Experiment-1

Create a Web Page for Course Curriculum: Use of Headings, Paragraphs, Bold, Italic, Underline, and Special Characters, Ordered List, Unordered List, Description List, Nested List, and Mixed Lists.

Objectives

1. To design a simple course curriculum webpage using HTML.
2. To practice the use of basic text formatting tags (bold, italic, underline, special characters).
3. To learn the implementation of ordered, unordered, description, nested, and mixed lists.
4. To understand webpage content structuring using headings and paragraphs.

Tools Required

- Computer / Laptop with any OS
- Text Editor (VS Code, Sublime Text, Notepad++)
- Web Browser (Chrome, Edge, Firefox)

Theory

1. Headings (<h1>…<h6>): Used to display titles and subheadings in different sizes.
2. Paragraphs (<p>): Defines blocks of text content.
3. Formatting Tags:
    - <b> for bold text
    - <i> for *italic text*
    - <u> for <u>underlined text</u>
    - Special characters are displayed using HTML entities (e.g., ©, <, >).
4. Lists:
    - Ordered List (<ol>): Numbered items.
    - Unordered List (<ul>): Bulleted items.
    - Description List (<dl>): Term and description pairs.
    - Nested List: A list inside another list.
    - Mixed List: Combination of ordered, unordered, and nested lists.

Code Implementation

index.html

```
<!DOCTYPE html>
<html>
<head>
  <title>Course Curriculum</title>
</head>
<body>

  <!-- Heading -->
  <h1 align="center">Course Curriculum</h1>
  <p align="center"><b>Department of Computer Science</b></p>
  <hr>

  <!-- Introduction -->
  <h2>Introduction</h2>
  <p>
    Welcome to the <b>Course Curriculum</b>. This page demonstrates the use of
    <i>HTML formatting</i>, <u>lists</u>, and special characters such as &amp;copy;, &amp;lt;, &amp;gt;.
  </p>

  <!-- Ordered List -->
  <h2>Semester 1 Subjects (Ordered List)</h2>
  <ol>
    <li>Mathematics I</li>
    <li>Computer Fundamentals</li>
    <li>Programming in C</li>
    <li>Electronics Basics</li>
  </ol>

  <!-- Unordered List -->
  <h2>Programming Languages (Unordered List)</h2>
  <ul>
    <li>C</li>
    <li>Java</li>
    <li>Python</li>
    <li>JavaScript</li>
  </ul>

  <!-- Description List -->
  <h2>Course Description (Description List)</h2>
  <dl>
    <dt><b>C Programming</b></dt>
    <dd>Learn basics of C language including loops, arrays, and functions.</dd>
    <dt><b>Java</b></dt>
    <dd>Introduction to Object-Oriented Programming concepts.</dd>
  </dl>

  <!-- Nested List -->
  <h2>Course Modules (Nested List)</h2>
  <ol>
    <li>Module 1: Basics
      <ul>
        <li>Introduction</li>
```

```
            <li>History of Computers</li>
          </ul>
        </li>
        <li>Module 2: Programming
          <ul>
            <li>Variables & Data Types</li>
            <li>Control Statements</li>
          </ul>
        </li>
      </ol>

      <!-- Mixed List -->
      <h2>Project Work (Mixed List)</h2>
      <ul>
        <li>Web Development
          <ol>
            <li>HTML</li>
            <li>CSS</li>
            <li>JavaScript</li>
          </ol>
        </li>
        <li>Database
          <ol type="A">
            <li>MySQL</li>
            <li>MongoDB</li>
          </ol>
        </li>
      </ul>

      <!-- Footer -->
      <hr>
      <p align="center">&copy; 2025 Computer Science Department</p>

</body>
</html>
```

Output

Introduction

Welcome to the **Course Curriculum**. This page demonstrates the use of *HTML formatting*, lists, and special characters such as ©, <, >.

Semester 1 Subjects (Ordered List)

1. Mathematics I
2. Computer Fundamentals
3. Programming in C
4. Electronics Basics

Programming Languages (Unordered List)

- C
- Java
- Python
- JavaScript

Course Description (Description List)

C Programming
: Learn basics of C language including loops, arrays, and functions.

Java
: Introduction to Object-Oriented Programming concepts.

Course Modules (Nested List)

1. Module 1: Basics
    - Introduction
    - History of Computers
2. Module 2: Programming
    - Variables & Data Types
    - Control Statements

Project Work (Mixed List)

- Web Development
    1. HTML
    2. CSS
    3. JavaScript
- Database
    A. MySQL
    B. MongoDB

Outcome

- Successfully designed a basic course curriculum webpage.
- Implemented text formatting and different types of lists in HTML.
- Learned structuring and organizing content on a webpage.

Experiment 2

Create a Web Page for a News Website with Embedded YouTube Video, Hyperlinks, and Navigation Structure, and Insert Multimedia in a Webpage.

