </div>
        <div class="channel">K.G ACADEMY</div>
```

```
        <div class="nav-links">

            <ul>
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                <li><a href="course.html">Course</a></li>
                <li><a href="tutorial.html">Tutorial</a></li>
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                <li><a href="aboutus.html">About US</a></li>
            </ul>
        </div>

    </nav>

    <div class="menu">
        <ul>
            <li><a href="bca.html">BCA</a></li>
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            <li><a href="python.html">PYTHON</a></li>
        </ul>
    </div>
    <div class="bcacontent">
        <div class="sidebar">
            <header>
                <h2>BCA </h2>
                <h5>(BRAB University) <BR><BR>COMPUTER
FUNDAMENTALS</BR></BR></h5>
            </header>
            <div class="BCA1"> <b>UNIT-1 : Introduction to Computer </b>
                <UL>
                    <li><a href="">Brief History of Development of
Computers</a></li>
                    <li><a href="">Computer System Concept & C
haracteristics</a></li>
                    <li><a href="">Capabilities and Limitations of
Computers</a></li>
                    <li><a href="">Types of Computers</a></li>
                    <li><a href="">Generations of Computers</a></li>
                    <li><a href="">Types of PCs:</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT-2 : Computer Organization and Working
.</b>
```

```
            <p><br>Basic Components of a computer system:</p>
            <UL>
                <li><a href="">CPU</a></li>
                <li><a href="">RAM</a></li>
                <li><a href="">ROM</a></li>
                <li><a href="">EROM</a></li>
                <li><a href="">PROM</a></li>
                <li><a href="">Other types of memory</a></li>
            </UL>
        </div>

        <div class="BCA1"> <b>UNIT-3 : Devices</b>
            <UL>
                <li><a href="">Input Devices</a></li>
                <li><a href="">Output Devices</a></li>
                <li><a href="">Various Storage Devices</a></li>
            </UL>
        </div>

        <div class="BCA1"><b>UNIT :- 4</b>
            <UL>
                <li><a href="">Computer Software</a></li>
                <li><a href="">Operating System</a></li>
                <li><a href="">Application Software</a></li>
            </UL>
        </div>

        <div class="BCA1"><b>UNIT :- 5</b>
            <UL>
                <li><a href="">Algorithms</a></li>
                <li><a href="">Flowcharts</a></li>
                <li><a href="">Psedo Code</a></li>
                <li><a href="">Decision Tree</a></li>
                <li><a href="">Decision Table</a></li>
                <li><a href="">System Flowchart</a></li>
            </UL>
        </div>
        <div class="BCA1"><B>UNIT :- 6</B>
            <ul>
                <li><a href="">Programming Techniques</a></li>
                <li><a href="">Programming Logic</a></li>
                <li><a href="">Computer Security & Virus</a></li>
            </ul>
        </div>
    </div>
    <div class="unit1">
        <h2>Introduction to Computer</h2><br>
```

```
            <p>Being a modern-day kid you must have used, seen, or read about
computers. This is because they are an
                integral part of our everyday existence. Be it school, banks,
shops, railway stations, hospital or your
                own home, computers are present everywhere, making our work
easier and faster for us. As they are such
                integral parts of our lives, we must know what they are and
how they function. Let us start with
                defining the term computer formally.<br><br>

                The literal meaning of computer is a device that can
calculate. However, modern computers can do a lot
                more than calculate. Computer is an electronic device that
receives input, stores or processes the input
                as per user instructions and provides output in desired
format.</p>
            <br><h2>Input-Process-Output Model</h2><br>
            <p>Computer input is called data and the output obtained after
processing it, based on user's instructions
                is called information. Raw facts and figures which can be
processed using arithmetic and logical
                operations to obtain information are called data.<br>
                The processes that can be applied to data are of two types –
<br>

            <p>Arithmetic operations – Examples include calculations like
addition, subtraction, differentials,
                square root, etc.</p> <br>
            <p>Arithmetic operations – Examples include calculations like
addition, subtraction, differentials,
                square root, etc.</p><br>

            </p><br>
            <p>The basic parts of a computer are as follows – </p><br>

            <p>Input Unit – Devices like keyboard and mouse that are used to
input data and instructions to the
                computer are called input unit.</p> <br>
            <p>Output Unit – Devices like printer and visual display unit that
are used to provide information to
                the user in desired format are called output unit.</p><br>
            <p>Control Unit – As the name suggests, this unit controls all the
functions of the computer. All
                devices or parts of computer interact through the control
unit.</p><br>
            <p>Arithmetic Logic Unit – This is the brain of the computer where
all arithmetic operations and
                logical operations take place</p><br>
```

```
            <p>Memory – All input data, instructions and data interim to the
processes are stored in the memory.
                Memory is of two types – primary memory and secondary memory.
Primary memory resides within the CPU
                whereas secondary memory is external to it.</p><br>
            <br>
            <p>Control unit, arithmetic logic unit and memory are together
called the central processing unit or
                CPU. Computer devices like keyboard, mouse, printer, etc. that
we can see and touch are the hardware
                components of a computer. The set of instructions or programs
that make the computer function using
                these
                hardware parts are called software. We cannot see or touch
software. Both hardware and software are
                necessary for working of a computer.
            </p>
            <p>
            <h2>Characteristics of Computer</h2>To understand why computers
are such an important part of our lives, let
            us look at some of its characteristics – <br>
            <p>Speed – Typically, a computer can carry out 3-4 million
instructions per second.</p><br>
            <p>Accuracy – Computers exhibit a very high degree of accuracy.
Errors that may occur are usually due
                to inaccurate data, wrong instructions or bug in chips – all
human errors.</p><br>
            <p>Reliability – Computers can carry out same type of work
repeatedly without throwing up errors due to
                tiredness or boredom, which are very common among
humans.</p><br>
            <p>Versatility – Computers can carry out a wide range of work from
data entry and ticket booking to
                complex mathematical calculations and continuous astronomical
observations. If you can input the
                necessary data with correct instructions, computer will do the
processing.</p><br>
            <p>Storage Capacity – Computers can store a very large amount of
data at a fraction of cost of
                traditional storage of files. Also, data is safe from normal
wear and tear associated with paper.
            </p><br>

            <p>
            <h2>Advantages of Using Computer</h2>Now that we know the
characteristics of computers, we can see the
            advantages that computers offer– <br>
```

```
            <p>Computers can do the same task repetitively with same
accuracy.</p><br>
            <p>Computers do not get tired or bored.</p><br>
            <p>Computers can take up routine tasks while releasing human
resource for more intelligent functions.
            </p><br>

            <p>
            <h2>Disadvantages of Using Computer</h2> Despite so many
advantages, computers have some disadvantages of
            their own -<br>
            <p>Disadvantages of Using Computer</p><br>
            <p>Regular electric supply is necessary to make computers work,
which could prove difficult everywhere
                especially in developing nations.</p><br>


            <p>
            <h2>Booting</h2>Starting a computer or a computer-embedded device
is called booting. Booting takes place in
            two steps - <br>
            <p>Switching on power supply</p><br>
            <p>Loading operating system into computer's main memory</p><br>
            <p>Keeping all applications in a state of readiness in case needed
by the user</p><br>
            <p>The first program or set of instructions that run when the
computer is switched on is called BIOS or
                Basic Input Output System. BIOS is a firmware, i.e. a piece of
software permanently programmed into the
                hardware.</p>
            <br>
            <p>
                If a system is already running but needs to be restarted, it
is called rebooting. Rebooting may be
                required
                if a software or hardware has been installed or system is
unusually slow.</p>


            <p><b>There are two types of booting -</b></p>

            <p>Cold Booting - When the system is started by switching on the
power supply it is called cold
                booting. The next step in cold booting is loading of
BIOS.</p><br>
            <p>Warm Booting - When the system is already running and needs to
be restarted or rebooted, it is
                called warm booting. Warm booting is faster than cold booting
because BIOS is not reloaded.</p><br>
```

```
        </div>
    </div>


    <footer class="footer">
        <div class="footer-container">
            <div class="column1">
                <div class="logo">
                    <img src="logo.jpg" width="50" height="50px">
                </div>
                <div class="channel">K.G ACADEMY</div>
            </div>
            <div class="column2">
                <h1>BCA </h1>
                <ul>
                    <li><a href="firstSemester.html">First Semester</a></li>
                    <li><a href="secondSemester.html">Second Semester</a></li>
                    <li><a href="thirdSemester.html">Third Semester</a></li>
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                    <li><a href="fifthSemester.html">Fifth Semester</a></li>
                </ul>
            </div>
            <div class="column3">
                <h1>GET IN TOUCH</h1>
                <ul>
                    <li>kajalgupta62064@gmail.com</li>
                </ul>
            </div>
        </div>
    </footer>
</body>
```

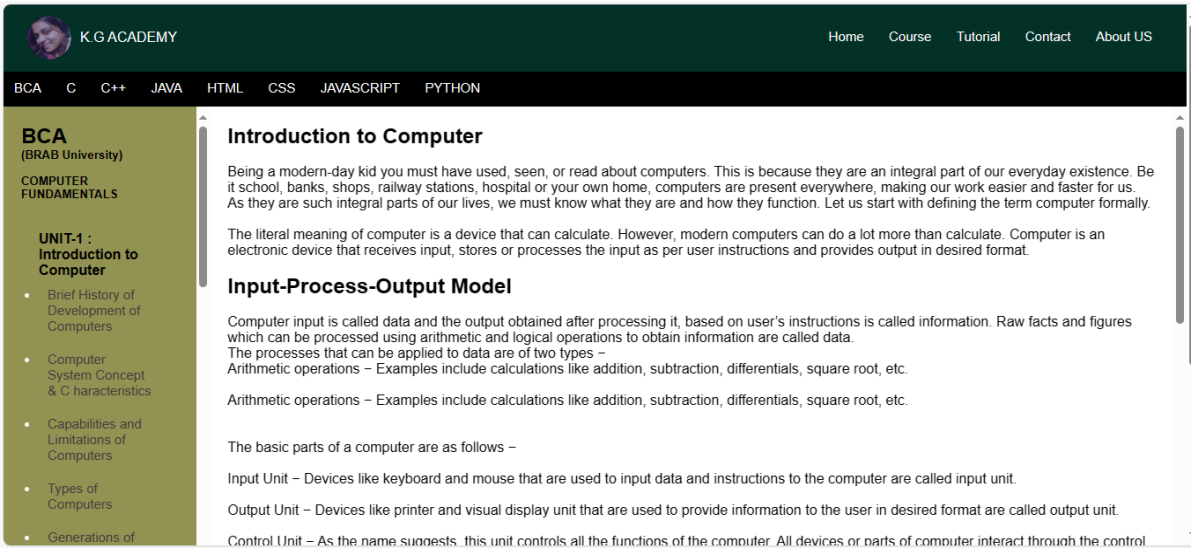

Business Communication and Information code and screenshort

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>WEBSITE</title>
    <link rel="stylesheet" href="kg.css">
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>


</head>

<body>
    <nav class="sticky">
        <div class="logo">
            <img src="logo.jpg" width="50" height="50px">
        </div>
        <div class="channel">K.G ACADEMY</div>
        <div class="nav-links">

            <ul>
                <li><a href="kg.html">Home</a></li>
                <li><a href="course.html">Course</a></li>
                <li><a href="tutorial.html">Tutorial</a></li>
                <li><a href="contact.html">Contact</a></li>
                <li><a href="aboutus.html">About US</a></li>
            </ul>
        </div>

    </nav>

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```

```
            <li><a href="python.html">PYTHON</a></li>
        </ul>
    </div>
    <div class="bcacontent">
        <div class="sidebar">
            <header>
                <h2>BCA </h2>
                <h5>(BRAB University) <BR><BR>BUSINESS COMMUNICATION &
INFORMATION</BR></BR></h5>
            </header>
            <div class="BCA1"> <b>UNIT-1 : </b>
                <UL>
                    <li><a href="">Meaning and process of
Communication</a></li>
                    <li><a href="">Barriers to Communication</a></li>
                    <li><a href="">Verbal Communication and Non-verbal
Communication.</a></li>
                    <li><a href="">Business Communication and it's importance
in business Organization.</a></li>

                </UL>
            </div>

            <div class="BCA1"><b>UNIT-2 : </b>

                <UL>
                    <li><a href="">Principles of letter writing</a></li>
                    <li><a href="">Business Letters</a></li>
                    <li><a href="">Social Correspondence</a></li>

                </UL>
            </div>

            <div class="BCA1"> <b>UNIT-3 : </b>
                <UL>
                    <li><a href="">Office Procedure </a></li>
                    <li><a href="">Forms of Oral Communication</a></li>

                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 4</b>
                <UL>
                    <li><a href="">Data and information</a></li>
                    <li><a href="">Characteristic of information</a></li>
                    <li><a href="">Sources of information</a></li>
                    <li><a href="">type of information</a></li>
```

```
                    <li><a href="">Importance of information for
managers</a></li>
                    <li><a href="">Value of Information</a></li>
                    <li><a href="">Information economics</a></li>
                    <li><a href="">Role of Computers.</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 5</b>
                <UL>
                    <li><a href="">Concept ,role and importance of
MIS</a></li>
                    <li><a href="">Concept ,characteristic and types of
System</a></li>
                    <li><a href="">Information needs and management
levels</a></li>

                </UL>
            </div>
            <div class="BCA1"><B>UNIT :- 6</B>
                <ul>
                    <li><a href="">MIS and Decision making concepts</a></li>
                    <li><a href="">Herbert-Simon model of Decision
Making.</a></li>
                    <li><a href="">Concept and Philosophy of DSS</a></li>
                    <li><a href="">MIS Project planning</a></li>
                </ul>
            </div>
        </div>
        <div class="unit1">
            <h1>Business Communication</h1>
            <div>
                <h2><b>Meaning and process of
                        communication:</b> </h2>
                <div>

                    <br>
                    <p>By definition, "business Communication refers to the
exchange of information,
                        ideas, and opinions within an organization or between
organizations and their
                        stakeholders, including customers, suppliers,
shareholders, and the public".
                        The goal of business communication is to facilitate
effective decision-making,
                        build relationships, and achieve organizational
objectives. It includes a range of
```

```
                        communication methods, including nonverbal, written,
spoken, and electronic. Clear,
                        concise, precise messages that are adapted based on
individual audiences and delivered
                        through proper channels to the intended audience are
essential to effective corporate
                        communication.<br>
                        <br><img src="http://blog.livebooks.com/wp-
content/uploads/2015/03/Networking.jpg" alt=""
                            width="1000px" height="500px"><br>
                        <br>Effective communication is a critical component of
success in the business
                        world. In fact, it is essential for businesses to
communicate effectively both internally
                        and externally in order to achieve their goals and
objectives. Business communication
                        encompasses various modes of communication, such as
written, verbal, electronic, and
                        nonverbal communication, all of which play a vital
role in achieving organizational success.
                        Perhaps, the most typical method of corporate or
business communication is writing. Emails,
                        memos, letters, reports, as well as other written
materials that impart knowledge, concepts,
                        and instructions fall under this category. Clear,
succinct, and well-structured written
                        communication makes it easier for the reader to
understand the content. Also, it is crucial
                        for businesses to think about their target audience
and modify their message accordingly.
                    </p>

                    <br>
                    <h2>Types of communication</h2><br>
                    <lp>In the corporate world, effective communication is
crucial for success. It includes a range
                        of communication methods, including spoken, written,
electronic, and nonverbal, all of which
                        are essential for establishing organizational success.
Developing effective communication skills
                        is crucial for individuals and organizations alike and
can help build strong relationships,
                        enhance teamwork,
                        and achieve business objectives. Let us discuss a few
notable communication method in given
                        below:
                    </lp>
                    <br><br>
```

```
                    <p> 1. Verbal Communication</p><br>
                    <p> 2. Written Communication</p><br>
                    <p> 3. Nonverbal Communication</p><br>
                    <p> 4. Visual Communication</p><br>
                    <p> 5. Formal Communication</p><br>
                    <p> 6. Informal Communication</p><br>
                    <p> 7. External Communication</p><br>
                    <p> 8. Internal Communication</p><br>


                </div>
            </div>
        </div>
    </div>

        <footer class="footer">
            <div class="footer-container">
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                    <ul>
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                    </ul>
                </div>
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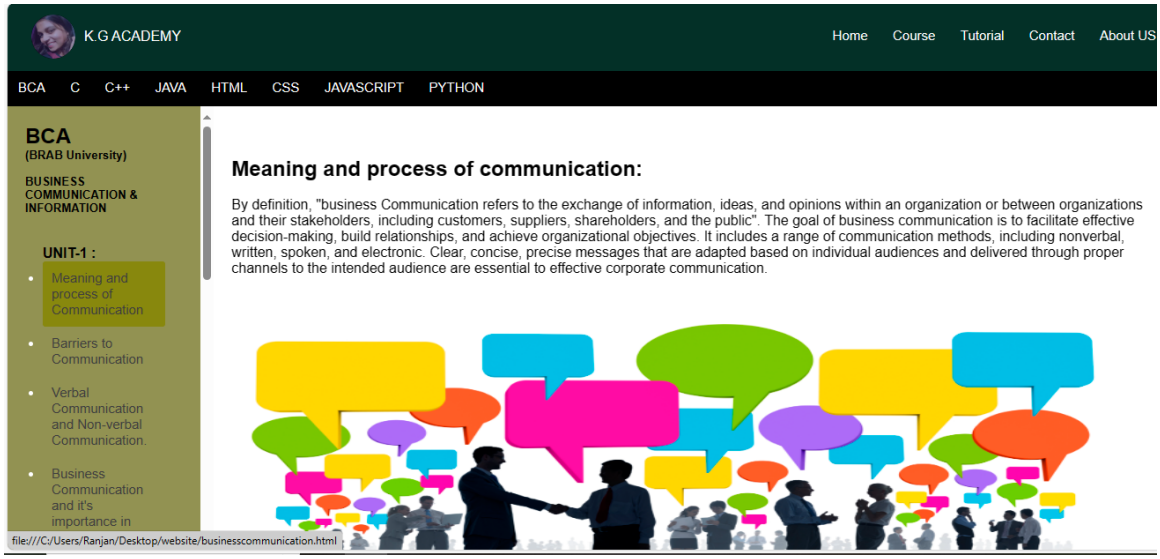

C program code and screenshort

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```
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            <li><a href="python.html">PYTHON</a></li>
        </ul>
    </div>
    <div class="bcacontent">
        <div class="sidebar">
            <header>
                <h2>BCA </h2>
                <h5>(BRAB University) <BR><BR>C PROGRAMMING</BR></BR></h5>
            </header>
            <div class="BCA1"> <b>UNIT-1 : </b>
                <UL>
                    <li><a href="">Structures of C Programming
Language</a></li>
                    <li><a href="">Elements of C Programming</a></li>
                    <li><a href="">Algorithms and flowcharts (Real life
Example)</a></li>
                    <li><a href="">C Tokens , Keywords , Identiers, Variable,
Constant</a></li>
                    <li><a href="">Data Types</a></li>
                    <li><a href="">Operators</a></li>
                    <li><a href="">Types of Operators</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT-2 : </b>

                <UL>
                    <li><a href="">Decision Making </a></li>
                    <li><a href="">Looping</a></li>
                    <li><a href="">Array</a></li>
                    <li><a href="">Two Dimensional</a></li>
                    <li><a href="">Concept of header files</a></li>
```

```
            </UL>
        </div>

        <div class="BCA1"> <b>UNIT-3 : </b>
            <UL>
                <li><a href="">Functions</a></li>
                <li><a href="">Nesting , Recursion</a></li>
                <li><a href="">Function with Array</a></li>
                <li><a href="">Parameter Passing</a></li>
                <li><a href="">Call by Value</a></li>
                <li><a href="">Call by reference</a></li>
            </UL>
        </div>

        <div class="BCA1"><b>UNIT :- 4</b>
            <UL>
                <li><a href="">String Handling (Manipulation)</a></li>
                <li><a href="">String Handling Fuctions</a></li>

            </UL>
        </div>

        <div class="BCA1"><b>UNIT :- 5</b>
            <UL>
                <li><a href="">Structure</a></li>
                <li><a href="">Structure Array</a></li>
                <li><a href="">pointers</a></li>

            </UL>
        </div>
        <div class="BCA1"><B>UNIT :- 6</B>
            <ul>
                <li><a href="">File Handling</a></li>
                <li><a href="">Reading and Writing a file</a></li>

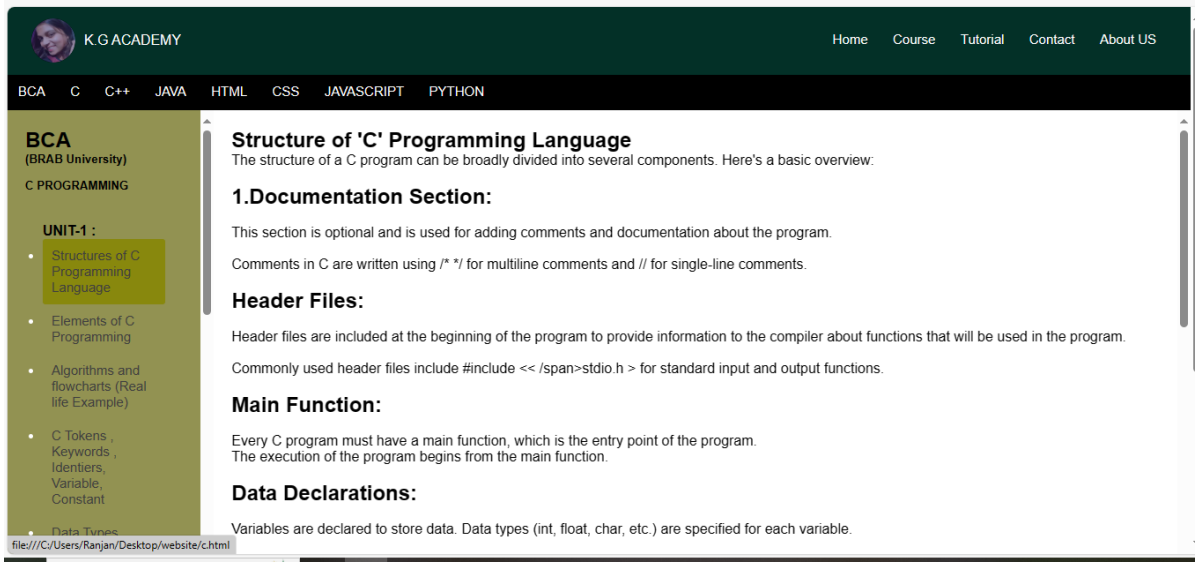
            </ul>
        </div>
    </div>
    <div class="unit1">
        <h2>Structure of 'C' Programming Language</h2>
        <div class="ovw">
            <p>The structure of a C program can be broadly divided into
several components. Here's a basic overview:
            </p> <br>
            <h2>1.Documentation Section:</h2><br>
            <p>This section is optional and is used for adding comments
and documentation about the program.</p>
```

```
                <br>
                <p> Comments in C are written using /* */ for multiline
comments and // for single-line comments.</p>
                <br>
                <h2>Header Files:</h2> <br>
                <p>Header files are included at the beginning of the program
to provide information to the compiler
                    about functions that will be used in the program.</p> <br>
                <p> Commonly used header files include #include <span>
                        << /span>stdio.h <span>>></span> for standard input and
output functions.</p> <br>
                <h2>Main Function:</h2> <br>
                <p>Every C program must have a main function, which is the
entry point of the program.</li> <br>
                <p> The execution of the program begins from the main
function. </p> <br>
                <h2>Data Declarations:</h2> <br>
                <p>Variables are declared to store data. Data types (int,
float, char, etc.) are specified for each
                    variable. </p> <br>
                <h5>Example</h5>
                <pre>
        int age;
        float salary;
        char grade;</pre> <br>
                <h2>Executable Statements:</h2><br>
                <p>These are statements that perform actions. They include
assignments, calculations, and function
                    calls.</p><br>
                <h5>Example</h5>
                <pre>
            age = 25;
            salary = 50000.50;
            grade = 'A';
        </pre> <br>
                <h2>Control Structures:</h2> <br>
                <p>C provides various control structures like loops (for,
while, do-while) and conditional statements
                    (if, else, switch) to control the flow of the program.</p>
<br>
                <h5>Example</h5>
                <pre>
            if (age >= 18) {
                printf("You are eligible to vote.\n");
            } else {
                printf("You are not eligible to vote.\n");
            }
        </pre> <br>
```

```
                <h2>Functions:</h2><br>
                <p>C programs are often organized into functions. The main
function is required, and you can define
                    additional functions to modularize the code.</p><br>
                <h5>Example</h5>
                <pre>
            void displayMessage() {
                printf("Hello, World!\n");
            }
        </pre><br>
                <h3>Comments:</h3><br>
                <p>Comments are used to explain the code and make it more
readable. They are ignored by the compiler.
                </p><br>
                <h5>Example</h5>
                <pre>
            // This is a single-line comment
            /* This is a
                 multiline comment */
        </pre><br>
                <h3>Preprocessor Directives:</h3><br>
                <p> These are lines in your program that begin with a #
symbol. They are processed before the actual
                    compilation and are used for macro definitions and
conditional compilation.</p><br>
                <h5>Example</h5>
                <pre>
            #define PI 3.14
        </pre> <br>
                <p>These components collectively form the structure of a C
program. The actual structure and complexity
                    may vary depending on the specific requirements of the
program.</p>
            </div>
        </div>
    </div>

        <footer class="footer">
            <div class="footer-container">
                <div class="column1">
                    <div class="logo">
                        <img src="logo.jpg" width="50" height="50px">
                    </div>
                    <div class="channel">K.G ACADEMY</div>
                </div>
                <div class="column2">
                    <h1>BCA </h1>
                    <ul>
```

```
                        <li><a href="firstSemester.html">First
Semester</a></li>
                        <li><a href="secondSemester.html">Second
Semester</a></li>
                        <li><a href="thirdSemester.html">Third
Semester</a></li>
                        <li><a href="fourthSemester.html">Fourth
Semester</a></li>
                        <li><a href="fifthSemester.html">Fifth
Semester</a></li>
                    </ul>
                </div>
                <div class="column3">
                    <h1>GET IN TOUCH</h1>
                    <ul>
                        <li>kajalgupta62064@gmail.com</li>
                    </ul>
                </div>
            </div>
        </footer>
</body>
```



Lab on ms-window and DOS code and screenshort

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>WEBSITE</title>
    <link rel="stylesheet" href="kg.css">
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>


</head>

<body>
    <nav class="sticky">
        <div class="logo">
            <img src="logo.jpg" width="50" height="50px">
        </div>
        <div class="channel">K.G ACADEMY</div>
        <div class="nav-links">

            <ul>
                <li><a href="kg.html">Home</a></li>
                <li><a href="course.html">Course</a></li>
                <li><a href="tutorial.html">Tutorial</a></li>
                <li><a href="contact.html">Contact</a></li>
                <li><a href="aboutus.html">About US</a></li>
            </ul>
        </div>

    </nav>

    <div class="menu">
        <ul>
            <li><a href="bca.html">BCA</a></li>
            <li><a href="c.html">C</a></li>
            <li><a href="cPlus.html">C++</a></li>
            <li><a href="java.html">JAVA</a></li>
            <li><a href="html.html">HTML</a></li>
            <li><a href="cssp.html">CSS</a></li>
            <li><a href="javascriptp.html">JAVASCRIPT</a></li>
            <li><a href="python.html">PYTHON</a></li>
```

```
        </ul>
    </div>
    <div class="bcacontent">
        <div class="sidebar">
            <header>
                <h2>BCA </h2>
                <h5>(BRAB University) <BR><BR>LAB ON MS-WINDOWS AND
DOS</BR></BR></h5>
            </header>
            <div class="BCA1"> <b>MS WINDOW : </b>
                <UL>
                    <li><a href="">Features of MS Windows , Desktop </a></li>
                    <li><a href="">Creation of folders and Shortcuts ,
icons</a></li>
                    <li><a href="">Features of Windows explorer</a></li>
                    <li><a href="">Internet Explorer</a></li>
                    <li><a href="">Windows Accessories</a></li>
                    <li><a href="">MS Packages</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>DOS Commands: </b>

                <UL>
                   <li><a href="">Internal</a></li>
                   <li><a href="">External</a></li>

                </UL>
            </div>
        </div>
        <div class="unit1">
            <h2>Features of MS Windows</h2><br><br>
    <div class="ovww">
        <h2>1. Graphical User Interface (GUI):</h2> <br>

          <p>  Windows provides a user-friendly interface with icons, windows,
and menus, making it easy for users to interact with the operating system.</p>
<br>

          <h2>2. Multitasking:</h2> <br>

          <p>  Windows supports the concurrent execution of multiple
applications, allowing users to run and switch between different programs
seamlessly.</p> <br>

           <h2>3.File Explorer:</h2> <br>
```

```
          <p> A built-in file management tool that allows users to navigate,
organize, and manipulate files and folders.</p><br>

          <h2>4. Device Compatibility:</h2><br>

          <p> Windows supports a wide range of hardware devices, making it
compatible with a variety of computer systems and peripherals.</p><br>
          <h2>5.  Security Features:</h2><br>

          <p>Includes built-in security tools like Windows Defender and
features like user account control (UAC) to protect against malware and
unauthorized access.</p> <br>
           <h2>6. Networking Capabilities:</h2><br>

           <p> network connectivity, allowing users to connect to the
internet, share files, and access resources on local networks.</p> <br> <br>

           <h2>Features of Desktop</h2> <br> <br>

           <h2>1. Desktop Icons:</h2><br>

              <p> Users can place shortcuts to applications, files, and
folders on the desktop for quick access.</p><br>

               <h2>2. Taskbar:</h2><br>

              <p> Located at the bottom of the screen, the taskbar provides
quick access to the Start Menu, open applications, system notifications, and
the system tray.</p><br>

              <h2>3. Start Menu:</h2> <br>

              <p> The Start Menu is a central hub for launching applications,
accessing system settings, and searching for files and programs.</p><br>

              <h2>4.  System Tray:</h2><br>

               <p>The system tray, located on the taskbar, displays icons for
system and background processes, as well as notifications.</p><br>

               <h2>5. Desktop Wallpaper:</h2><br>

              <p> Users can customize the desktop background with images or
solid colors according to their preferences. </p> <br>

               <h2>6. Virtual Desktops:</h2> <br>
```

```
                <p>Allows users to create and switch between virtual desktops
for better organization and multitasking.</p> <br> <br>
        </div>
        </div>
    </div>

    <footer class="footer">
        <div class="footer-container">
            <div class="column1">
                <div class="logo">
                    <img src="logo.jpg" width="50" height="50px">
                </div>
                <div class="channel">K.G ACADEMY</div>
            </div>
            <div class="column2">
                <h1>BCA </h1>
                <ul>
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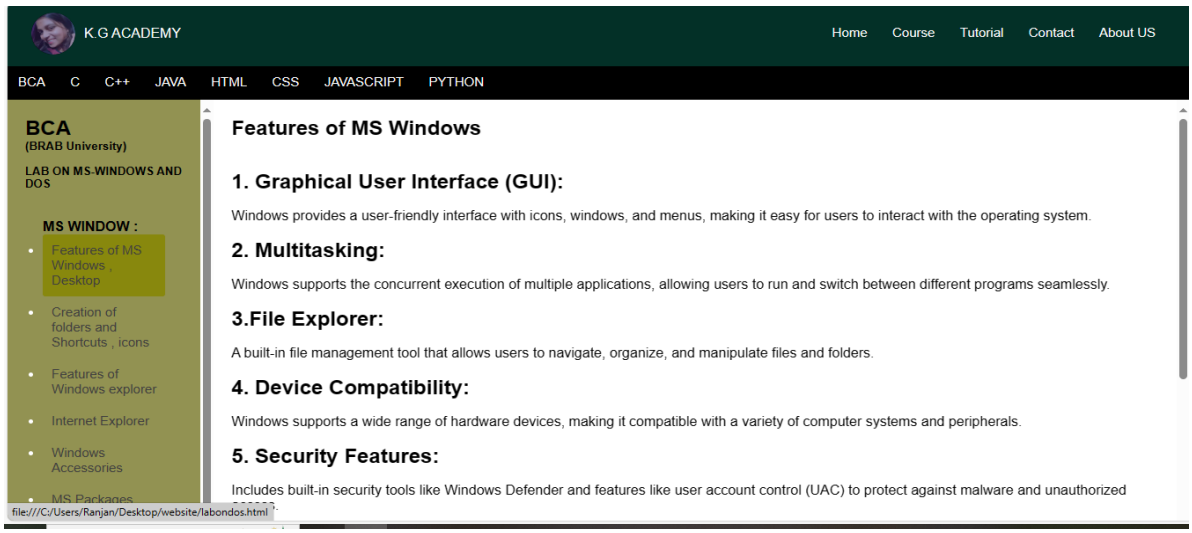

Second semester subject:

Discrete Mathematics code and screenshot

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<head>
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</head>

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```

```
            <li><a href="javascriptp.html">JAVASCRIPT</a></li>
            <li><a href="python.html">PYTHON</a></li>
        </ul>
    </div>
    <div class="bcacontent">
        <div class="sidebar">
            <header>
                <h2>BCA </h2>
                <h5>(BRAB University) <BR><BR>DISCRETE
MATHEMATICS</BR></BR></h5>
            </header>
            <div class="BCA1"> <b>UNIT-1 : Set,Relation & function .</b>
                <UL>
                    <li><a href="">Notation</a></li>
                    <li><a href="">Inclusion and Equality of Sets</a></li>
                    <li><a href="">Power Set</a></li>
                    <li><a href="">Operation on set </a></li>
                    <li><a href="">Venn Diagram</a></li>
                    <li><a href="">Relation</a></li>
                    <li><a href="">Domain and range</a></li>
                    <li><a href="">properties of binary relation in a
set</a></li>
                    <li><a href="">Relation Matrix</a></li>
                    <li><a href="">Digraph</a></li>
                    <li><a href="">Equivalence Relation, Partition and
covering of set</a></li>
                    <li><a href="">Definition and types of function</a></li>
                    <li><a href="">Composition of function</a></li>
                    <li><a href="">Inverse function</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT-2 : Algebraic Structures .</b>

                <UL>
                    <li><a href="">Semi-groups</a></li>
                    <li><a href="">Monoids</a></li>
                    <li><a href="">Groups</a></li>
                    <li><a href="">Subgroups</a></li>
                    <li><a href="">Ring</a></li>

                </UL>
            </div>

            <div class="BCA1"> <b>UNIT-3 : POSET & Lattice.</b>
                <UL>
                    <li><a href="">Partial ordered set</a></li>
                    <li><a href="">Chain</a></li>
```

```
                    <li><a href="">Maximal</a></li>
                    <li><a href="">Minimal</a></li>
                    <li><a href="">LUB AND GLB</a></li>
                    <li><a href="">Hasse Diagram</a></li>

                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 4 Lattice.</b>
                <UL>
                    <li><a href="">Definition and properties</a></li>
                    <li><a href="">Sublattice</a></li>
                    <li><a href="">Distributive and Complemented
lattice</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 5 Graph Theory .</b>
                <UL>
                    <li><a href="">Defintion</a></li>
                    <li><a href="">Type of graph</a></li>
                    <li><a href="">Tree</a></li>

                </UL>
            </div>

        </div>
        <div class="unit1">
            <h2>Set Notation Definitions and Examples : </h2><br>
            <div class="para">
                <p>In mathematics, set notation is the notation used to
represent a set, usually denoted by curly braces
                    {}. Sets are collections of objects, which can be anything
from numbers to points in space. The
                    objects in a set are called elements or members. Set
notation is very versatile and can be used to
                    represent many different types of sets, such as finite
sets, infinite sets, empty sets, and more. In
                    this blog post, we will explore some of the most common
types of sets and their notation.</p><br>

            </div>
            <h2>SET NOTATION</h2><br>
            <div class="para">
                <p>In mathematics, set notation is the notation used to
represent a set. A set is a collection of
                    elements, and set notation is the way we identify which
elements are in the set. There are many
```

```
                    different types of sets, and each has its own
notation.</p><br>
                <p>The most basic type of set is a finite set. A finite set is
a set with a finite number of elements.
                    The number of elements in a finite set is called the
cardinality of the set. The cardinality of a
                    finite set can be any whole number, including 0.</p><br>
                If we have a finite set with n elements, we can write it using
Set-Builder Notation: <br>
                {x | x is an element of the set}

                For example, if we have a set with 3 elements, we can write it
as: <br>

                {x | x is an element of the set} = 1, 2, 3<br>

                Another common type of set is an infinite set. An infinite set
is aset with an infinite number of
                elements. The cardinality of an infinite set is infinity. We
can write an infinite using Set-Builder
                Notation as well:

                <br>{x | xis an elementof theset}= ?<br>

                <br>For example, if we have an infinite {x|x>0}, then this
Set-Builder Notation would mean that for any
                positive real number x (no matter how large), x would be
included in this infinite <br>

            </div>
            <div>
                <h2> WHAT IS SET NOTATION? </h2><br>
                In mathematics, set notation is the notation used to represent
a set, usually denoted by curly braces.
                For example, the set of natural numbers (N) can be represented
by the following set notation:
                <br><br>
                {1, 2, 3, …} <br>

                Set notation can also be used to define a set in terms of
another set. For example, the set of all even
                numbers can be defined as follows:
                <br>
                x | x ? N & x is even<br>

                This means that the set of all even numbers is equal to the
set of all natural numbers (N) such that x
                is an even number.
```

```
            </div>

        </div>
    </div>

    <footer class="footer">
        <div class="footer-container">
            <div class="column1">
                <div class="logo">
                    <img src="logo.jpg" width="50" height="50px">
                </div>
                <div class="channel">K.G ACADEMY</div>
            </div>
            <div class="column2">
                <h1>BCA </h1>
                <ul>
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                </ul>
            </div>
            <div class="column3">
                <h1>GET IN TOUCH</h1>
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                    <li>kajalgupta62064@gmail.com</li>
                </ul>
            </div>
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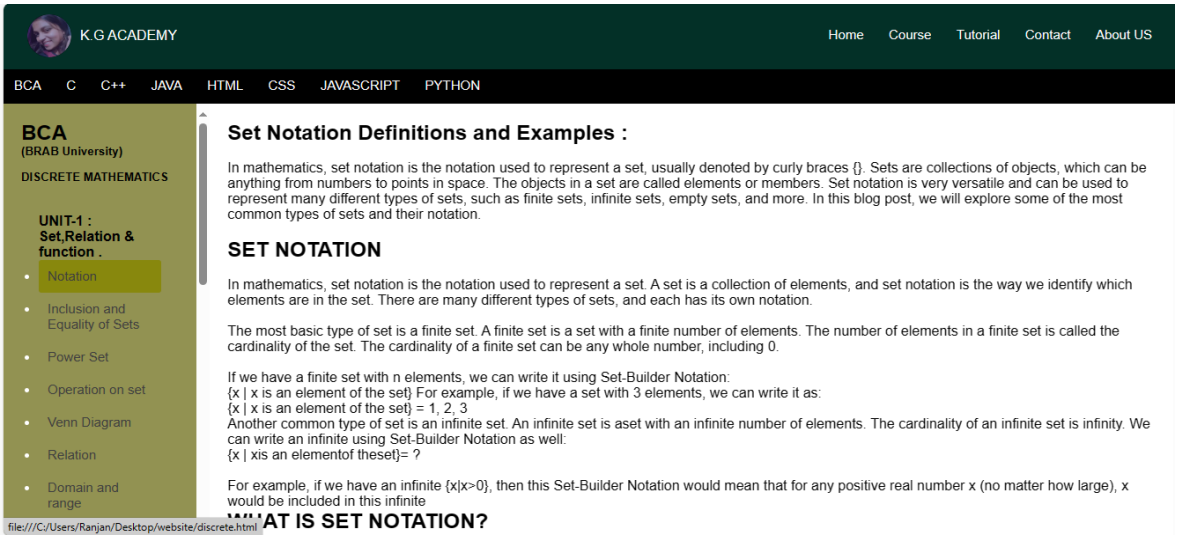

Computer Architecture code and screenshot

```
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<html lang="en">

<head>
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    <meta name="viewport" content="width=device-width, initial-scale=1.0">
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    <div class="menu">
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            <li><a href="python.html">PYTHON</a></li>
        </ul>
```

```
    </div>
    <div class="bcacontent">
        <div class="sidebar">
            <header>
                <h2>BCA </h2>
                <h5>(BRAB University) <BR><BR>COMPUTER
ARCHITECTURE.</BR></BR></h5>
            </header>
            <div class="BCA1"> <b>UNIT-1 : </b>
                <UL>
                    <li><a href="">Data representation</a></li>
                    <li><a href="">Data Types and Number Systems</a></li>
                    <li><a href="">Fixed-point Representation</a></li>
                    <li><a href="">1's & 2's Complement</a></li>
                    <li><a href="">Binary Fixed-Point Representation</a></li>
                    <li><a href="">Arithmetic Operation on Binary
Numbers</a></li>
                    <li><a href="">Overflow & Underflow</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT-2 : Boolean Algebra & Digital Circuits
.</b>

                <UL>
                   <li><a href="">Boolean Algebra and digital logic
circuits</a></li>
                   <li><a href="">Basic Boolean Law's</a></li>
                   <li><a href="">Demorgan's Theorem</a></li>

                </UL>
            </div>

            <div class="BCA1"> <b>UNIT-3 : Sequential Logic.</b>
                <UL>
                    <li><a href="">Flip-Flops</a></li>
                    <li><a href="">Registers</a></li>
                    <li><a href="">Counters</a></li>
                    <li><a href="">Timings Sequence digital logic
families</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 4 Input-Output Organization.</b>
                <UL>
                <li><a href="">I/O Interface</a></li>
                <li><a href="">Properties of simple I/O Devices and their
controller</a></li>
```

```
                <li><a href="">Isolated Vs Memory-mapped I/O </a></li>
                <li><a href="">Modes of data transfer</a></li>
                <li><a href="">Synchronous and Asynchronous data
transfer</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 5 Memory Organization .</b>
                <UL>
                    <li><a href="">Auxillary Memory</a></li>
                    <li><a href="">Magnetic Drum</a></li>
                    <li><a href="">Disk and Tape</a></li>
                    <li><a href="">Semi-conductor memories</a></li>
                    <li><a href="">Hierarchy</a></li>
                    <li><a href="">Associative memory</a></li>
                    <li><a href="">Virtual memory</a></li>
                    <li><a href="">Address space and memory space</a></li>
                    <li><a href="">Cache memory</a></li>
                    <li><a href="">Hit ratio</a></li>
                    <li><a href="">Writing into cache</a></li>
                </UL>
            </div>

        </div>
        <div class="unit1">
            <h2>Data Representation</h2><br>
    <p>Data representation refers to the way data is encoded and presented in
a computer system.
      It involves translating information into a format that can be easily
processed by a computer.
      There are different types of data representation, and the choice of
representation depends
      on the nature of the data and the specific requirements of a given
application.</p>
      <br><h2>Here are some common Types of data representation:-</h2>

      <br><h2>1.Numeric Representation</h2></br>

      <p><b>Integer Representation:</b>Integers are whole numbers without any
decimal places.
        They can be represented in binary, octal, decimal, or hexadecimal
systems. For example,
        the decimal number 42 is represented as 101010.</p><br>
      <p><b>Floating-point Representation:</b>Floating-point numbers include a
decimal point
        and can represent a wide range of values, including fractions. They
are typically represented
         using the IEEE 754 standard in binary.</p><br>
```

```
      <h2>2.Text Representation</h2><br>
      <p><b>ASCII (American Standard Code for Information
Interchange):</b>ASCII is a character encoding
         standard that represents text characters using 7 or 8 bits. Each
character is assigned a unique
          numeric code. For example, the ASCII code for the letter 'A' is
65.</p><br>
      <p><b>Unicode:</b>Unicode is a character encoding standard that aims to
represent most of the
         world's written languages. It uses 16 or 32 bits to represent
characters, allowing for a broader range
         of symbols and characters.</p><br>

      <h2>3.Image Representation</h2><br>
      <p><b>Raster Graphics:</b> Images are represented as a grid of pixels,
where each pixel is assigned
         a color value. The RGB color model is a common representation, where
colors are described using
         combinations of red, green, and blue values.</p><br>
      <p><b>Vector Graphics:</b>Images are represented as a set of
mathematical equations that define shapes,
         lines, and colors. This representation is resolution-independent and
is often used for scalable graphics.</p><br>

      <h2>4.Audio Representation</h2><br><br>
      <p><b>Digital Audio:</b>Sound waves are sampled at regular intervals,
and the amplitude of each sample
        is represented digitally. Common formats include WAV and MP3, where
the audio waveform is encoded as a
        series of numerical values.</p><br>

      <h2>5.Boolean Representation</h2><br>
      <p><b>Boolean Data:</b>Boolean values, representing true or false, are
fundamental in computer science.
         They can be represented using bits (0 for false, 1 for true) or by
symbolic values (e.g., TRUE or FALSE).</p><br>

    <p style="font-size: 22px;">These are just a few examples, and there are
many other specialized data representations depending on the
        nature of the data and the requirements of the application. Choosing
the appropriate representation is
         crucial for efficient storage, processing, and communication of
information within a computer system.</p>


        </div>
    </div>
```

```
    <footer class="footer">
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</body>
```