Objectives

1. To design a simple **news website homepage** using HTML and CSS.
2. To learn how to **embed YouTube videos** into a webpage.
3. To implement **hyperlinks and navigation menus** for easy browsing.
4. To insert **multimedia (images, videos, audio)** in a webpage.

Tools Required

- Computer / Laptop with any OS
- **Text Editor** (VS Code, Sublime Text, Notepad++)
- **Web Browser** (Chrome, Edge, Firefox)
- Internet connection (for YouTube embedding)

Theory

1. **Hyperlinks (<a> tag):**
   Hyperlinks allow navigation between pages or websites. Example:

   ```
   <a href="https://www.bbc.com">Visit BBC News</a>
   ```
2. **Navigation Structure:**
   A <nav> element groups navigation links for better structure.
3. **Embedding YouTube Video:**
   YouTube provides an <iframe> code for embedding videos into a webpage.

   ```
   <iframe src="https://www.youtube.com/embed/VIDEO_ID"></iframe>
   ```
4. **Multimedia in Webpages:**
   - **Image (<img>):** Display news images.
   - **Audio (<audio>):** Add podcasts or news audio clips.
   - **Video (<video>):** Insert local or hosted video files.

Code Implementation

index.html

```
<!DOCTYPE html>
<html>
<head>
  <title>Simple News Website</title>
</head>
<body>

  <!-- Header -->
  <h1 align="center">Global Daily News</h1>
  <p align="center">Your Trusted Source for Latest Updates</p>
  <hr>

  <!-- Navigation -->
  <p align="center">
    <a href="#world">World</a> |
    <a href="#sports">Sports</a> |
    <a href="#entertainment">Entertainment</a> |
    <a href="#podcast">Podcast</a> |
    <a href="#contact">Contact</a>
  </p>
  <hr>

  <!-- World News Section -->
  <World id="world">World News</h2>
  <p>Today’s top headline: Global leaders meet to discuss climate change initiatives.</p>
  <img src="https://m.media-
amazon.com/images/M/MV5BNGYwNDlmZDgtMDg1Yi00N2JmLTk0NzQtNWVkN2NiMTQxY2RlXkEyXk
FqcGc@._V1_.jpg" alt="World News" width="560" height="315">
  <p><a href="https://www.bbc.com/news" target="_blank">Read more on BBC</a></p>
  <!-- Sports News Section -->
  <h2 id="sports">Sports Update</h2>
  <p>Highlights of yesterday’s football match with thrilling last-minute goals!</p>
  <!-- Embedded YouTube Video -->
  <iframe width="560" height="315" src="https://www.youtube.com/embed/aqz-KE-bpKQ" frameborder="0"
allowfullscreen></iframe>
  <hr>

  <!-- Entertainment Section -->
  <h2 id="entertainment">Entertainment Buzz</h2>
  <p>New movie trailer released today. Fans are excited!</p>
  <!-- Local Video -->
  <video width="560" height="315" controls>
    <source src="sample-video.mp4" type="video/mp4">
    Your browser does not support the video tag.
  </video>
```

```
    <hr>

    <!-- Podcast Section -->
    <h2 id="podcast">News Podcast</h2>
    <p>Listen to today’s top headlines:</p>
    <!-- Audio -->
    <audio controls>
        <source src="sample-audio.mp3" type="audio/mp3">
        Your browser does not support the audio element.
    </audio>
    <hr>

    <!-- Footer -->
    <h3 id="contact">Contact Us</h3>
    <p>Email: info@globalnews.com</p>
    <p>&copy; 2025 Global Daily News</p>

</body>
</html>
```

Output:

127.0.0.1:5500/exp2.html

Read more on BBC

Sports Update

Highlights of yesterday's football match with thrilling last-minute goals!

Entertainment Buzz

New movie trailer released today. Fans are excited!