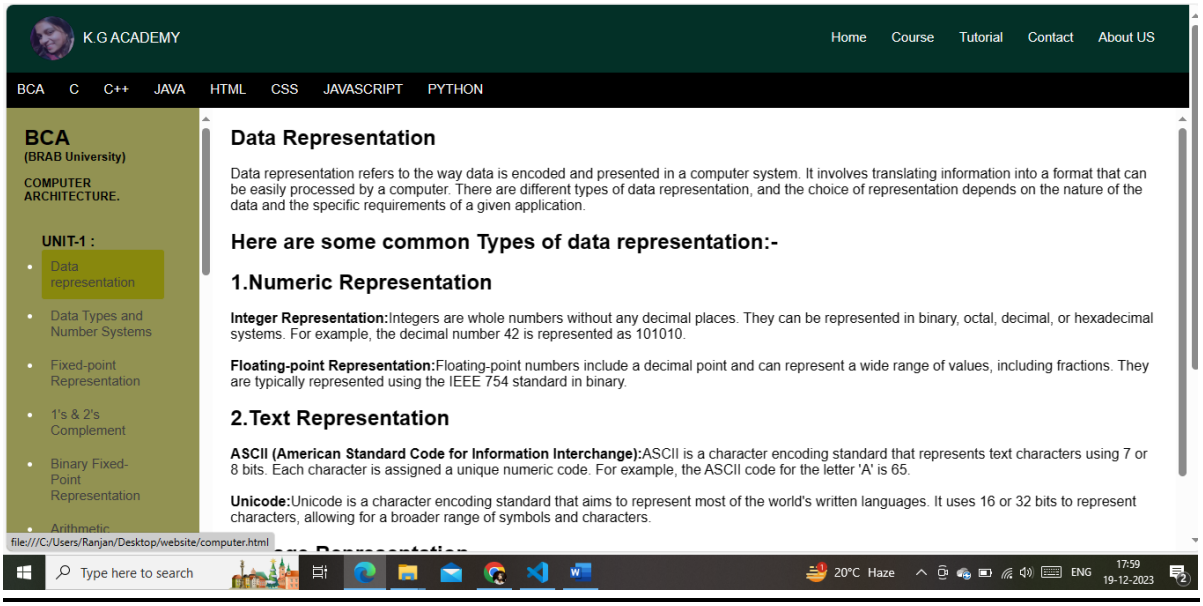

Data structure tab code and screenshot

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>WEBSITE</title>
    <link rel="stylesheet" href="kg.css">
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>


</head>

<body>
    <nav class="sticky">
        <div class="logo">
            <img src="logo.jpg" width="50" height="50px">
        </div>
        <div class="channel">K.G ACADEMY</div>
        <div class="nav-links">

            <ul>
                <li><a href="kg.html">Home</a></li>
                <li><a href="course.html">Course</a></li>
                <li><a href="tutorial.html">Tutorial</a></li>
                <li><a href="contact.html">Contact</a></li>
                <li><a href="aboutus.html">About US</a></li>
            </ul>
        </div>

    </nav>

    <div class="menu">
        <ul>
            <li><a href="bca.html">BCA</a></li>
            <li><a href="c.html">C</a></li>
            <li><a href="cPlus.html">C++</a></li>
            <li><a href="java.html">JAVA</a></li>
            <li><a href="htmlp.html">HTML</a></li>
            <li><a href="cssp.html">CSS</a></li>
            <li><a href="javascriptp.html">JAVASCRIPT</a></li>
```

```
            <li><a href="python.html">PYTHON</a></li>
        </ul>
    </div>
    <div class="bcacontent">
        <div class="sidebar">
            <header>
                <h2>BCA </h2>
                <h5>(BRAB University) <BR><BR>DATA STRUCTURE THROUGH
C.</BR></BR></h5>
            </header>
            <div class="BCA1"> <b>UNIT-1 : </b>
                <UL>
                    <li><a href="">Array</a></li>
                    <li><a href="">Function</a></li>
                    <li><a href="">Pointer</a></li>
                    <li><a href="">Structure</a></li>

                </UL>
            </div>

            <div class="BCA1"><b>UNIT-2 : </b>

                <UL>
                    <li><a href="">Recursion</a></li>
                    <li><a href="">Looping</a></li>
                    <li><a href="">Recursive Function</a></li>

                </UL>
            </div>

            <div class="BCA1"> <b>UNIT-3 : </b>
                <UL>
                    <li><a href="">Selection Sorting</a></li>
                    <li><a href="">Bubble Sorting</a></li>
                    <li><a href="">Insertion Sorting</a></li>
                    <li><a href="">Heap Sorting</a></li>
                    <li><a href="">Quick Sorting</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 4 </b>
                <UL>
                    <li><a href="">Linked List</a></li>
                    <li><a href="">Single Linked List</a></li>
                    <li><a href="">Double Linked List</a></li>
                    <li><a href="">Circular Linked List</a></li>
                </UL>
            </div>
```

```
            <div class="BCA1"><b>UNIT :- 5 </b>
                <UL>
                    <li><a href="">Stack</a></li>
                    <li><a href="">Queue</a></li>

                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 6 </b>
                <UL>
                    <li><a href="">Tree</a></li>
                    <li><a href="">Graph</a></li>

                </UL>
            </div>
        </div>
        <div class="unit1">
            <h2>What is Array?</h2><br>
            <div class="para">
                <p>An array is a collection of items stored at contiguous
memory locations. The idea is to store
                    multiple items of the same type together. This makes it
easier to calculate the position of each
                    element by simply adding an offset to a base value, i.e.,
the memory location of the first element
                    of the array (generally denoted by the name of the
array).</p><br><br>

            </div>
            <div><br>
                <h2>Properties of array</h2><br>
                <p>There are some of the properties of an array that are
listed as follows -</p><br>
                <p>
                    Each element in an array is of the same data type and
carries the same size that is 4 bytes.</p>
                <br><br>
                <p>Elements in the array are stored at contiguous memory
locations from which the first element is
                    stored at the smallest memory location.</p><br><br>
                <p>Elements of the array can be randomly accessed since we can
calculate the address of each element of
                    the array with the given base address and the size of the
data element.</p><br><br>
                </p>
            </div>
            <div>
```

```
                <h2><br>Representation of an array .</h2>
                <p>We can represent an array in various ways in different
programming languages. As an illustration,
                    let's see the declaration of array in C language -

                </p> <br>
                <p>Index starts with 0.</p><br>
                    <p>The array's length is 10, which means we can store 10
elements.</p><br>
                    <p>Each element in the array can be accessed via its
index.</p><br>
            </div>

        </div>
    </div>

    <footer class="footer">
        <div class="footer-container">
            <div class="column1">
                <div class="logo">
                    <img src="logo.jpg" width="50" height="50px">
                </div>
                <div class="channel">K.G ACADEMY</div>
            </div>
            <div class="column2">
                <h1>BCA </h1>
                <ul>
                    <li><a href="firstSemester.html">First Semester</a></li>
                    <li><a href="secondSemester.html">Second Semester</a></li>
                    <li><a href="thirdSemester.html">Third Semester</a></li>
                    <li><a href="fourthSemester.html">Fourth Semester</a></li>
                    <li><a href="fifthSemester.html">Fifth Semester</a></li>
                </ul>
            </div>
            <div class="column3">
                <h1>GET IN TOUCH</h1>
                <ul>
                    <li>kajalgupta62064@gmail.com</li>
                </ul>
            </div>
        </div>
    </footer>
</body>
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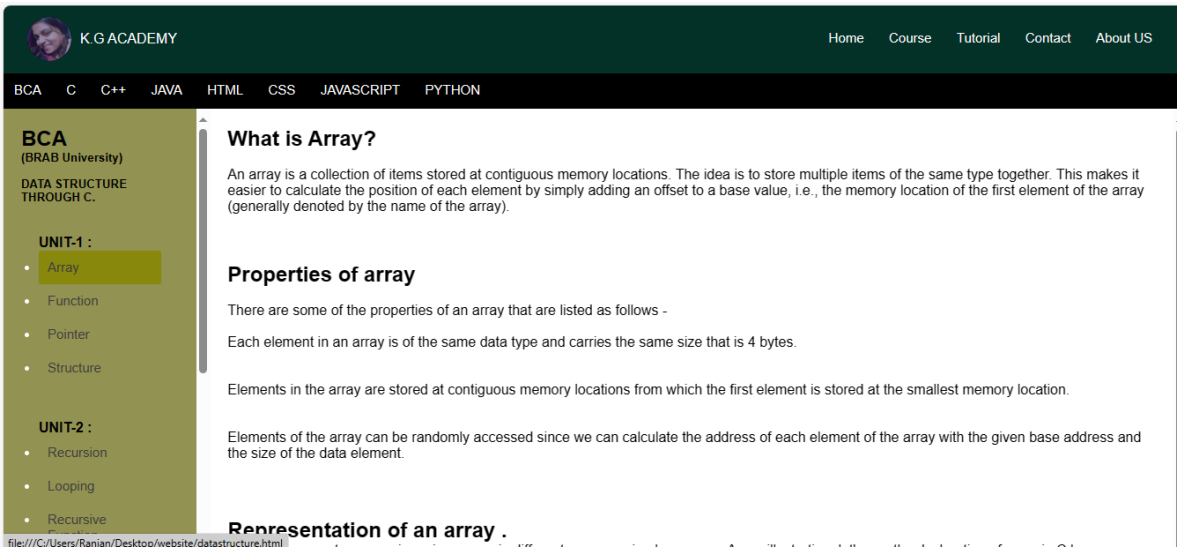

System analysis and Design code and screenshot

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```

```
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        </div>

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            <li><a href="cssp.html">CSS</a></li>
            <li><a href="javascriptp.html">JAVASCRIPT</a></li>
            <li><a href="python.html">PYTHON</a></li>
        </ul>
    </div>
    <div class="bcacontent">
        <div class="sidebar">
            <header>
                <h2>BCA </h2>
                <h5>(BRAB University) <BR><BR>System Analysis and
Design</BR></BR></h5>
            </header>
            <div class="BCA1"> <b>UNIT-1 : </b>
                <UL>
                    <li><a href="">Important of SAD and Design</a></li>
                    <li><a href="">Concept ,characteristic and types of system
</a></li>
                    <li><a href="">SDLC</a></li>
                    <li><a href="">Software Crisis</a></li>
                    <li><a href="">Audit Trail</a></li>
                    <li><a href="">Role and Attributes of System
Analyst</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT-2 : </b>

                <UL>
                    <li><a href="">Sources of project request</a></li>
                    <li><a href="">Project Selection</a></li>
                    <li><a href="">Preliminary Investigation</a></li>
                    <li><a href="">Feasibility Study</a></li>
                    <li><a href="">Types of Feasibility study</a></li>
                    <li><a href="">Cost and benefit analysis</a></li>
                    <li><a href="">System Analysis,Requirements
determination</a></li>
```

```
                    <li><a href="">Structured Analysis</a></li>
                    <li><a href="">System Requirements Specification
(SRS)</a></li>
                    <li><a href="">Analysis Tools</a></li>
                </UL>
            </div>

            <div class="BCA1"> <b>UNIT-3 : </b>
                <UL>
                    <li><a href="">System Design</a></li>
                    <li><a href="">Design Process</a></li>
                    <li><a href="">Constraints</a></li>
                    <li><a href="">Input and Control Design</a></li>
                    <li><a href="">Validation Checks</a></li>
                    <li><a href="">Concept and types of form</a></li>
                    <li><a href="">Form Design</a></li>
                    <li><a href="">Output Design</a></li>
                    <li><a href="">File Design</a></li>
                    <li><a href="">Types of file</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 4</b>
                <UL>
                    <li><a href="">Software quality and Testing</a></li>

                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 5</b>
                <UL>
                    <li><a href="">Hardware and Software acquisition and
selection criteria></a></li>
                    <li><a href="">System conversion and conversion plan,site
preparation</a></li>
                    <li><a href="">Training</a></li>
                    <li><a href="">Maintenance and it's type</a></li>

                </UL>
            </div>
            <div class="BCA1"><B>UNIT :- 6</B>
                <ul>
                    <li><a href="">Management Information System
(MIS)</a></li>

                </ul>
            </div>
        </div>
```

```
        <div class="unit1">
            <h2>System Analysis And Design</h2><br>
            <div class="para">
                Systems Analysis and Design is a combination of three
individual terms that have their meaning. The
                meaning of these terms is as follows,<br>
                <h2> Systems </h2><br>
                <p>A system is an organized group of components linked
together to accomplish a specific objective
                    according to a predefined plan. Every system has its goal;
component of a system has its role but
                    all components work together to achieve the desired goal
of the system.
                </p><br><br>
                <p> example- a computer is a system; its goal is to take data
as an input; process it and gives the
                    desired result/output. While keyboard, mouse, monitor,
CPU, etc are the components of the computer
                    system and the role of these components is different but
all work together to achieve the main goal
                    of the computer system.
                </p><br>
                <h2>Analysis</h2><br>
                <p>An analysis is a detailed inquiry about a particular
problem. It enquires about the answers to all
                    possible questions like what, why, when, how?An analysis
is a detailed inquiry about a particular
                    problem. It enquires about the answers to all possible
questions like what, why, when, how?
                </p><br>
                <p>
                    For example - if we have a problem and want to solve
systematically than we will start from the
                    point-like what is the problem?<br>
                </p><br>
                <p>
                    Is there any existing solution?
                </p><br>
                <p>
                    What will be a feasible solution?</p><br>
                <p><br>
                    How the problem will be solved efficiently?
                </p><br>
                <p><br>
                    An analysis is a systematic study/evaluation of data or
information by splitting it into its parts
                    to reveal its interrelations. The person who did analysis
is known as an analyst. The analyst is an
```

```
                    experienced and expert candidate who did the analysis.
                </p><br>
                <h2>Design</h2><br><br>
                <p> is a blueprint that describes the components and their
relationship with a system. Before the
                    implementation of a system, the system experts make its
design which describes the internal and
                    external layout of the system and describes the
interdependency between the components of the
                    system. There are two types of design,
                </p><br>
                <p><br> design - this design describes the abstract of a
system.</p>
                <p><br> design - this design relates to the system's processes
i.e input, process, and output. It
                    produces the working system by specifying the
specification of the design which sets out exactly
                    what the candidate system does. </p><br>
            </div>
        </div>
    </div>

    <footer class="footer">
        <div class="footer-container">
            <div class="column1">
                <div class="logo">
                    <img src="logo.jpg" width="50" height="50px">
                </div>
                <div class="channel">K.G ACADEMY</div>
            </div>
            <div class="column2">
                <h1>BCA </h1>
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                    <li><a href="fourthSemester.html">Fourth Semester</a></li>
                    <li><a href="fifthSemester.html">Fifth Semester</a></li>
                </ul>
            </div>
            <div class="column3">
                <h1>GET IN TOUCH</h1>
                <ul>
                    <li>kajalgupta62064@gmail.com</li>
                </ul>
            </div>
        </div>
    </footer>
```
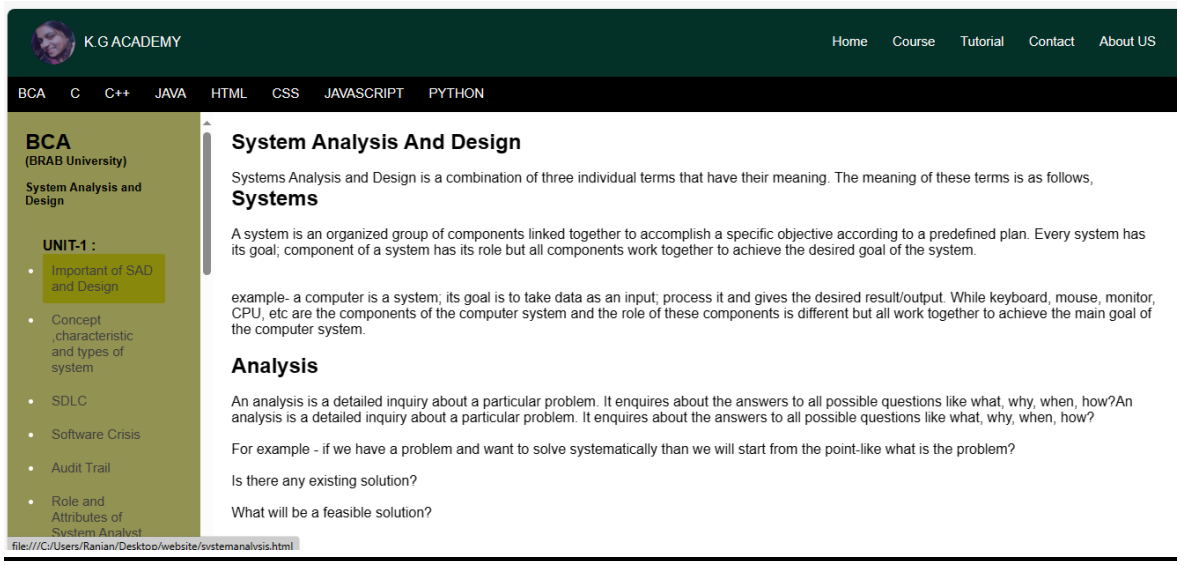

```
</body>
```



Third semester

Fundamentals of management and business accounting code and screenshot

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>WEBSITE</title>
    <link rel="stylesheet" href="kg.css">
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</head>

<body>
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        </div>
        <div class="channel">K.G ACADEMY</div>
        <div class="nav-links">

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                <li><a href="contact.html">Contact</a></li>
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    <div class="menu">
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            <li><a href="javascriptp.html">JAVASCRIPT</a></li>
            <li><a href="python.html">PYTHON</a></li>
        </ul>
    </div>
    <div class="bcacontent">
        <div class="sidebar">
            <header>
                <h2>BCA </h2>
                <h5>(BRAB University) <BR><BR>Fundamentals of Management &
Business Accounting</BR></BR></h5>
            </header>
            <div class="BCA1"> <b>UNIT-1 : </b>
                <UL>
                    <li><a href="">Nature and Functions of Managers</a></li>
                    <li><a href="">Management(Arts Vs Science)</a></li>
                    <li><a href="">Evolution of Management Thoughts</a></li>
                    <li><a href="">Functions of Management</a></li>

                </UL>
            </div>

            <div class="BCA1"><b>UNIT-2 : </b>

                <UL>
```

```
                    <li><a href="">Types of Control</a></li>
                    <li><a href="">Steps involved in Control Process</a></li>
                    <li><a href="">Meaning and importance of the study of
Organization Behaviour</a></li>
                    <li><a href="">Improving inter-personal
effectiveness</a></li>
                    <li><a href="">inter-personal communication</a></li>

                </UL>
            </div>

            <div class="BCA1"> <b>UNIT-3 : </b>
                <UL>
                    <li><a href="">Introduction of Accounting</a></li>

                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 4</b>
                <UL>
                <li><a href="">Double Entry System of Book Keeping</a></li>
                <li><a href="">Accounting and Economic Concept of
Income</a></li>
                <li><a href="">Computation of Accounting Income and Economic
Income</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 5</b>
                <UL>
                    <li><a href="">Journalising,Posting and Balancing</a></li>
                    <li><a href="">Financial Statements</a></li>

                </UL>
            </div>
            <div class="BCA1"><B>UNIT :- 6</B>
            <ul>
                <li><a href="">Use of Computersnin Accounting</a></li>

            </ul>
        </div>
        </div>
        <div class="unit1">
           <h2> Nature of Management:</h2><br>
           <p>There are following Nature of Management.</p><br>
<p><b>1. Planning:</b></p><br>
<p>
```

```
Fundamental Principle: Management involves setting objectives and determining
the best course of action to achieve those objectives.
</p><br>
<p>
In Accounting: Financial planning is crucial. Budgets and forecasts are
prepared, considering the financial resources required to meet organizational
goals.
</p><br>
<p><b>2. Organizing:</b></p><br>

<p> Fundamental Principle:
Management structures and organizes resources (people, materials, and
equipment) to implement the plans effectively.
</p><br><p>
In Accounting: Organizational structure influences the design of accounting
systems and the allocation of financial responsibilities.
</p><br>
<p><b>3. Leading:</b></p><br>
<p>
Fundamental Principle: Management involves directing and motivating
individuals and teams to achieve the desired outcomes.
</p><br><p>
In Accounting: Leadership is crucial for managing accounting teams, ensuring
accurate financial reporting, and fostering a culture of compliance.
</p><br>
<p><b>4. Controlling:</b></p><br>
<p>
Fundamental Principle: Management monitors performance against plans, takes
corrective actions, and ensures that goals are met efficiently.
</p><br><p>
In Accounting: Internal controls are implemented to ensure the accuracy and
reliability of financial information, and financial performance is
continuously monitored.
</p><br>
<p><b>5. Decision-Making:</b></p><br>
<p>
Fundamental Principle: Management makes informed decisions based on analysis,
evaluation, and judgment.
</p><br><p>
In Accounting: Decision-making involves financial analysis, cost-benefit
analysis, and using accounting information to make strategic choices.
</p><br>
<p><b>6. Adaptability:</b></p><br>
<p>
Fundamental Principle: Management must adapt to changes in the internal and
external environment.
</p><br><p>
```

```
In Accounting: Accounting practices and reporting must adapt to changes in
regulations, industry standards, and organizational needs.
</p><br>
        </div>
    </div>

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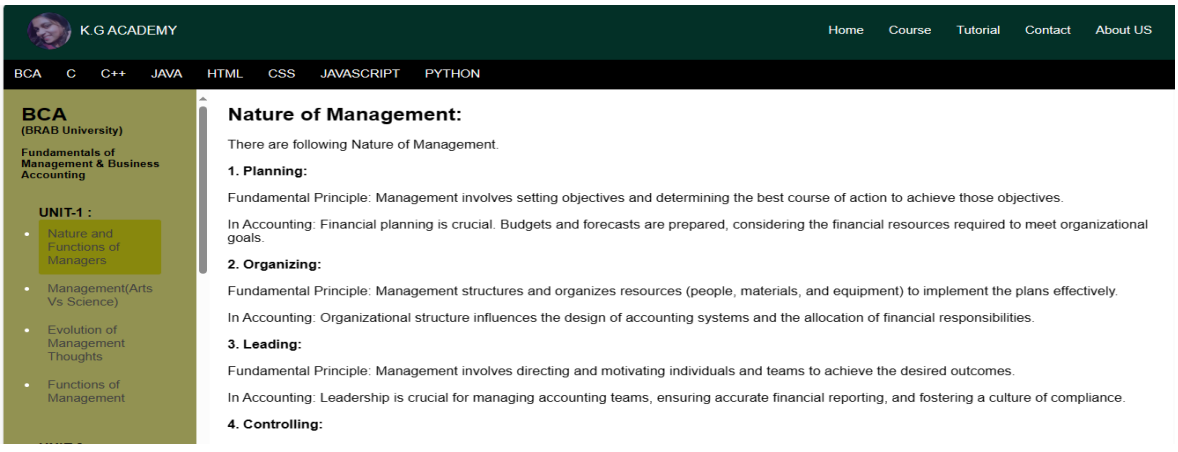

Database management system code and screenshot

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                <h5>(BRAB University) <BR><BR>Data Management
System</BR></BR></h5>
            </header>
            <div class="BCA1"> <b>UNIT-1 : </b>
                <UL>
                    <li><a href="">Database and Database Users</a></li>
                    <li><a href="">Characteristic of the Database
Approach</a></li>
                    <li><a href="">Structure, function and Components of
DBMS</a></li>
                    <li><a href="">Different People behind DBMS</a></li>
                    <li><a href="">Advantage of using DBMS</a></li>
                    <li><a href="">Database System Concepts and
architecture</a></li>
                    <li><a href="">Types of DBMS </a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT-2 : </b>

                <UL>
                    <li><a href="">Entity-Relation Model</a></li>
                    <li><a href="">Abstraction</a></li>
                    <li><a href="">Generalisation</a></li>
                    <li><a href="">Specialisation</a></li>
                    <li><a href="">Aggregation</a></li>
                    <li><a href="">Cardinality and Modality</a></li>
                </UL>
            </div>

            <div class="BCA1"> <b>UNIT-3 : </b>
                <UL>
                    <li><a href="">Relational Data Model></a></li>
                    <li><a href="">Keys</a></li>
                    <li><a href="">Relational Algebra</a></li>
                    <li><a href="">Introduction to Network and Hierarchical
Data Models</a></li>
                </UL>
            </div>
```

```
            <div class="BCA1"><b>UNIT :- 4</b>
                <UL>
                    <li><a href="">Functional Dependencies and Normalization
for Relational Database </a></li>
                    <li><a href="">Different Normal Forms</a></li>
                    <li><a href="">Multi-Values dependencies</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 5</b>
                <UL>
                    <li><a href="">Relational Database Language</a></li>

                </UL>
            </div>
            <div class="BCA1"><B>UNIT :- 6</B>
                <ul>
                    <li><a href="">Transaction Processing Concepts</a></li>

                </ul>
            </div>
        </div>
        <div class="unit1">
            <h2><u>Database</u></h2> <br>
            <div class="para">
                <p>A database is an organized collection of structured
information, or data, typically stored
                    electronically in a computer system. A database is usually
controlled by a database management
                    system (DBMS).
                    <br><br>ϖ Any place where the data is stored it is called
a data base. A data base is
                    information that is set up for easy access, management and
updating. <br>
                    ϖ Collection of all related files of an organization is
known as data base. <br>
                    ϖ Data base were first created in the 1960. <br>
                    ϖ The main purpose of the database is to operate a large
amount of information
                    by storing, retrieving and managing data. <br>
                    ϖ Using the database you can easily retrieve insert and
delete the information. <br>
                    ϖ These early database were network models where each
record is related to
                    many primary and secondary records. <br>
                    ϖ Collection of all related files of an organization is
known as data base
```

```
                </p> <br>
            </div>
            <div>
                <h2>Database User </h2><br>
                <p>There are following database user.</p><br>
                <p>
                <h2> 1. Database Administrator (DBA) :</h2> <br>
                <p> Database Administrator (DBA) is a person/team who defines
the schema and also controls the 3 levels
                    of database. The DBA will then create a new account id and
password for the user if he/she need to
                    access the database. DBA is also responsible for providing
security to the database and he allows
                    only the authorized users to access/modify the data base.
DBA is responsible for the problems such
                    as security breaches and poor system response
time.</p><br>
                <p> DBA also monitors the recovery and backup and provide
technical support.</p><br>
                <p> DBA has a DBA account in the DBMS which called a system or
superuser account.</p><br>
                <p> DBA repairs damage caused due to hardware and/or software
failures.</p><br>
                <p>DBA is the one having privileges to perform DCL (Data
Control Language) operations such as GRANT and
                    REVOKE, to allow/restrict a particular user from accessing
the database.</p><br>
                </p><br>
                <h2> 2. Naive / Parametric End Users :</h2><br>
                <p> Parametric End Users are the unsophisticated who don’t
have any DBMS
                    knowledge but they frequently use the database
applications in their daily life to get the desired
                    results. For examples, Railway’s ticket booking users are
naive users. Clerks in any bank is a naive
                    user because they don’t have any DBMS knowledge but they
still use the database and perform their
                    given
                    task.</p><br>
                <h2>
                    3. System Analyst :</h2><br>
                <p>
                    System Analyst is a user who analyzes the requirements of
parametric end users. They check whether
                    all
                    the requirements of end users are satisfied.</p><br>
                <h2>
                    4. Sophisticated Users : </h2><br>
```

```
                <p> users can be engineers, scientists, business analyst, who
are
                    familiar with the database. They can develop their own
database applications according to their
                    requirement. They don’t write the program code but they
interact the database by writing SQL queries
                    directly through the query processor.</p><br>
                <h2>5. Database Designers : </h2><br><p> Data Base Designers
are the users who design the structure of database which
                includes tables, indexes, views, triggers, stored procedures
and constraints which are usually enforced
                before the database is created or populated with data. He/she
controls what data must be stored and how
                the data items to be related. It is responsibility of Database
Designers to understand the requirements
                of different user groups and then create a design which
satisfies the need of all the user groups.
                </p><br><br>
                <h2>6. Application Programmers :</h2><br><p> Application
Programmers also referred as System Analysts or simply Software
                Engineers, are the back-end programmers who writes the code
for the application programs. They are the
                computer professionals. These programs could be written in
Programming languages such as Visual Basic,
                Developer, C, FORTRAN, COBOL etc. Application programmers
design, debug, test, and maintain set of
                programs called “canned transactions” for the Naive
(parametric) users in order to interact with
                database.</p><br><br><h2>
                7. Casual Users / Temporary Users :</h2><br><p> Casual Users
are the users who occasionally use/access the database but
                each time when they access the database they require the new
information, for example, Middle or higher
                level manager.</p><br>
                <h2>8. Specialized users :</h2><br><p>Specialized users are
sophisticated users who write
                    specialized database application that does not fit into
the traditional data-
                    processing framework. Among these applications are
computer aided-design
                    systems, knowledge-base and expert systems etc.</p><br>
            </div>

        </div>
    </div>

    <footer class="footer">
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```
            <div class="column1">
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                <div class="channel">K.G ACADEMY</div>
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            <div class="column2">
                <h1>BCA </h1>
                <ul>
                    <li><a href="firstSemester.html">First Semester</a></li>
                    <li><a href="secondSemester.html">Second Semester</a></li>
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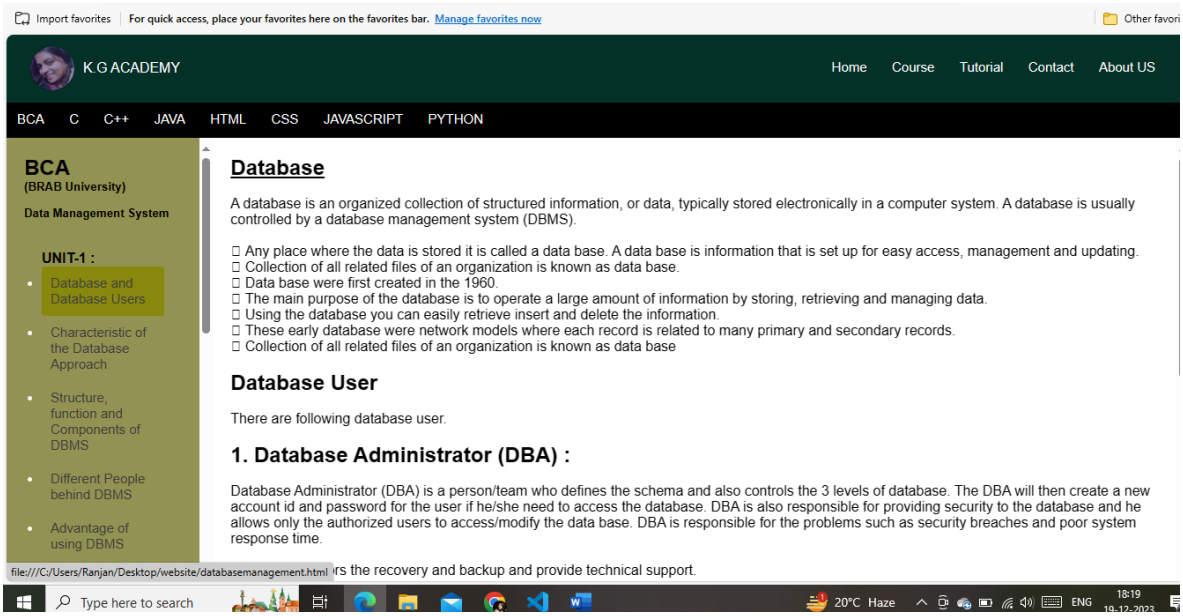
                    <li><a href="fifthSemester.html">Fifth Semester</a></li>
                </ul>
            </div>
            <div class="column3">
                <h1>GET IN TOUCH</h1>
                <ul>
                    <li>kajalgupta62064@gmail.com</li>
                </ul>
            </div>
        </div>
    </footer>
</body>
```



Object Oriented Programming through c++ code and screenshot

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<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>WEBSITE</title>
    <link rel="stylesheet" href="kg.css">
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>


</head>

<body>
    <nav class="sticky">
        <div class="logo">
            <img src="logo.jpg" width="50" height="50px">
        </div>
        <div class="channel">K.G ACADEMY</div>
        <div class="nav-links">

            <ul>
                <li><a href="kg.html">Home</a></li>
                <li><a href="course.html">Course</a></li>
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                <li><a href="contact.html">Contact</a></li>
                <li><a href="aboutus.html">About US</a></li>
            </ul>
        </div>

    </nav>

    <div class="menu">
        <ul>
            <li><a href="bca.html">BCA</a></li>
            <li><a href="c.html">C</a></li>
            <li><a href="cPlus.html">C++</a></li>
            <li><a href="java.html">JAVA</a></li>
```

```
            <li><a href="htmlp.html">HTML</a></li>
            <li><a href="cssp.html">CSS</a></li>
            <li><a href="javascriptp.html">JAVASCRIPT</a></li>
            <li><a href="python.html">PYTHON</a></li>
        </ul>
    </div>
    <div class="bcacontent">
        <div class="sidebar">
            <header>
                <h2>BCA </h2>
                <h5>(BRAB University) <BR><BR>C++ PROGRAMMING</BR></BR></h5>
            </header>
            <div class="BCA1"> <b>UNIT-1 : </b>
                <UL>
                    <li><a href="">Object Oriented programming concepts why do
we need object oriented</a></li>
                    <li><a href="">C++ Programming basics
(cout,cin,bool,setw)</a></li>
                    <li><a href="">Type conversions</a></li>

                </UL>
            </div>

            <div class="BCA1"><b>UNIT-2 : </b>

                <UL>
                    <li><a href="">Functions</a></li>

                </UL>
            </div>

            <div class="BCA1"> <b>UNIT-3 : </b>
                <UL>
                    <li><a href="">Object and Classes</a></li>
                    <li><a href="">implementation of class in c++</a></li>
                    <li><a href="">C++ objects as physical object</a></li>
                    <li><a href="">c++ object as datatypes</a></li>
                    <li><a href="">constructor</a></li>
                    <li><a href="">Object as function arguments</a></li>
                    <li><a href="">the default copy constructor</a></li>
                    <li><a href="">returing object from function</a></li>
                    <li><a href="">Structures and classes</a></li>
                    <li><a href="">classes objects and memory static class
data</a></li>
                    <li><a href="">const and classes</a></li>
                </UL>
            </div>
```

```
            <div class="BCA1"><b>UNIT :- 4</b>
                <UL>
                    <li><a href="">Arrays and string arrays
fundamentals</a></li>
                    <li><a href="">Arrays as class member data</a></li>
                    <li><a href="">Operator overloading</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 5</b>
                <UL>
                    <li><a href="">Inheritance</a></li>
                    <li><a href="">Aggregation</a></li>

                </UL>
            </div>
            <div class="BCA1"><B>UNIT :- 6</B>
                <ul>
                    <li><a href="">Pointer</a></li>
                    <li><a href="">Memory Management</a></li>
                    <li><a href="">Streams and files</a></li>
                    <li><a href="">Templates and Exceptions</a></li>
                </ul>
            </div>
        </div>
        <div class="unit1">
            <h2>Object Oriented programming concepts</h2><br>
            <div class="ovww">
                <p>Object-Oriented Programming (OOP) is a programming paradigm
that uses objects, which are instances of
                    classes, for designing and organizing code. OOP provides
several benefits that contribute to better
                    code organization, modularity, and maintainability. Here
are some key reasons why Object-Oriented
                    Programming is important:</p> <br>
                <h2>1. Modularity:</h2> <br>
                <p>OOP encourages the organization of code into modular units
called classes. Each class represents a
                    specific entity and encapsulates its properties and
behavior.</p> <br>
                <p> Modularity makes it easier to understand, modify, and
extend code. Changes in one part of the code
                    do not necessarily affect other parts, provided that the
interfaces remain consistent.</p> <br>
                <h2>2. Reusability:</h2> <br>

                <p>Objects and classes can be reused in different parts of an
application or in different projects
```

```
                    altogether.</p> <br>
                <p> Code reuse is facilitated through the concept of
inheritance, where a new class can inherit
                    attributes and behaviors from an existing class, promoting
the reuse of code.</p> <br>
                <h2>3. Encapsulation:</h2> <br>
                <p>Encapsulation involves bundling the data (attributes) and
the methods (functions) that operate on the
                    data into a single unit, i.e., a class.</p> <br>
                <p> It allows the internal workings of a class to be hidden
from the outside world, promoting
                    information hiding and reducing dependencies.</p><br>
                <h2>4.Abstraction:</h2> <br>
                <p>Abstraction involves simplifying complex systems by
modeling classes based on the essential
                    properties and behaviors they share.</p> <br>
                <p> It allows developers to focus on relevant aspects of an
object and ignore unnecessary details,
                    making it easier to comprehend and work with complex
systems.</p> <br>
                <h2>5. Polymorphism:</h2><br>
                <p> Polymorphism allows objects of different classes to be
treated as objects of a common base class.
                    This enables code to be more flexible and extensible.</p>
<br>
                <p> It allows the same interface (method or property) to be
used for different types of objects,
                    promoting code reuse and flexibility.</p> <br>
                <h2>6. Maintainability:</h2> <br>

                <p> OOP facilitates code maintenance by providing a clear and
organized structure. Changes to one part
                    of the code are less likely to affect other parts if the
principles of encapsulation and modularity
                    are followed.</p> <br>
                <p> When new features need to be added or existing ones
modified, OOP makes it easier to identify and
                    update the relevant portions of the code.</p> <br>
                <h2>7. Scalability:</h2> <br>
                <p>OOP principles make it easier to scale applications. New
features can be added by creating new
                    classes or extending existing ones without major
disruptions to the existing codebase.</p> <br>
                <h2>8. Collaboration:</h2>
                <p>OOP promotes collaboration among developers. Different team
members can work on different classes or
                    modules without interfering with each other, as long as
the interfaces between classes are
```

```
                    well-defined.</p> <br>

                <p>In summary, Object-Oriented Programming enhances code
organization, promotes reuse, simplifies
                    maintenance, and supports the development of scalable and
collaborative software systems. These
                    factors contribute to the creation of more robust,
flexible, and understandable software.</p>

            </div>
        </div>
    </div>

        <footer class="footer">
            <div class="footer-container">
                <div class="column1">
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                        <img src="logo.jpg" width="50" height="50px">
                    </div>
                    <div class="channel">K.G ACADEMY</div>
                </div>
                <div class="column2">
                    <h1>BCA </h1>
                    <ul>
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Semester</a></li>
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                    </ul>
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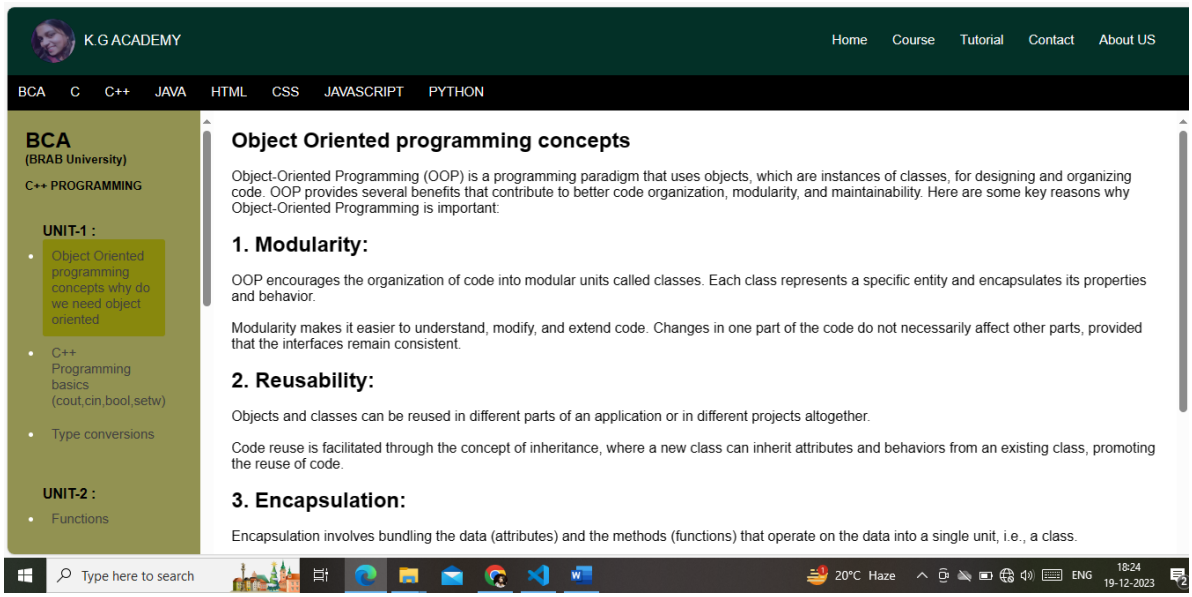

Numerical Methodology code and screenshot

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    <meta name="viewport" content="width=device-width, initial-scale=1.0">
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```

```
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        </ul>
    </div>
    <div class="bcacontent">
        <div class="sidebar">
            <header>
                <h2>BCA </h2>
                <h5>(BRAB University) <BR><BR>Numerical
Methodology</BR></BR></h5>
            </header>
            <div class="BCA1"> <b>UNIT-1 : <br> nonlinear algebraic and
transcendental equations </b>
                <UL>
                    <li><a href=""> Bisection method</a></li>
                    <li><a href=""> false position method</a></li>
                    <li><a href=""> Newton Raphson method</a></li>
                    <li><a href="">iterative Method</a></li>
                    <li><a href="">Lin Bairstow's method</a></li>

                </UL>
            </div>

            <div class="BCA1"> <b>UNIT-2 : <br> Solution of Simultaneous
linear equation </b>
                <UL>
                    <li><a href="">Gauss elimination method</a></li>
                    <li><a href="">Gauss jordan method</a></li>
                    <li><a href="">LU Decomposition method</a></li>
                    <li><a href="">Crout's Method</a></li>
                    <li><a href="">Jacobi method</a></li>
                    <li><a href="">Gauss Seidel method</a></li>
                    <li><a href="">7Relaxation method</a></li>
```

```
                    <li><a href="">Inverse of a matrix using iterative
method</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 3</b>
                <UL>
                    <li><a href="">Finite differences: introduction and
differet types of operators and relation between
                            them</a></li>
                    <li><a href="">Factorial notation and Polynomial in
factorial notation</a></li>

                </UL>
            </div>
            <div class="BCA1"><b>UNIT-4 : </b>

                <UL>
                    <li><a href="">Introduction Newton forward and backward
interpolation</a></li>
                    <li><a href="">Newton Divide difference</a></li>
                    <li><a href="">Lagrange's interpolation</a></li>
                    <li><a href="">Central difference interpolation
formula</a></li>
                    <li><a href="">Gauss forward and backward interpolation
formula</a></li>
                    <li><a href="">Numerical differentiation</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 5 <br>Numerical Integration </b>
                <UL>
                    <li><a href=""> Trapezoidal rule</a></li>
                    <li><a href=""> simpson's rules</a></li>
                    <li><a href=""> Weddle's rules</a></li>

                </UL>
            </div>
            <div class="BCA1"><B>UNIT :- 6 <br>(Solution of Ordinary
differential equation)</B>
                <ul>
                    <li><a href=""> Euler's Method</a></li>
                    <li><a href="">Euler's modified method</a></li>
                    <li><a href="">Runga kutta method</a></li>
                    <li><a href="">Taylor's series Method</a></li>
                    <li><a href="">Picard's Method</a></li>
                    <li><a href="">Adams-Bashforth method</a></li>
                </ul>
```

```
            </div>
        </div>
        <div class="unit1">
            <h2>Bisection Method</h2><br><br>
            <div>
                <p>The bisection method is used to find the roots of a
polynomial equation. It separates the interval
                    and subdivides the interval in which the root of the
equation lies. The principle behind this method
                    is the intermediate theorem for continuous functions. It
works by narrowing the gap between the
                    positive and negative intervals until it closes in on the
correct answer. This method narrows the
                    gap by taking the average of the positive and negative
intervals. It is a simple method and it is
                    relatively slow. The bisection method is also known as
interval halving method, root-finding method,
                    binary search method or dichotomy method.</p><br>
                <p>Let us consider a continuous function “f” which is defined
on the closed interval [a, b], is given
                    with f(a) and f(b) of different signs. Then by
intermediate theorem, there exists a point x belong
                    to (a, b) for which f(x) = 0.</p><br>
                <h2>Bisection Method Algorithm</h2><br>
                <p>For any continuous function f(x) ,<br><br>

                <p> 1. Find two points, say a and b such that a < b and f(a)*
f(b) < 0 </p><br>
                        <br<p>2. the midpoint of a and b, say
                            “t” </p><br><br>
                <p>3. t is the root of the given function if f(t)=0; else
follow the next step </p><br><br>
                <p>4.
                    the interval
                    [a, b] – If f(t)*f(a) <0, there exist a root between t and
a – else if f(t) *f (b) < 0, there exist
                        a root between t and b </p><br>
                        <p>5. above three steps until f(t)=0.</p><br><br>
                        <p> The bisection method is an
                            approximation method to find the roots of the
given equation by repeatedly dividing the
                            interval. This method will divide the interval
until the resulting interval is found, which
                            is
                            extremely small.</p>
            </div>
        </div>
    </div>
```

```
    <footer class="footer">
        <div class="footer-container">
            <div class="column1">
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                    <img src="logo.jpg" width="50" height="50px">
                </div>
                <div class="channel">K.G ACADEMY</div>
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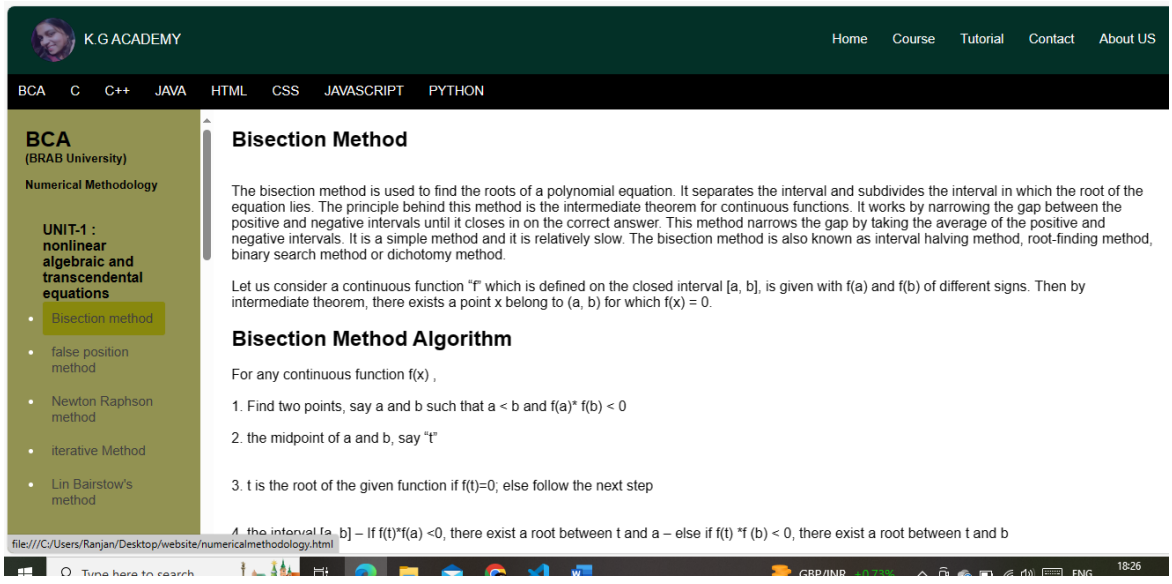

Fourth Semester

Java code and screenshot

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<html lang="en">

<head>
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    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>


</head>

<body>
    <nav class="sticky">
        <div class="logo">
            <img src="logo.jpg" width="50" height="50px">
        </div>
        <div class="channel">K.G ACADEMY</div>
        <div class="nav-links">

            <ul>
                <li><a href="kg.html">Home</a></li>
                <li><a href="course.html">Course</a></li>
                <li><a href="tutorial.html">Tutorial</a></li>
                <li><a href="contact.html">Contact</a></li>
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            </ul>
        </div>

    </nav>

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        <ul>
            <li><a href="bca.html">BCA</a></li>
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```

```
            <li><a href="javascriptp.html">JAVASCRIPT</a></li>
            <li><a href="python.html">PYTHON</a></li>
        </ul>
    </div>
    <div class="bcacontent">
        <div class="sidebar">
            <header>
                <h2>BCA </h2>
                <h5>(BRAB University) <BR><BR>JAVA</BR></BR></h5>
            </header>
            <div class="BCA1"> <b>UNIT-1 : </b>
                <UL>
                    <li> <a href="">Overview of java</a></li>
                    <li><a target="_blank" href="">Java and C++</a></li>

                    <li><a target="_blank" href="">Java and Internet</a></li>
                    <li><a target="_blank" href="">Java invironment</a></li>
                    <li><a href="">Java Program Structure</a></li>
                    <li><a href="">Java Tokens</a></li>
                    <li><a href="">Java Virtual Machine</a></li>
                    <li><a href="">Java Variables</a></li>
                    <li><a href="">Java Constants</a></li>
                    <li><a href="">Java Datatypes</a></li>
                    <li><a href="">Java Operators</a></li>


                    <p>Decision Making and Branching</p>
                    <li><a href="">Java if Statement</a></li>
                    <li><a href="">Java if...else Statement</a></li>
                    <li><a href="">Java Nesting of if...else</a></li>
                    <li><a href="">Java else...if Ladder</a></li>
                    <li><a href="">Java Switch</a></li>
                    <li><a href="">Java While Loops </a></li>
                    <li><a href="">Java Do Loops</a></li>
                    <li><a href="">Java For Loops</a></li>
                    <li><a href="">Java Jumps in Loop</a></li>
                    <li><a href="">Java Labellsd Loops</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT-2 : </b>

                <UL>
                    <li><a href="">Java OOP</a></li>
                    <li><a href="">Java Classes/Objects></a></li>
                    <li><a href="">Java Constructor</a></li>
                    <li><a href="">Java Method Overloading</a></li>
                    <li><a href="">Java Stastic Members</a></li>
                    <li><a href="">Nesting of Methods</a></li>
```

```
                    <li><a href="">Java Inheritance</a></li>
                    <li><a href="">Java Visibility Control</a></li>
                    <li><a href="">Java Overriding Methods</a></li>
                    <li><a href="">Java Abstract Method</a></li>

                </UL>
            </div>

            <div class="BCA1"> <b>UNIT-3 : </b>
                <UL>
                    <li><a href="">Arrays</a></li>
                    <li><a href="">String</a></li>
                    <li><a href="">Vectors</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 4</b>
                <UL>
                    <li><a href="">Multithreaded Programming</a></li>

                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 5</b>
                <UL>
                    <li><a href="">Applet Programming</a></li>

                </UL>
            </div>

        </div>
        <div class="unit1">
            <h2>Overview of Java Language</h2><br>
            <div class="pra">
                <p>Java is a versatile, object-oriented, and platform-
independent programming
                    language developed by Sun</p>
                <p>Microsystems (now owned by Oracle Corporation) in the mid-
1990s. It has since become one of the</p>
                <p>most popular and widely used programming languages in the
world, especially for building enterprise-
                </p>
                <p>level applications, mobile applications (Android), web
applications, and large-scale distributed
                    systems.</p>
            </div><br>
            <h2>History of Java</h2>
            <div>
```

```
                <p>In 1990's James Ghosling and his team tried to develop a
portable application that can run on any
                    microchip. The team choose C++ to accomplish this task.
But soon they found that there are many
                    features in c++ that prevent it from being PORTABLE.
Therefore they tried to remove features that
                    are plateform dependent. In doing so, they ended up
developing a new programming language called
                    Oak. Some say that the reason simply being that the team
leader James Gosling spent most of the time
                    under a Oak tree so they choose this name. Sun Microsystem
renamed Oak to Java in 1995.
                </p>
            </div> <br>
            <h2>Versions of Java</h2><br>
            <div>

                <p> Java 1.0 (January 1996): Initial release.</p><br>
                <p> Java 1.1 (February 1997): Introduced inner classes and
JDBC.</p><br>
                <p> Java 2 (December 1998): Versions 1.2, 1.3, and 1.4
introduced Swing, Collections, and other
                         features.</p><br>
                <p> Java 5 (September 2004): Introduced generics and enhanced
for loop.</p><br>
                <p> Java 6 (December 2006): Improved performance and added
scripting support.</p><br>
                <p> Java 7 (July 2011): Introduced try-with-resources and
diamond operator.</p> <br>
                <p>Java 8 (March 2014): Major release with lambdas and Stream
API.</p> <br>
                <p> Java 9 (September 2017): Introduced module system (Project
Jigsaw).</p><br>
                <p> Java 10 (March 2018): Modest release with local-variable
type inference.</p><br>
                <p> Java 11 (September 2018): First LTS under the new release
model.</p><br>
                <p> Java 12–17 (2019–2021): Incremental releases with various
features and improvements.</p><br>
                <p> Java 18 (Future): Expected to continue the evolution of
the language.</p><br>
            </div>
            <h2>Features of Java</h2><br>
            <div>
                <p>Simple</p><br>
                <p>Object-Oriented</p><br>
                <p> Portable</p><br>
                <p> Platform independent</p><br>
```

```
            <p> Secured</p><br>
            <p> Robust</p><br>
            <p>Architecture neutral</p><br>
            <p> Interpreted</p><br>
            <p> High Performance</p><br>
            <p> Multithreaded</p><br>
            <p> Distributed</p><br>
            <p> Dynamic</p><br>
        </div>
        <h3 id="app">Application of Java</h3>
        <div class="appli">
            <li>Mobile applications (specially Android apps)</li>
            <li> Desktop applications</li>
            <li>Web applications</li>
            <li> Web servers and application servers
                Games</li>
            <li>Database connection</li>
            <li> And much, much more!</li>
        </div>
    </div>
</div>

<footer class="footer">
    <div class="footer-container">
        <div class="column1">
            <div class="logo">
                <img src="logo.jpg" width="50" height="50px">
            </div>
            <div class="channel">K.G ACADEMY</div>
        </div>
        <div class="column2">
            <h1>BCA </h1>
            <ul>
                <li><a href="firstSemester.html">First Semester</a></li>
                <li><a href="secondSemester.html">Second Semester</a></li>
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            </ul>
        </div>
        <div class="column3">
            <h1>GET IN TOUCH</h1>
            <ul>
                <li>kajalgupta62064@gmail.com</li>
            </ul>
        </div>
    </div>
</footer>
```
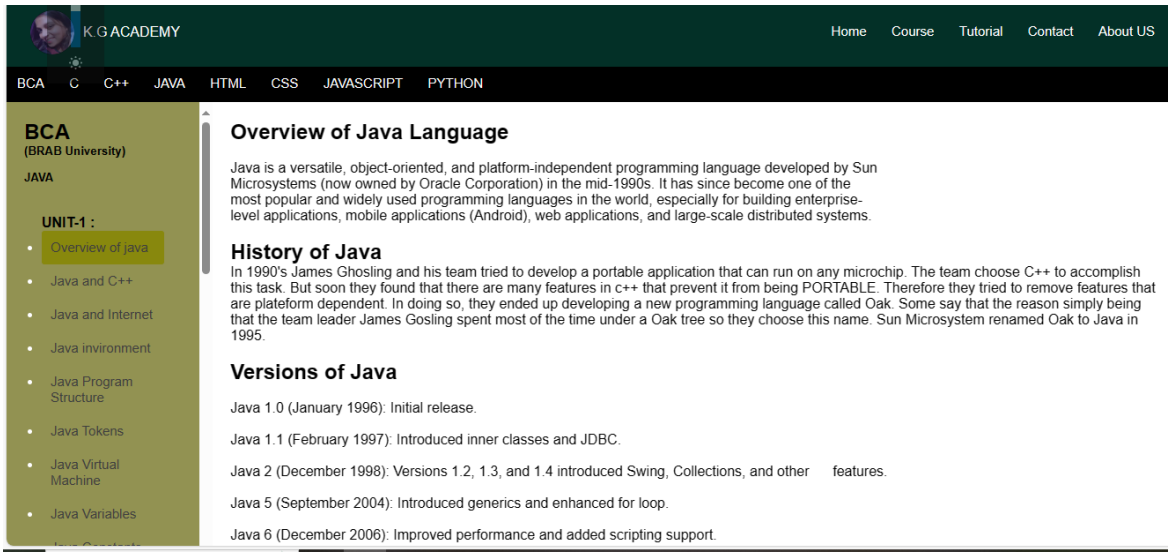

```
</body>
```



Computer Graphics code and screenshot

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>WEBSITE</title>
    <link rel="stylesheet" href="kg.css">
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            <li><a href="python.html">PYTHON</a></li>
        </ul>
    </div>
    <div class="bcacontent">
        <div class="sidebar">
            <header>
                <h2>BCA </h2>
                <h5>(BRAB University) <BR><BR>COMPUTER GRAPHICS</BR></BR></h5>
            </header>
            <div class="BCA1"> <b>UNIT-1 : </b>
                <UL>
                    <li><a href="">Introduction of Computer Graphics
System</a></li>
                    <li><a href="">Interactive Graphics</a></li>
                    <li><a href="">Passive Graphics</a></li>
                    <li><a href="">Application of Computer Graphics</a></li>

                </UL>
            </div>

            <div class="BCA1"><b>UNIT-2 : </b>

                <UL>
                    <li><a href="">Display Devices</a></li>
                    <li><a href="">Cathode Ray Tube</a></li>
                    <li><a href="">Bit-mapped Graphics</a></li>
                    <li><a href="">Graphics Attributes</a></li>
                    <li><a href="">Refresh Cathode Ray Tubes</a></li>
                    <li><a href="">Random Scan Displays</a></li>
                    <li><a href="">Raster-scan Displays</a></li>
                    <li><a href="">Color CRT Monitors</a></li>
```

```
                    <li><a href="">Direct-View Storage Tubes (DVST)</a></li>
                    <li><a href="">Plasma Panel Displays</a></li>
                    <li><a href="">Thin Film Electroluminescent
displays</a></li>
                    <li><a href="">Light Emitting Diode(LED)</a></li>
                    <li><a href="">Liquid Crystal Displays(LCD)</a></li>
                    <li><a href="">Hard Copy Output Devices</a></li>
                </UL>
            </div>

            <div class="BCA1"> <b>UNIT-3 : </b>
                <UL>
                    <li><a href="">Scan Conversion and Digital Differential
Analyzer</a></li>
                    <li><a href="">Bresenham's Algorithms and
IntegerBresenham's Algorithm</a></li>
                    <li><a href="">General Bresenham's Algorithm of Circle
Generation</a></li>
                    <li><a href="">Midpoint circle Algorithm</a></li>
                    <li><a href="">Ellipse Generation Algorithms</a></li>
                    <li><a href="">Arc Generation algorithms</a></li>
                    <li><a href="">fill algorithms</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 4</b>
                <UL>
                    <li><a href="">Fundamentals of Antialiasing</a></li>
                    <li><a href="">Dithering</a></li>
                    <li><a href="">2-D Graphics Transformations</a></li>
                    <li><a href="">Geometric and Coordinate
Transformations</a></li>
                    <li><a href="">Transformation Composition</a></li>
                    <li><a href="">2-D Vieew and Clipping</a></li>
                    <li><a href="">Exterior and Interior clipping</a></li>
                    <li><a href="">Viewport Transformation</a></li>
                    <li><a href="">polygon clipping</a></li>
                    <li><a href="">Text clipping</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT :- 5</b>
                <UL>
                    <li><a href="">3-D Graphics Transformations</a></li>

                </UL>
            </div>
            <div class="BCA1"><B>UNIT :- 6</B>
```

```
                <ul>
                    <li><a href="">MultiMedia</a></li>

                </ul>
            </div>
        </div>
        <div class="unit1">
            <h2>Introduction of computer graphics</h2>
            <div>
                <p>
                    <br>Graphics are defined as any sketch or a drawing or a
special network that pictorially represents
                    some meaningful information. Computer Graphics is used
where a set of images needs to be manipulated
                    or the creation of the image in the form of pixels and is
drawn on the computer. Computer Graphics
                    can be used in digital photography, film, entertainment,
electronic gadgets, and all other core
                    technologies which are required. It is a vast subject and
area in the field of computer science.
                    Computer Graphics can be used in UI design, rendering,
geometric objects, animation, and many more.
                    In most areas, computer graphics is an abbreviation of CG.
There are several tools used for the
                    implementation of Computer Graphics. The basic is the
<graphics.h> header file in Turbo-C, Unity for
                        advanced and even OpenGL can be used for its
Implementation.
                        <br>
                        The term ‘Computer Graphics’ was coined by Verne
Hudson and William Fetter from Boeing who were
                        pioneers in the field. <br>
                </p>
                <h2><br>
                    Computer Graphics refers to several things:</h2><br>
                <p>The manipulation and the representation of the image or the
data in a graphical manner.</p><br>
                <p>Various technology is required for the creation and
manipulation.</p><br>
                <p>Digital synthesis and its manipulation.</p><br>
            </div>
            <div>
                <h2>Types of Computer Graphics</h2><br>
                <p><b>1. Raster Graphics:</b></p><br>
                <p>In raster, graphics pixels are used for an image to be
drawn. It is also known as a bitmap image in
                    which a sequence of images is into smaller pixels.
Basically, a bitmap indicates a large number of
```

```
                    pixels together.</p><br>
                <p><b>2. Vector Graphics: </b></p><br>
                <p>
                    In vector graphics, mathematical formulae are used to draw
different types of shapes, lines,
                    objects, and so on.
                </p>
            </div>
            <div><br><br>
                <h2>Interactive Computer Graphics</h2> <br><br>
                <p>To construct various images and graphics in interactive
manner, there are different methods which are
                    built into various graphics packages. These packages
contains various options which help user to
                    enter information of coordinate by using stroke devices or
various locators. These coordinates helps
                    in creating boundaries for various objects which user is
going to drawn.</p>
            </div>
        </div>
    </div>

    <footer class="footer">
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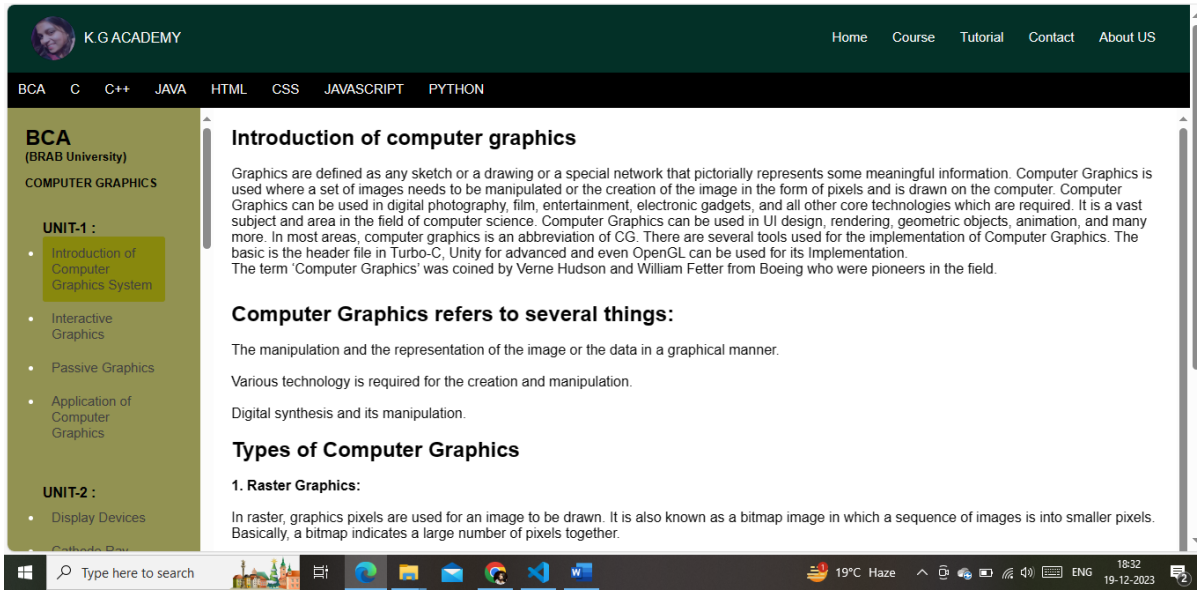

Operating System and LINUX code and screenshot

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    </div>
    <div class="bcacontent">
        <div class="sidebar">
            <header>
                <h2>BCA </h2>
                <h5>(BRAB University) <BR><BR>OPERATING SYSTEM AND
LINUX</BR></BR></h5>
            </header>
            <div class="BCA1"> <b>UNIT-1 :(Overview) </b>
                <UL>
                    <li><a href="">Objectives</a></li>
                    <li><a href="">Functions</a></li>
                    <li><a href="">Evolution</a></li>
                    <li><a href="">Achievement</a></li>

                </UL>
            </div>

            <div class="BCA1"><b>UNIT-2 : (Process Management) </b>

                <UL>
                    <li><a href="">Process State</a></li>
                    <li><a href="">Description</a></li>
                    <li><a href="">Control</a></li>
```

```
    </UL>
</div>

<div class="BCA1"> <b>UNIT-3 : (Process Synchronization)</b>
    <UL>
        <li><a href="">Mutual Exclusion</a></li>
        <li><a href="">Semaphores</a></li>
        <li><a href="">Monitors</a></li>
        <li><a href="">Message Passing</a></li>
        <li><a href="">Readers/Writers Problem</a></li>
    </UL>
</div>

<div class="BCA1"><b>UNIT :- 4 (Deadlock)</b>
    <UL>
        <li><a href="">Deadlock Avoidance & Detection</a></li>
        <li><a href="">Dining Philosophers problem</a></li>

    </UL>
</div>

<div class="BCA1"><b>UNIT :- 5 (Memory Management)</b>
    <UL>
        <li><a href="">Requirements</a></li>
        <li><a href="">Partitioning</a></li>
        <li><a href="">Paging Segmentation</a></li>

    </UL>
</div>
<div class="BCA1"><B>UNIT :- 6 (Scheduling)</B>
    <ul>
        <li><a href="">Uniprocessor Scheduling Algorithms</a></li>
        <li><a href="">Multiprocessor Scheduling</a></li>
        <li><a href="">Real-time Scheduling</a></li>
    </ul>
</div>

<div class="BCA1"><B>UNIT :- 7 (File Management)</B>
    <ul>
        <li><a href="">File Organization</a></li>
        <li><a href="">Directories</a></li>
        <li><a href="">Sharing</a></li>
        <li><a href="">Record Blocking</a></li>
        <li><a href="">Secondary Stroage Management</a></li>
    </ul>
</div>
<div class="BCA1"><B>UNIT :- 8 (LINUX and SHELL PROGRAMMING)</B>
```

```
                <ul>
                    <li><a href="">LINUX</a></li>
                    <li><a href="">shell programming</a></li>

                </ul>
            </div>
        </div>
        <div class="unit1">
            <h2>
                <u>Objectives of Operating System</u>
            </h2>
            <div>
                <h2><br>Introduction : </h2>
                <p><br><br>An operating system (OS) is like the boss of your
computer. It helps apps and hardware work
                    together. It manages files, memory, and devices like
printers. Think of it as the traffic cop making
                    sure everything runs smoothly. In this blog, we will
discuss about objectives of OS.</p><br>
                To run other applications, every computer system must have at
least one operating system. Browsers, MS
                Office, Notepad Games, and other applications require an
environment to execute and fulfill their
                functions.
            </div><br>
            <div>
                <h2>What are the objectives of the Operating System?</h2>
                <p><br>The operating system acts as a bridge between the user
of a computer system and the computer
                    hardware. All of the applications required for your
programs to utilize the computer hardware are
                    located on top of the operating system.
                    The following are the main objectives of an operating
system:</p><br><br>
                <p>1. Efficiency <br>
                    2. Hardware abstraction <br>
                    3. Convenience <br>
                    4. System resource management <br>
                </p><br>
                <p>
                <h2>1. Efficiency:</h2><br>
                <p>The operating system increases the production efficiency.
This is because the system configuration
                    takes less time. By default, the operating system handles
system tasks such as allocating resources
                    to processes and resolving conflicts between different
programs and users. This saves the user time
                    and results in a more efficient result.</p><br>
```

```
                <h2>2. Hardware Abstraction : </h2><br>
                <p>The operating system performs a good job of concealing the
computer's intricate details. The user can
                    fully utilise the computer hardware without having to cope
with the accompanying difficulties. The
                    operating system coordinates communication between user
programs and computer hardware.</p>
                </p>
                <h2>3. Convenience :</h2><br>
                <p>In the absence of an operating system, users would have to
deal with the hardware directly without
                    access to the pre-configured utility packages that come
with an operating system. This would make
                    using a computer extremely inconvenient. Operating systems
allow users to go right to work on the
                    tasks they want to do without dealing with the burden of
setting up the system beforehand.</p>
                <h2><br>
                    4. System resource management</h2>
                <br>
                <p>The operating system serves as a neutral arbitrator. It
serves a management role in the computer
                    system by ensuring equitable resource distribution among
various operations and consumers.</p>
            </div>

        </div>
    </div>

    <footer class="footer">
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                <h1>BCA </h1>
                <ul>
                    <li><a href="firstSemester.html">First Semester</a></li>
                    <li><a href="secondSemester.html">Second Semester</a></li>
                    <li><a href="thirdSemester.html">Third Semester</a></li>
                    <li><a href="fourthSemester.html">Fourth Semester</a></li>
                    <li><a href="fifthSemester.html">Fifth Semester</a></li>
                </ul>
            </div>
            <div class="column3">
```
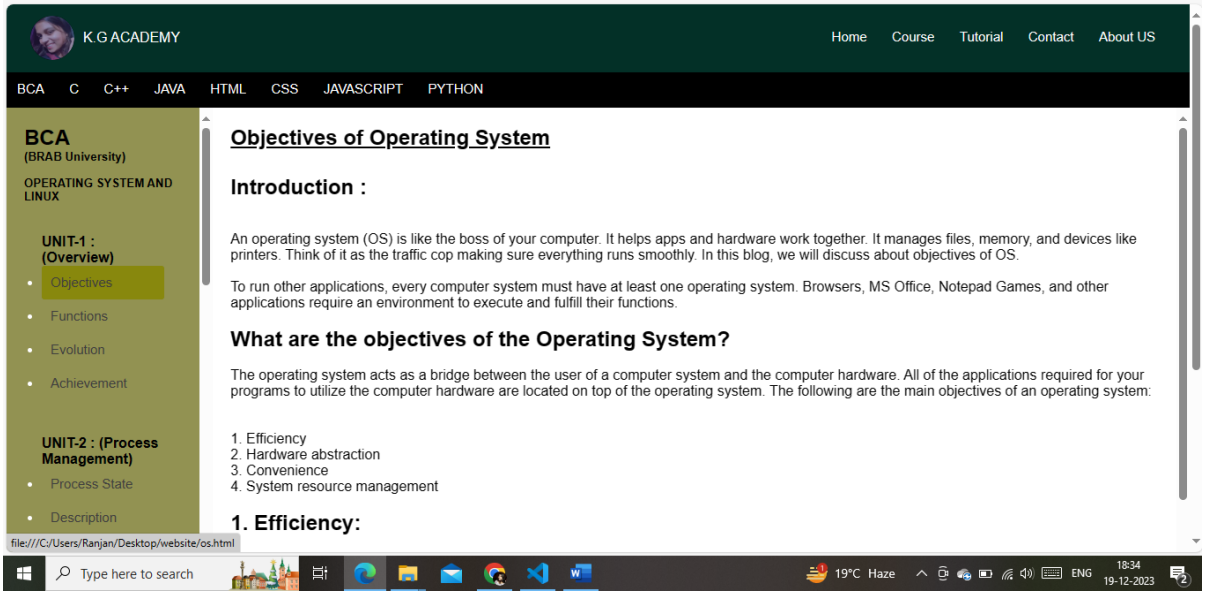

```
                <h1>GET IN TOUCH</h1>
                <ul>
                    <li>kajalgupta62064@gmail.com</li>
                </ul>
            </div>
        </div>
    </footer>
</body>
```



Software Engineering code and screenshot

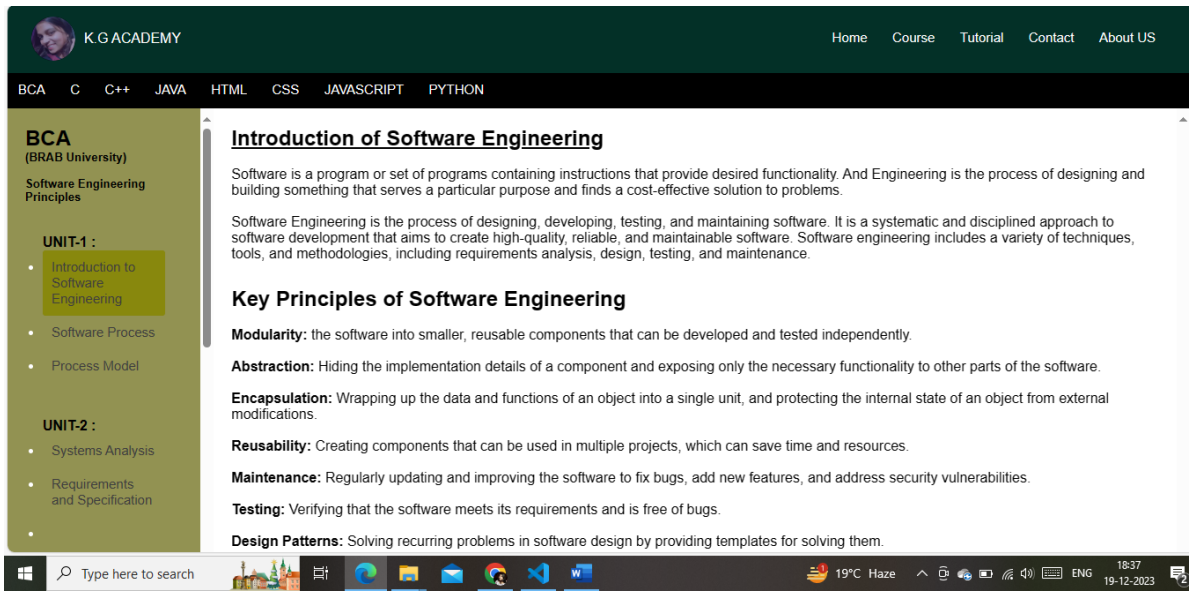
```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>WEBSITE</title>
    <link rel="stylesheet" href="kg.css">
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>


</head>

<body>
```

```
    <nav class="sticky">
        <div class="logo">
            <img src="logo.jpg" width="50" height="50px">
        </div>
        <div class="channel">K.G ACADEMY</div>
        <div class="nav-links">

            <ul>
                <li><a href="kg.html">Home</a></li>
                <li><a href="course.html">Course</a></li>
                <li><a href="tutorial.html">Tutorial</a></li>
                <li><a href="contact.html">Contact</a></li>
                <li><a href="aboutus.html">About US</a></li>
            </ul>
        </div>

    </nav>

    <div class="menu">
        <ul>
            <li><a href="bca.html">BCA</a></li>
            <li><a href="c.html">C</a></li>
            <li><a href="cPlus.html">C++</a></li>
            <li><a href="java.html">JAVA</a></li>
            <li><a href="htmlp.html">HTML</a></li>
            <li><a href="cssp.html">CSS</a></li>
            <li><a href="javascriptp.html">JAVASCRIPT</a></li>
            <li><a href="python.html">PYTHON</a></li>
        </ul>
    </div>
    <div class="bcacontent">
        <div class="sidebar">
            <header>
                <h2>BCA </h2>
                <h5>(BRAB University) <BR><BR>Software Engineering
Principles</BR></BR></h5>
            </header>
            <div class="BCA1"> <b>UNIT-1 : </b>
                <UL>
                    <li><a href="">Introduction to Software
Engineering</a></li>
                    <li><a href="">Software Process</a></li>
                    <li><a href="">Process Model</a></li>

                </UL>
            </div>

            <div class="BCA1"><b>UNIT-2 : </b>
```

```
            <UL>
                <li><a href="">Systems Analysis</a></li>
                <li><a href="">Requirements and Specification</a></li>
                <li><a href=""></a></li>
                <li><a href=""></a></li>
                <li><a href=""></a></li>
                <li><a href=""></a></li>
            </UL>
        </div>

        <div class="BCA1"> <b>UNIT-3 : </b>
            <UL>
                <li><a href=""></a></li>
                <li><a href=""></a></li>
                <li><a href=""></a></li>
            </UL>
        </div>

        <div class="BCA1"><b>UNIT :- 4</b>
            <UL>
                <li><a href=""></a></li>
                <li><a href=""></a></li>
                <li><a href=""></a></li>
            </UL>
        </div>

        <div class="BCA1"><b>UNIT :- 5</b>
            <UL>
                <li><a href=""></a></li>
                <li><a href=""></a></li>
                <li><a href=""></a></li>
                <li><a href=""></a></li>
                <li><a href=""></a></li>
                <li><a href=""></a></li>
            </UL>
        </div>
        <div class="BCA1"><B>UNIT :- 6</B>
            <ul>
                <li><a href=""></a></li>
                <li><a href=""></a></li>
                <li><a href=""></a></li>
            </ul>
        </div>
    </div>
    <div class="unit1">
        <h2><u>Introduction of Software Engineering</u></h2><br>
        <div>
```

```
                <p>Software is a program or set of programs containing
instructions that provide desired functionality.
                    And Engineering is the process of designing and building
something that serves a particular purpose
                    and finds a cost-effective solution to problems. </p>
<br>Software Engineering is the process of
                designing, developing, testing, and maintaining software. It
is a systematic and disciplined approach to
                software development that aims to create high-quality,
reliable, and maintainable software. Software
                engineering includes a variety of techniques, tools, and
methodologies, including requirements analysis,
                design, testing, and maintenance. <br>

            </div>
            <div>
                <h2> <br> Key Principles of Software Engineering</h2><br>
               <b> Modularity: </b> the software into smaller, reusable
components that can be developed and tested
                independently. <br><br>
                <b> Abstraction:</b> Hiding the implementation details of a
component and exposing only the necessary
                functionality to other parts of the software. <br><br>
                <b> Encapsulation:</b> Wrapping up the data and functions of
an object into a single unit, and protecting the
                internal state of an object from external modifications.
<br><br>
                <b>Reusability:</b> Creating components that can be used in
multiple projects, which can save time and
                resources. <br><br>
                <b> Maintenance: </b>Regularly updating and improving the
software to fix bugs, add new features, and address
                security vulnerabilities. <br><br>
                <b> Testing: </b>Verifying that the software meets its
requirements and is free of bugs. <br><br>
                 <b> Design Patterns:</b> Solving recurring problems in
software design by providing templates for solving them. <br><br>
                 <b> Agile methodologies:</b> Using iterative and incremental
development processes that focus on customer
                satisfaction, rapid delivery, and flexibility. <br><br>
                Continuous Integration & Deployment: Continuously integrating
the code changes and deploying them into
                the production environment. <br><br>
            </div>
        </div>
    </div>

    <footer class="footer">
```

```
        <div class="footer-container">
            <div class="column1">
                <div class="logo">
                    <img src="logo.jpg" width="50" height="50px">
                </div>
                <div class="channel">K.G ACADEMY</div>
            </div>
            <div class="column2">
                <h1>BCA </h1>
                <ul>
                    <li><a href="firstSemester.html">First Semester</a></li>
                    <li><a href="secondSemester.html">Second Semester</a></li>
                    <li><a href="thirdSemester.html">Third Semester</a></li>
                    <li><a href="fourthSemester.html">Fourth Semester</a></li>
                    <li><a href="fifthSemester.html">Fifth Semester</a></li>
                </ul>
            </div>
            <div class="column3">
                <h1>GET IN TOUCH</h1>
                <ul>
                    <li>kajalgupta62064@gmail.com</li>
                </ul>
            </div>
        </div>
    </footer>
</body>
```



Fifth semester

RDBMS code and screenshot

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>WEBSITE</title>
    <link rel="stylesheet" href="kg.css">
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>


</head>

<body>
    <nav class="sticky">
        <div class="logo">
            <img src="logo.jpg" width="50" height="50px">
        </div>
        <div class="channel">K.G ACADEMY</div>
        <div class="nav-links">

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                <li><a href="tutorial.html">Tutorial</a></li>
                <li><a href="contact.html">Contact</a></li>
                <li><a href="aboutus.html">About US</a></li>
            </ul>
        </div>

    </nav>

    <div class="menu">
        <ul>
            <li><a href="bca.html">BCA</a></li>
            <li><a href="c.html">C</a></li>
            <li><a href="cPlus.html">C++</a></li>
            <li><a href="java.html">JAVA</a></li>
            <li><a href="htmlp.html">HTML</a></li>
            <li><a href="cssp.html">CSS</a></li>
```
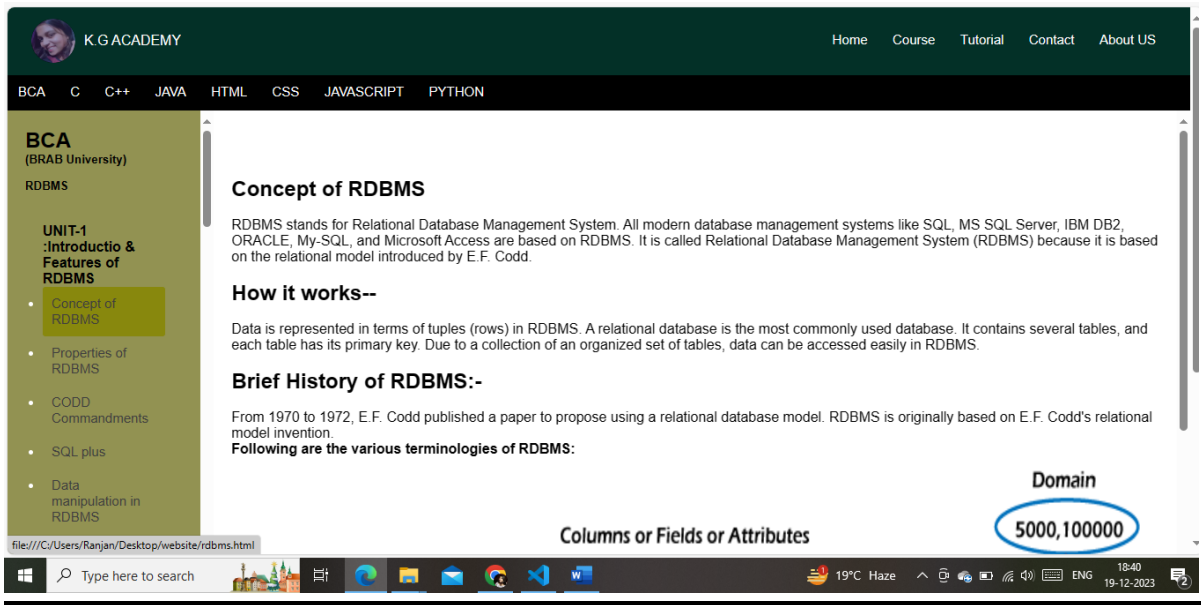

```
            <li><a href="javascriptp.html">JAVASCRIPT</a></li>
            <li><a href="python.html">PYTHON</a></li>
        </ul>
    </div>
    <div class="bcacontent">
        <div class="sidebar">
            <header>
                <h2>BCA </h2>
                <h5>(BRAB University) <BR><BR>RDBMS</BR></BR></h5>
            </header>
            <div class="BCA1"> <b>UNIT-1 :Introductio & Features of RDBMS </b>
                <UL>
                    <li><a href="">Concept of RDBMS</a></li>
                    <li><a href="">Properties of RDBMS</a></li>
                    <li><a href="">CODD Commandments</a></li>
                    <li><a href="">SQL plus</a></li>
                    <li><a href="">Data manipulation in RDBMS</a></li>
                    <li><a href="">Oracle data type</a></li>
                    <h5>Table</h5>
                    <li><a href="">Creation, insertion,updation,deletion of
data contents</a></li>
                    <li><a href="">Modification of structure</a></li>
                    <li><a href="">Removing, deleting, dropping of
tables</a></li>
                    <li><a href="">Select command</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT-2 : Data constraints</b>

                <UL>
                    <li><a href="">Column level & table constraints</a></li>
                    <li><a href="">Null</a></li>
                    <li><a href=""> keys</a></li>
                    <li><a href="">CHECK integrity constraints</a></li>
                    <li><a href="">Defining different constraints on the
table</a></li>
                    <li><a href="">Defining integrity constraints in the alter
table command</a></li>
                </UL>
            </div>

            <div class="BCA1"> <b>UNIT-3 :Computations in Expression Lists
used to Select Data </b>
                <UL>
                    <li><a href="">Logical operators</a></li>
                    <li><a href="">Range searching</a></li>
                    <li><a href="">Pattern searching</a></li>
```

```
                    <li><a href="">Oracle function</a></li>
                    <li><a href="">Grouping data frame table in SQL</a> </li>
                    <li><a href="">Manipulation data inSQL</a></li>
                    <h5>Joins</h5>
                    <li><a href="">Joining multiple tables(equi-
joins)</a></li>
                    <li><a href="">Joining table to itself(self joins)sub
queries Union</a></li>
                    <li><a href="">Intersect & minus clause</a></li>

                </UL>
            </div>

            <div class="BCA1"><b>UNIT-4 :Indexes Views</b>
                <UL>
                    <li><a href="">Creation</a></li>
                    <li><a href="">Updation</a></li>
                    <li><a href="">Destroying</a></li>
                    <li><a href="">Selection of data</a></li>
                    <li><a href="">Renaming the column of view</a></li>
                    <li><a href="">Granting permissions</a></li>
                    <li><a href="">Permission on the objects created by the
user</a></li>
                    <li><a href="">GRANT statement</a></li>
                    <li><a href="">Object privileges</a></li>
                    <li><a href="">Referencing the tables to the another
user</a></li>
                    <li><a href="">Revoking the permission given</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT-5 :PL/SQL</b>
                <UL>
                    <li><a href="">Performance</a></li>
                    <li><a href="">Protability</a></li>
                    <li><a href="">Dta types</a></li>
                    <li><a href="">Character set</a></li>
                    <li><a href="">syntax</a></li>
                    <li><a href="">Block structure</a></li>
                    <li><a href="">Oracle transaction</a></li>
                    <li><a href="">Locks</a></li>
                </UL>
            </div>
            <div class="BCA1"><B>UNIT-6 :Cursors</B>
                <ul>
                    <li><a href="">Cursor</a></li>
                    <li><a href="">Error handling</a></li>
                    <li><a href="">Procedure and function</a></li>
```

```
                    <li><a
href="">Concept,creation,execution,advantages,syntax,deletion</a></li>
                    <li><a href="">Triggers</a></li>
                    <li><a href="">Concept, use, how to apply database
triggers, types of triggers syntax, deleting</a>
                    </li>
                </ul>
            </div>
        </div>

        <div class="unit1">
            <h1>Relational Database Management System</h1>
            <br>
            <h2>Concept of RDBMS</h2><br>
            <p>RDBMS stands for Relational Database Management System.

                All modern database management systems like SQL, MS SQL
Server, IBM DB2, ORACLE, My-SQL, and Microsoft
                Access are based on RDBMS.

                It is called Relational Database Management System (RDBMS)
because it is based on the relational model
                introduced by E.F. Codd.</p>
            <br>
            <h2>How it works--</h2><br>
            <p>Data is represented in terms of tuples (rows) in RDBMS.
                A relational database is the most commonly used database. It
contains several tables, and each table has
                its primary key.

                Due to a collection of an organized set of tables, data can be
accessed easily in RDBMS.
            </p>
            <br>
            <h2>Brief History of RDBMS:-</h2><br>

            <p>From 1970 to 1972, E.F. Codd published a paper to propose using
a relational database model.

                RDBMS is originally based on E.F. Codd's relational model
invention.</p>
            <p><b>Following are the various terminologies of RDBMS:</b></p>
            <img src="https://static.javatpoint.com/dbms/images/what-is-
rdbms.png" alt="" width="100%" height="100%">

            <br>
            <h2>What is table/Relation?</h2><br>
```

```
            <p>Everything in a relational database is stored in the form of
relations. The RDBMS database uses tables to
                store data. A table is a collection of related data entries
and contains rows and columns to store data.
                Each table represents some real-world objects such as person,
place, or event about which information is
                collected. The organized collection of data into a relational
table is known as the logical view of the
                database.
            </p>

        </div>
    </div>

    <footer class="footer">
        <div class="footer-container">
            <div class="column1">
                <div class="logo">
                    <img src="logo.jpg" width="50" height="50px">
                </div>
                <div class="channel">K.G ACADEMY</div>
            </div>
            <div class="column2">
                <h1>BCA </h1>
                <ul>
                    <li><a href="firstSemester.html">First Semester</a></li>
                    <li><a href="secondSemester.html">Second Semester</a></li>
                    <li><a href="thirdSemester.html">Third Semester</a></li>
                    <li><a href="fourthSemester.html">Fourth Semester</a></li>
                    <li><a href="fifthSemester.html">Fifth Semester</a></li>
                </ul>
            </div>
            <div class="column3">
                <h1>GET IN TOUCH</h1>
                <ul>
                    <li>kajalgupta62064@gmail.com</li>
                </ul>
            </div>
        </div>
    </footer>
</body>
```



python code and screenshot

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>WEBSITE</title>
    <link rel="stylesheet" href="kg.css">
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>


</head>

<body>
    <nav class="sticky">
        <div class="logo">
            <img src="logo.jpg" width="50" height="50px">
        </div>
        <div class="channel">K.G ACADEMY</div>
        <div class="nav-links">

            <ul>
                <li><a href="kg.html">Home</a></li>
                <li><a href="course.html">Course</a></li>
                <li><a href="tutorial.html">Tutorial</a></li>
```

```
                <li><a href="contact.html">Contact</a></li>
                <li><a href="aboutus.html">About US</a></li>
            </ul>
        </div>

    </nav>

    <div class="menu">
        <ul>
            <li><a href="bca.html">BCA</a></li>
            <li><a href="c.html">C</a></li>
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            <li><a href="cssp.html">CSS</a></li>
            <li><a href="javascriptp.html">JAVASCRIPT</a></li>
            <li><a href="python.html">PYTHON</a></li>
        </ul>
    </div>
    <div class="bcacontent">
        <div class="sidebar">
            <header>
                <h2>BCA </h2>
                <h5>(BRAB University) <BR><BR>5-Artificial Intelligence
through Python</BR></BR></h5>
            </header>

            <div class="BCA1">
                <p><b>Unit:1-Introductin of Python</b></p>
                <ul>
                    <li><a href="">Python Intro</a></li>
                    <li><a href="">Python Variables</a></li>
                    <li><a href="">Python Operators</a></li>
                    <li><a href="">Python blocks</a></li>

                    <li><a href="">Python Data Type</a></li>
                    <li><a href="">Python List</a></li>
                    <li><a href="">python Tuple</a></li>
                    <li><a href="">Python if...Else</a></li>

                    <li><a href="">Python WhileLoop</a></li>
                    <li><a href="">Python For Loop</a></li>
                    <li><a href="">Python String</a></li>
                    <li><a href="">Python Sets</a></li>
                    <li><a href="">Python Dictionarie</a></li>
                </ul>
            </div>
            <div class="BCA1">
```

```
                <p><b>Unit:2-Python Function,Modules,
                        packages</b></p>
                <ul>

                    <li><a href="">Python Fuction</a></li>
                    <li><a href="">Python Modules</a></li>
                    <li><a href="">Python Lambda</a></li>
                    <li><a href="">Python Packages</a></li>


                </ul>
            </div>
            <div class="BCA1">
                <p><b>Unit:3-File handling</b></p>
                <ul>
                    <li><a href="file.html">Python File Handling</a></li>
                    <li><a href="read.html">Python Read Files</a></li>
                    <li><a href="write.html">Python Write Files</a></li>
                    <li><a href="searching.html">Python Searching
Files</a></li>
                    <li><a href="delete.html">Python Delete Files</a></li>
                </ul>
            </div>
            <div class="BCA1">

                <p><b>Unit:4-Python MySQL</b></p>
                <ul>
                    <li><a href="">Create Data Base</a></li>
                    <li><a href="">Create Table</a></li>
                    <li><a href="">Insert</a></li>
                    <li><a href="">Select</a></li>
                    <li><a href="">Where</a></li>
                    <li><a href="">Drop Table</a></li>
                    <li><a href="">Delete</a></li>
                    <li><a href="">Join</a></li>
                    <li><a href="">Order By</a></li>
                    <li><a href="">Update</a></li>
                </ul>
            </div>
            <div class="BCA1">

                <p><b>Unit:5-Artificial Intelligence</b></p>
                <ul>
                    <li><a href="">Search</a></li>
                    <li><a href="">Uninformed</a></li>
                    <li><a href="">Informed</a></li>
                    <li><a href="">Mini-Max for Game Playing</a></li>
                    <li><a href="">Task Planning</a></li>
                    <li><a href="">Robot Motion Planning</a></li>
```

```
                    <li><a href="">Supervised Learning</a></li>
                    <li><a href="">Unsupervised Learning</a></li>
                    <li><a href="">Reinforcement Learning</a></li>


                </UL>
            </div>

        </div>
        <div class="unit1">

            <h2>Introduction of Python</h2>
            <div><br><br>

                <p>Python is a popular programming language.python can be used
on a server to create web application.
                    it was created by Guido Van Rossum, and released in
1991.It is a general purpose high interpreted
                    language. <br>
                    It supports object oriented programming approach to
develop applications.Python is easy to learn yet
                    powerful
                    and verstalile language which makes it attractive for
application development. It is also as a
                    multipurpose
                    programming language. because it can be used with
enterprise, 3D CAD etc.Python makes the
                    development
                    and debugging
                    fast because there is no compliation step in python
development.
                </p>
                <br>
                <h2>History Of Python</h2><br>
                <p>Python laid its foundation in the late 1980s.<br>
                <p>The implementation of Python was started in December 1989
by Guido Van Rossum at
                    CWI in Netherland.</p><br>
                <p>In February 1991, Guido Van Rossum published the code
(labeled version 0.9.0) to
                    alt.sources.</p><br>
                <p>In 1994, P*ython 1.0 was released with new features like
lambda, map, filter, and
                    reduce.</p><br>
                <p>Python 2.0 added new features such as list comprehensions,
garbage collection systems.</p><br>
                <p> On December 3, 2008, Python 3.0 (also called "Py3K") was
released. It was designed to
                    rectify the fundamental flaw of the language.</p><br>
```

```
                </p><br>
                <br>
                <h2>What Python can do?</h2><br>
                <p>Python can be used on a server to create web applications.
<br>
                    Python can be used alongside software to create workflows.
<br>
                    Python can connect to database systems. It can also read
and modify files. <br>
                    Python can be used to handle big data and perform complex
mathematics. <br>
                    Python can be used for rapid prototyping, or for
production-ready software development.</p>

                <br>
                <h2>it is used for:</h2><br>
                <p>
                <p>1. Web development</p><br>
                <p>2. Software development</p><br>
                <p>3. System scripting</p><br>
                <p>4. mathematics</p><br>
                </p>

            </div>
        </div>

    </div>


    <footer class="footer">
        <div class="footer-container">
            <div class="column1">
                <div class="logo">
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                <ul>
                    <li><a href="firstSemester.html">First Semester</a></li>
                    <li><a href="secondSemester.html">Second Semester</a></li>
                    <li><a href="thirdSemester.html">Third Semester</a></li>
                    <li><a href="fourthSemester.html">Fourth Semester</a></li>
                    <li><a href="fifthSemester.html">Fifth Semester</a></li>
                </ul>
            </div>
            <div class="column3">
```
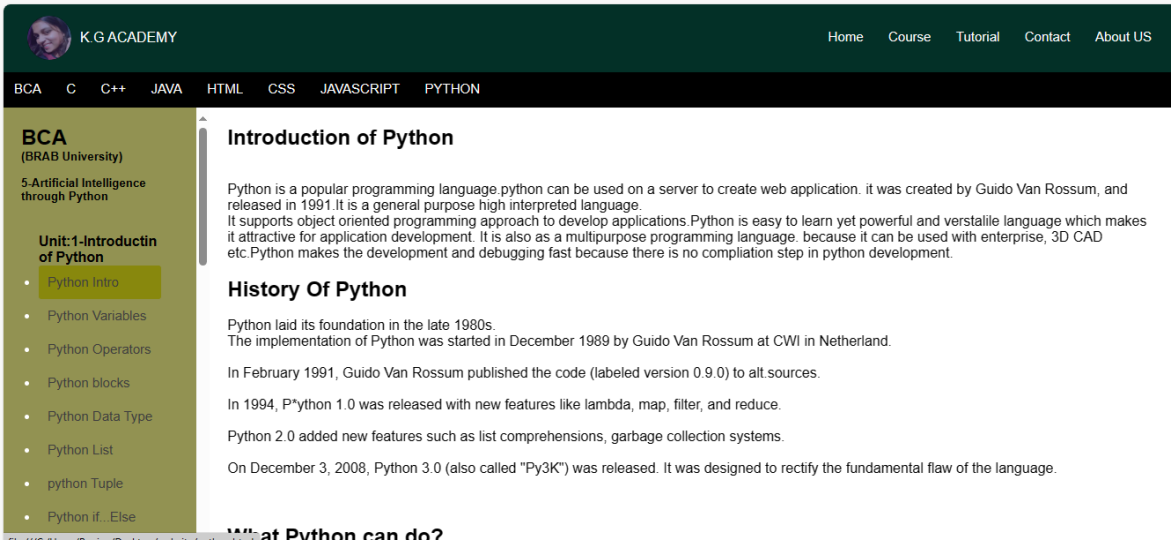

```
                <h1>GET IN TOUCH</h1>
                <ul>
                    <li>kajalgupta62064@gmail.com</li>
                </ul>
            </div>
        </div>
    </footer>
</body>
```



Web Development code and screenshot

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>WEBSITE</title>
    <link rel="stylesheet" href="kg.css">
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>


</head>

<body>
    <nav class="sticky">
```

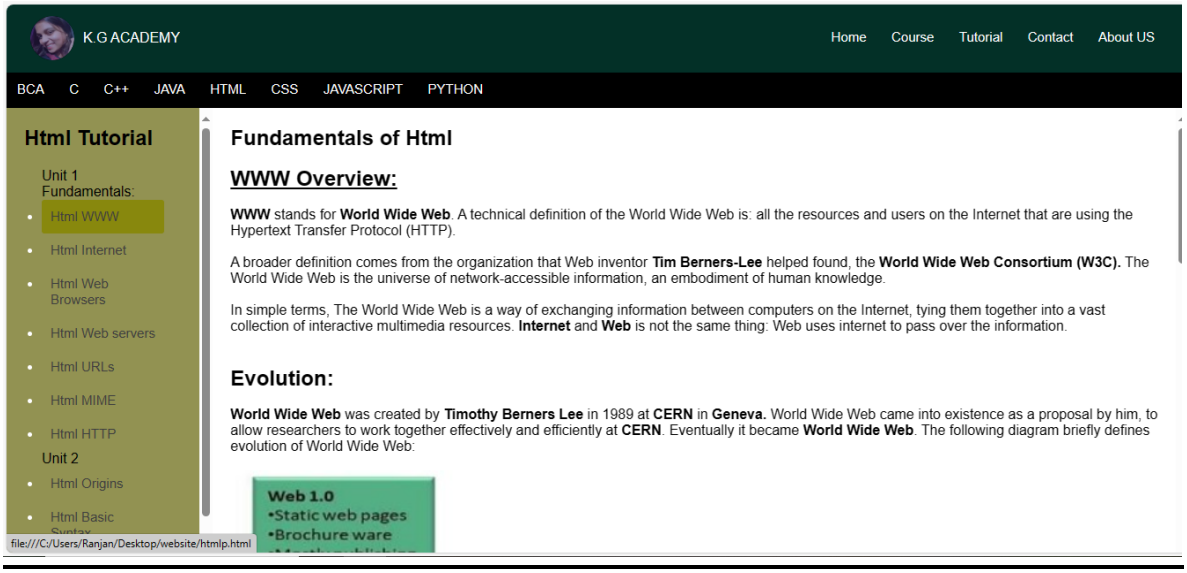
```
        <div class="logo">
            <img src="logo.jpg" width="50" height="50px">
        </div>
        <div class="channel">K.G ACADEMY</div>
        <div class="nav-links">

            <ul>
                <li><a href="kg.html">Home</a></li>
                <li><a href="course.html">Course</a></li>
                <li><a href="tutorial.html">Tutorial</a></li>
                <li><a href="contact.html">Contact</a></li>
                <li><a href="aboutus.html">About US</a></li>
            </ul>
        </div>

    </nav>

    <div class="menu">
        <ul>
            <li><a href="bca.html">BCA</a></li>
            <li><a href="c.html">C</a></li>
            <li><a href="cPlus.html">C++</a></li>
            <li><a href="java.html">JAVA</a></li>
            <li><a href="htmlp.html">HTML</a></li>
            <li><a href="cssp.html">CSS</a></li>
            <li><a href="javascriptp.html">JAVASCRIPT</a></li>
            <li><a href="python.html">PYTHON</a></li>
        </ul>
    </div>
    <div class="bcacontent">
        <div class="sidebar">
            <header>
                <h2>Html Tutorial</h2>
            </header>

            <div class="BCA1"><b></b>
                <p>Unit 1</p>
                <p>Fundamentals:</p>
                <ul>

                    <li><a href="">Html WWW</a></li>
                    <li><a href="internet.html">Html Internet</a></li>
                    <li><a href="browser.html">Html Web Browsers</a></li>
                    <li><a href="server.html">Html Web servers</a></li>
                    <li><a href="url.html">Html URLs</a></li>
                    <li><a href="mime.html">Html MIME</a></li>
                    <li><a href="http.html">Html HTTP</a></li>
```

```
                    <p>Unit 2</p>
                    <li><a href="origin.html">Html Origins</a></li>
                    <li><a href="basic.html">Html Basic Syntax</a></li>

                    <li><a href="page.html">Html Page Structure</a></li>
                    <li><a href="text.html">Html Text Markup</a></li>
                    <li><a href="image.html">Html Images</a></li>
                    <li><a href="hlink.html">Html Hyperlinks</a></li>
                    <li><a href="list.html">Html Lists</a></li>
                    <li><a href="table.html">Html Tables</a></li>
                    <li><a href="form.html">Html Form</a></li>
                </ul>
            </div>
        </div>
        <div class="unit1">
            <h2>Fundamentals of Html</h2><br>
            <div class="ovww">
                <h2><u>WWW Overview:</u></h2> <br>
                <p><b>WWW</b> stands for <b>World Wide Web</b>. A technical
definition of the World Wide Web is:
                    all the resources and users on the Internet that are using
the Hypertext Transfer Protocol
                    (HTTP). <br><br>
                    A broader definition comes from the organization that Web
inventor <b> Tim Berners-Lee</b> helped
                    found, the <b> World Wide Web Consortium (W3C).</b>
                    The World Wide Web is the universe of network-accessible
information, an embodiment of
                    human knowledge. <br> <br>
                    In simple terms, The World Wide Web is a way of exchanging
information between computers
                    on the Internet, tying them together into a vast
collection of interactive multimedia resources.
                    <b>Internet</b> and <b> Web</b> is not the same thing: Web
uses internet to pass over the
                    information.
                </p> <br><br>
                <h2>Evolution:</h2> <br>
                <p><b> World Wide Web</b> was created by <b> Timothy Berners
Lee</b> in 1989 at <b>CERN</b> in <b>
                        Geneva.</b> World Wide
                    Web came into existence as a proposal by him, to allow
researchers to work together effectively
                    and efficiently at <b>CERN</b>. Eventually it became <b>
World Wide Web</b>.
                    The following diagram briefly defines evolution of World
Wide Web:</p> <br>
```

```
                <img src="ev.jpeg" alt="" width="70%"> <br> <br>

                <h2>WWW Operation:</h2> <br>
                <p><b> WWW </b> works on client- server approach. Following
steps explains how the web works:</p>
                <br>
                <p>User enters the URL (say, <b>
http://www.tutorialspoint.com</b>) of the web page in the
                    address bar of web browser.</p> <br>
                <p>Then browser requests the Domain Name Server for the IP
address corresponding to
                    www.tutorialspoint.com. </p> <br>
                <p> After receiving IP address, browser sends the request for
web page to the web server
                    using HTTP protocol which specifies the way the browser
and web server communicates.</p> <br>
                <p> Then web server receives request using HTTP protocol and
checks its search for the
                    requested web page. If found it returns it back to the web
browser and close the HTTP
                    connection.</p> <br>
                <p> Now the web browser receives the web page, It interprets
it and display the contents of
                    web page in web browser’s window.</p> <br> <br>
                <img src="sc.jpeg" alt="" width="80%">

            </div>
            <h2>Internet</h2> <br>
            <div class="ovww">
                <p>Internet is defined as an Information super Highway, to
access information over the web.
                    However, It can be defined in many ways as follows:
                </p> <br>
                <p>Internet is a world-wide global system of interconnected
computer networks.</p> <br>
                <p> Internet uses the standard Internet Protocol
(TCP/IP).</p><br>
                <p>Every computer in internet is identified by a unique IP
address.</p> <br>
                <p>IP Address is a unique set of numbers (such as
110.22.33.114) which identifies a computer
                    location.</p> <br>
                <p> A special computer DNS (Domain Name Server) is used to
give name to the IP Address so
                    that user can locate a computer by a name.</p><br>
                <p>For example, a DNS server will resolve a name
<b>http://www.k.gacademy.com </b> to a
```

```
                    particular IP address to uniquely identify the computer on
which this website is hosted.</p><br>
                <p> Internet is accessible to every user all over the
world</p><br> <br>
                <img src="ss.jpeg" alt=""> <br> <br>

                <h2>Evolution</h2> <br>
                <p>The concept of Internet was originated in 1969 and has
undergone several technological &
                    Infrastructural changes as discussed below:</p> <br>
                <p>The origin of Internet devised from the concept of Advanced
Research Project Agency
                    Network (ARPANET).</p> <br>
                <p> ARPANET was developed by United States Department of
Defense.</p> <br>
                <p> Basic purpose of ARPANET was to provide communication
among the various bodies of
                    government.</p><br>
                <p> Initially, there were only four nodes, formally called
Hosts.</p>
                <p> In 1972, the ARPANET spread over the globe with 23 nodes
located at different countries
                    and thus became known as Internet.</p> <br>
                <p> By the time, with invention of new technologies such as
TCP/IP protocols, DNS, WWW,
                    browsers, scripting languages etc. Internet provided a
medium to publish and access
                    information over the web.</p> <br>
                <img src="pic.png" alt="" width="55%">
            </div>
        </div>

    </div>


    <footer class="footer">
        <div class="footer-container">
            <div class="column1">
                <div class="logo">
                    <img src="logo.jpg" width="50" height="50px">
                </div>
                <div class="channel">K.G ACADEMY</div>
            </div>
            <div class="column2">
                <h1>BCA </h1>
                <ul>
                    <li><a href="firstSemester.html">First Semester</a></li>
                    <li><a href="secondSemester.html">Second Semester</a></li>
                    <li><a href="thirdSemester.html">Third Semester</a></li>
```

```
                    <li><a href="fourthSemester.html">Fourth Semester</a></li>
                    <li><a href="fifthSemester.html">Fifth Semester</a></li>
                </ul>
            </div>
            <div class="column3">
                <h1>GET IN TOUCH</h1>
                <ul>
                    <li>kajalgupta62064@gmail.com</li>
                </ul>
            </div>
        </div>
    </footer>
</body>
```



Web Development code and screenshot

```
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<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
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    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
```

```
</head>

<body>
    <nav class="sticky">
        <div class="logo">
            <img src="logo.jpg" width="50" height="50px">
        </div>
        <div class="channel">K.G ACADEMY</div>
        <div class="nav-links">

            <ul>
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                <li><a href="course.html">Course</a></li>
                <li><a href="tutorial.html">Tutorial</a></li>
                <li><a href="contact.html">Contact</a></li>
                <li><a href="aboutus.html">About US</a></li>
            </ul>
        </div>

    </nav>

    <div class="menu">
        <ul>
            <li><a href="bca.html">BCA</a></li>
            <li><a href="c.html">C</a></li>
            <li><a href="cPlus.html">C++</a></li>
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            <li><a href="htmlp.html">HTML</a></li>
            <li><a href="cssp.html">CSS</a></li>
            <li><a href="javascriptp.html">JAVASCRIPT</a></li>
            <li><a href="python.html">PYTHON</a></li>
        </ul>
    </div>
    <div class="bcacontent">
        <div class="sidebar">
            <header>
                <h2>BCA </h2>
                <h4>(BRAB University) <BR><BR>Compurt
Networking</BR></BR></h4>
            </header>
            <div class="BCA1"> <b>UNIT-1 :Computer Network </b>
                <UL>
                    <h4>Introduction:</h4>
                    <li><a href="">Definition, its use and structure</a></li>
                    <li><a href="">Network architecture</a></li>
                    <li><a href="">ISO Model</a></li>
                    <li><a href="">Network Model</a></li>
                    <li><a href="">connecting Devices</a></li>
```

```
                    <li><a href="">TCP/IP,UDP</a></li>
                    <h4>Network Topology:</h4>
                    <li><a href="">Topology Design process</a></li>
                    <li><a href="">Connectivity analysis</a></li>
                    <li><a href="">Delay analysis</a></li>
                    <li><a href="">Backbone Design</a></li>
                    <li><a href="">Logical Access Design</a></li>

                </UL>
            </div>

            <div class="BCA1"><b>UNIT-2 :Physical Link Layer </b>

                <UL>
                    <li><a href="">Theoretical basis for data
communication</a></li>
                    <li><a href="">Data and signal</a></li>
                    <li><a href="">Digital and Analog transmission</a></li>
                    <li><a href="">Transmission media</a></li>
                    <li><a href="">Switching</a></li>
                    <li><a href="">Multiplexing</a></li>
                </UL>
            </div>


            <div class="BCA1"> <b>UNIT-3 :Data Link Layer </b>
                <UL>
                    <li><a href="">Data link protocols</a></li>
                    <li><a href="">Data link controls</a></li>
                    <li><a href="">Sliding window protocols</a></li>
                    <li><a href="">Virtula circuits</a></li>
                    <li><a href="">Routing algorithms</a></li>
                    <li><a href="">Congestion</a></li>
                    <li><a href="">Example of network layers,selected
examples</a></li>
                    <li><a href="">Error detection and correction</a></li>
                    <li><a href="">Multiple access</a></li>
                    <li><a href="">Congestion controls</a></li>
                    <li><a href="">Framing</a></li>
                    <li><a href="">Mac sublayer</a></li>
                    <li><a href="">IPv4,IPv6 Address</a></li>
                    <li><a href="">ICMP,IGMP</a></li>
                </UL>
            </div>

            <div class="BCA1"><b>UNIT-4 :Network security</b>
                <UL>
                    <h4>Introduction:</h4>
                    <li><a href="">Security overview</a></li>
```

```
                    <li><a href="">Cyber security fundamentals</a></li>
                    <li><a href="">Security system design
architecture</a></li>
                    <li><a href="">The OSI security architecture tools &
techniques</a></li>
                    <li><a href="">Current vulnerablities different security
attacks</a></li>
                    <li><a href="">Countermeasures</a></li>
                    <li><a href="">Security services</a></li>
                    <li><a href="">Model for network security</a></li>
                    <h4>Symmetirc cipher:</h4>
                    <li><a href="">Classical Encryption technique</a></li>
                    <li><a href="">Symmetric cipher model</a></li>
                    <li><a href="">Block cipher design principles-Feistel
structure,DES,Triple DES,AES,Stream cipher and
                            RC4</a></li>

                </UL>
            </div>

            <div class="BCA1"><b>UNIT-5 :Public key Encryption</b>
                <UL>
                    <li><a href="">Message Authentication</a></li>
                    <li><a href="">RSA Algorithm</a></li>
                    <li><a href="">Digital signature</a></li>
                    <li><a href="">Metwork Algorithms-
Kerberos,X.509,Authentication services</a></li>
                    <li><a href="">System security-Intrusion
detection,Password management,Virus
                            countermeasure,Firewall</a></li>

                </UL>
            </div>
            <div class="BCA1"><B>UNIT-6 :introductory concept of cyber
laws</B>
                <ul>
                    <li><a href="">IT Laws</a></li>
                    <li><a href="">Policies and Government Regulation
Global</a></li>
                    <li><a href="">IT Act-India</a></li>
                </ul>
            </div>
        </div>
        <div class="unit1">
            <h2>Computer Network</h2>
            <br>
            <p>Computer Network is a group of computers connected with each
other through wires, optical fibres or
```

```
                optical
                links so that various devices can interact with each other
through a network.
                The aim of the computer network is the sharing of resources
among various devices.
                In the case of computer network technology, there are several
types of networks that vary from simple to
                complex level.</p>

            <br>
            <h2>What is Computer Network?</h2>
            <br>
            <p>A computer network is a set of devices connected through links.
A node can be computer,
                printer, or any other device capable of sending or receiving
the data. The links connecting
                the nodes are known as communication channels.<br><br>

                Computer Network uses distributed processing in which task is
divided among several
                computers. Instead, a single computer handles an entire task,
each separate computer handles a subset.

            </p>

            <br><b>Following are the advantages of Distributed processing:</b>


            <br><br>
            <p><b>Security:</b> It provides limited interaction that a user
can have with the entire system. For
                example,
                a bank allows the users to access their own accounts through
an ATM without allowing them to access
                the bank's entire database.<br><br>

                <b>Faster problem solving: </b>Multiple computers can solve
the problem faster than a single machine
                working
                alone.<br>

                <br><b>Security through redundancy:</b> Multiple computers
running the same program at the same time can
                provide the security through redundancy. For example, if four
computers run the same program and any
                computer has a hardware error, then other computers can
override it.
            </p>
```

```
            <br><br>
            <h2>Its Use:-</h2>
            <br>
            <p>Computer networks serve various essential purposes,
contributing to the efficiency and functionality of
                modern systems. Some common uses of computer networks
include:<br>

                <br><b>Resource Sharing:</b> Computer networks enable the
sharing of resources such as files, printers,
                and internet connections among connected devices. This
facilitates collaborative work and efficient
                utilization of resources.<br>

                <br><b>Communication:</b> Networks provide a means for
communication through email, instant messaging,
                video
                conferencing, and other applications. This enhances real-time
interaction and collaboration among
                individuals and organizations, regardless of geographical
distances.<br>

                <br><b>Data Storage and Retrieval:</b> Networks allow
centralized data storage on servers, making it
                easier
                to manage and access files and information. This facilitates
data backup, retrieval, and sharing among
                users.<br>

                <br><b>Internet Access:</b> Computer networks provide
connectivity to the internet, allowing users to
                access
                a vast amount of information, online services, and
communication platforms.<br>

                <br><b>Remote Access:</b> Networks enable remote access to
resources and systems, allowing users to
                connect
                to
                their work or home networks from different locations. This is
particularly valuable for telecommuting
                and accessing data while on the go.<br>

                <br><b>Collaboration and File Sharing:</b> Networks support
collaborative work environments where
                multiple
                users
```

```
                can simultaneously work on and share documents, fostering
teamwork and productivity.<br>

                <br><b>Application Sharing: </b> Certain network
configurations allow the sharing of software
                applications.
                This can be cost-effective and efficient, as users can access
applications installed on a central
                server rather than installing them on individual devices.<br>

                <br><b>Cost Efficiency:</b> Networks can lead to cost savings
by centralizing resources, reducing the
                need
                for
                redundant equipment, and optimizing the use of hardware and
software.<br>

                <br><b>Automation and Control:</b> In industrial settings,
computer networks are used for automation and
                control of
                various processes, enhancing efficiency and precision in
manufacturing and production.<br>

                <br><b> Entertainment and Media Streaming:</b> Home networks
are often used for streaming media content,
                such as music
                and videos, to various devices, including computers, smart
TVs, and mobile devices.<br>
            </p>
            <br><br>
            <p>Overall, computer networks play a crucial role in facilitating
communication, resource sharing,
                and collaboration in various sectors, contributing to the
interconnected nature of the modern digital
                world.
            </p>
        </div>
    </div>
    <footer class="footer">
        <div class="footer-container">
            <div class="column1">
                <div class="logo">
                    <img src="logo.jpg" width="50" height="50px">
                </div>
                <div class="channel">K.G ACADEMY</div>
            </div>
            <div class="column2">
                <h1>BCA </h1>
```

```
                <ul>
                    <li><a href="firstSemester.html">First Semester</a></li>
                    <li><a href="secondSemester.html">Second Semester</a></li>
                    <li><a href="thirdSemester.html">Third Semester</a></li>
                    <li><a href="fourthSemester.html">Fourth Semester</a></li>
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                </ul>
            </div>
            <div class="column3">
                <h1>GET IN TOUCH</h1>
                <ul>
                    <li>kajalgupta62064@gmail.com</li>
                </ul>
            </div>
        </div>
    </footer>
</body>
```

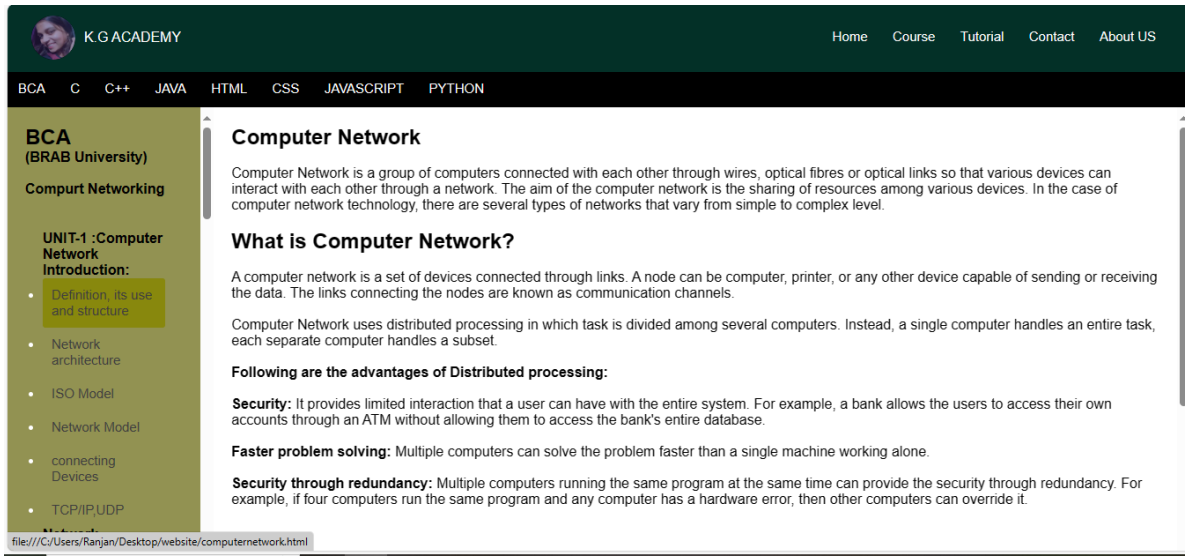

Now here css code of our website

```
* {
    margin: 0;
    padding: 0;
    font-family: 'Poppins', sans-serif;
}

.logo {
    width: 50px;
    height: 50px;
    border-radius: 80%;
```

```
    overflow: hidden;
}

.channel {
    padding: 10px;
    color: white;
}

nav {
    display: flex;
    padding: 1% 2%;
    justify-content: space-between;
    align-items: center;
    background-color: rgb(3, 48, 39);
}

.nav-links {
    flex: 1;
    text-align: right;
}

.nav-links ul li {
    list-style: none;
    display: inline-block;
    padding: 8px 12px;
    position: relative;
    color: rgb(2, 2, 96);
}

.nav-links ul li a {
    color: white;
    text-decoration: none;
    font-size: 15px;

}

.nav-links ul li::after {
    content: '';
    width: 0%;
    height: 2px;
    display: block;
    margin: auto;
    transition: 1s;
}

.nav-links ul li:hover::after {
    width: 100%;
    background-color: rgb(19, 19, 141);
```

```
}

.active,
.nav-links ul li:hover {
    background-color: rgb(106, 106, 11);
    border-radius: 3px;
}

.menu {
    background-color: black;
    position: sticky;
    top: 70px;
}

.menu ul li {
    list-style: none;
    display: inline-block;
    padding: 10px 12px;
    position: relative;
}

.menu ul li a {
    color: white;
    text-decoration: none;
    font-size: 15px;

}

.menu ul li::after {
    content: ' ';
    width: 0%;
    height: 2px;
    display: block;
    margin: auto;
    transition: 1s;
}

.menu ul li:hover {
    background-color: rgb(136, 136, 13);
    border-radius: 3px;
}

.heading {
    padding: 80px;
    background-color: rgb(72, 72, 11);
    text-align: center;
}
```

```css
.search-container {
    display: flex;
    justify-content: center;
}

.search-box {
    background-color: black;
    width: 400px;
    padding: 10px;
    border-radius: 50px;
}

.input-search {
    background-color: transparent;
    border: 0px;
    outline: 0px;
    color: white;
}

.icon-search {
    padding: 10px;
    width: 40px;
    color: white;
    background-color: black;
}

.recommended {
    text-align: center;
    background-color: black;
    color: white;
    padding: 15px;
}

.sticky {
    position: sticky;
    top: 0;
}

.video-container {
    margin: 10px;
    padding: 20px;
    background-color: rgb(3, 48, 39);
}

.Videoes {
    display: inline-block;
    margin: 25px;
    border-radius: 25px;
```

```
}

/* id selector */
#Video1 {
    background-color: black;
    padding: 10px;
    width: 350px;
}

#Video2 {
    background-color: black;
    padding: 10px;
    width: 350px;

}

#Video3 {
    background-color: black;
    padding: 10px;
    width: 350px;
}

.text {
    color: white;
}

.button {
    background-color: white;
    padding: 6px;
    cursor: pointer;
    font-size: 15px;
    border-radius: 50px;
}

.button a {
    text-decoration: none;
}

.button:hover {
    color: blue;
    background-color: aqua;
}

/*video player adjecement */
.rv1 {
    border: 15px;
    padding: 2px;
```

```
    background-color: rgb(224, 226, 220);
}

/* footer code*/
.footer-container {
    display: flex;
    padding: 1% 2%;
    justify-content: space-between;
    align-items: center;
    background-color: rgb(3, 48, 39);
}

.column2 ul li a {
    text-decoration: none;
    color: white;
}

h1 {
    color: white;
}

li {
    color: white;
}

/*course page*/
.coursepage {
    padding: 20px;
    text-align: center;
}

.prev a {
    text-decoration: none;
    display: inline-block;
    padding: 8px 16px;
}

.prev a:hover {
    background-color: #403d95;
    color: black;
}

.previous {
    background-color: #f1f1f1;
    color: black;
}

.next {
```

```
    background-color: #5c7d2e;
    color: white;
}

.round {
    border-radius: 50%;
}

/* tutorial page*/

.coursebox {
    padding: 1px 50px;
}

.coursename {
    padding: 1px 3px;
    margin: 20px;
    color: white;
}

.coursebutton {
    padding: 10px 35px;
}

.tutorialContainer {
    display: inline-block;
    padding: 30px;
    margin: 25px;
    border-radius: 25px;
    background-color: rgb(3, 48, 39);
    box-shadow: 5px 5px 5px 5px rgb(27, 121, 102);
}

/* Contact page */
.contact {
    margin: 50px;
}
.contactus{
    border-radius:95px;
    overflow: hidden  ;
}
.contactContainer{
    background-color: rgb(3, 48, 39);
}
h3{
    padding: 20px;
    margin: 10px ;
    color: white;
```

```
}
.contactlink{
    padding: 20px ;
}

/*about us page css*/
.aboutme{
    padding: 100px;
    background-color:rgb(3, 48, 39) ;
    margin: 30px;
}
.ame{
    padding: 20px;
    border-radius: 50px 0px 50px 0px;
    background-color: white;
}
/* bca page css*/
.sidebar {
    height: 600px;
    width: 200px;
    background-color: rgb(146, 146, 82);
    padding: 20px;
    overflow: scroll;
}

.BCA1 {
    padding: 20px;
    color: black;
}

.BCA1 ul li {
    padding: 10px;
}

.BCA1 ul li a {
    color: rgb(63, 63, 64);
    text-decoration: none;
    font-size: 15px;

}

.BCA1 ul li:hover {
    background-color: rgb(136, 136, 13);
    border-radius: 3px;
}

.bcacontent {
    display: flex;
```

```
}

.firstsempyq h2 {
    text-align: center;
    padding: 50px;

}

/*math css*/
.solution {
    padding: 10px 100px;
}

.unit1 {
    height: 600px;
    padding: 20px;
    width:1100px;
    overflow-y: scroll;
}
```

Aim and Objectives

The aim of our education website catering to BCA students across all semesters is to create a comprehensive and accessible platform that serves as a digital companion throughout their academic journey. Our primary objective is to provide students with a centralized hub for all BCA subjects, organized by semester, fostering a structured and efficient learning experience. We strive to offer a diverse range of resources, including lecture notes, study materials, and practice exercises, to support both foundational understanding and advanced exploration. Additionally, our platform aims to enhance collaboration and engagement among BCA students, fostering a vibrant community where learners can share insights, discuss coursework, and collectively elevate their knowledge. By promoting accessibility, interactivity, and a user-friendly interface, we aim to empower BCA students, facilitating seamless navigation through their curriculum and enabling them to excel in their studies. Our ultimate goal is to contribute to the academic success and holistic development of BCA students by providing a digital ecosystem that aligns with their learning needs and enhances the overall educational experience."

Conclusion :

In conclusion, our education website stands as a dynamic and invaluable resource designed to empower students throughout their academic journey. By offering a centralized platform encompassing all BCA subjects across each semester, we aim to streamline learning, providing students with a user-friendly interface for efficient navigation. Our commitment to accessibility ensures that learners have instant access to a rich repository of lecture notes, study materials, and collaborative spaces. This website goes beyond traditional learning resources, fostering a vibrant community where students can engage in discussions, share insights, and collectively enhance their understanding. Through a blend of organized content and interactive features, we aspire to contribute to the success of BCA students, enabling them not only to excel in their studies but also to cultivate a deeper passion for their field. As we continue to evolve, our dedication to facilitating comprehensive, engaging, and student-centric learning experiences remains unwavering. Join us on this educational journey, where knowledge meets accessibility, and together, let's shape a future of academic excellence and collaborative growth.

ThankYou

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