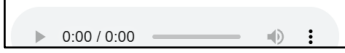
127.0.0.1:5500/exp2.html

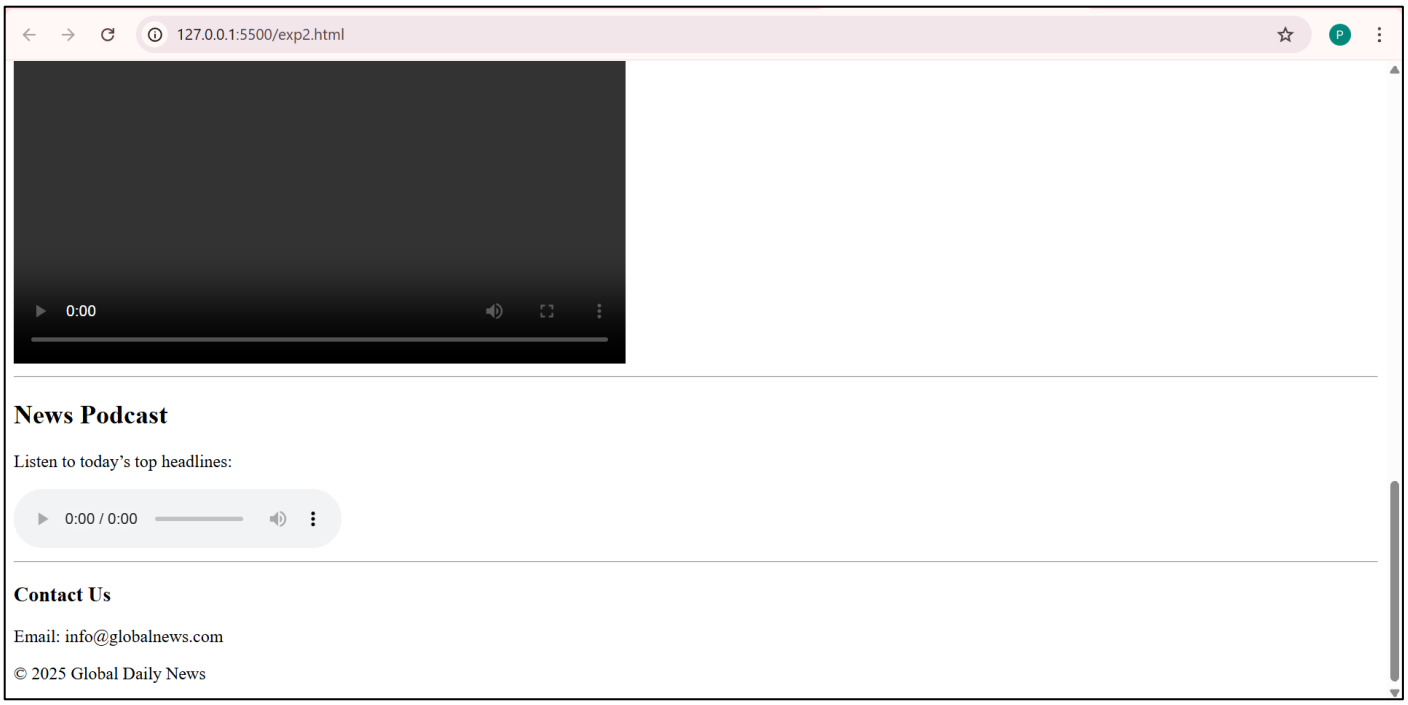
Entertainment Buzz

New movie trailer released today. Fans are excited!

News Podcast

Listen to today's top headlines:





Outcome

- Successfully designed a **basic news website** layout.
- Implemented **hyperlinks, navigation, multimedia (image, audio, video), and embedded YouTube video**.
- Learned practical **webpage structuring techniques** for media-rich sites.

Experiment-3

Create a Web Page for College Timetable: Use of Tables with Rowspan, Colspan, Headers, Captions, and Nested Tables.

Objectives

1. To design a college timetable webpage using HTML tables.
2. To apply rowspan and colspan attributes for merging cells.
3. To use table headers (<th>), captions (<caption>), and formatting for readability.
4. To implement nested tables within a timetable cell.

Tools Required

- Computer / Laptop with any OS
- Text Editor (Notepad, VS Code, Sublime Text)
- Web Browser (Chrome, Edge, Firefox)

Theory

1. Table (<table>): Arranges data in rows and columns.
2. Rowspan: Merges a cell vertically across rows.
3. <td rowspan="2">Lab</td>
4. Colspan: Merges a cell horizontally across columns.
5. <td colspan="3">Break</td>
6. Header (<th>): Displays header cells in bold and centered.
7. Caption (<caption>): Defines the title of the table.
8. Nested Table: A table placed inside another table cell.

Code Implementation
index.html

```
<!DOCTYPE html>
<html>
<head>
   <title>College Timetable</title>
</head>
<body>

   <table border="1" align="center" cellpadding="8" cellspacing="0">
      <caption>College Timetable - CSE Department</caption>
      <tr>
         <th>Day / Time</th>
         <th>9:00 - 10:00</th>
         <th>10:00 - 11:00</th>
         <th>11:00 - 12:00</th>
         <th>12:00 - 1:00</th>
         <th>1:00 - 2:00</th>
```

```
    <th>2:00 - 3:00</th>
    <th>3:00 - 4:00</th>
  </tr>

  <tr>
    <th>Monday</th>
    <td rowspan="2">Mathematics</td>
    <td>English</td>
    <td rowspan="3">Physics</td>
    <td>Break</td>
    <td colspan="2">Computer Lab</td>
    <td>Sports</td>
  </tr>

  <tr>
    <th>Tuesday</th>
    <td>C Programming</td>
    <td>Break</td>
    <td colspan="2">Electronics Lab</td>
    <td>Library</td>
  </tr>

  <tr>
    <th>Wednesday</th>
    <td>Mathematics</td>
    <td>English</td>
    <td>Break</td>
    <td>Computer Networks</td>
    <td colspan="2">
      <!-- Nested Table Example -->
      <table border="1" cellpadding="5" cellspacing="0">
        <tr><th colspan="2">Lab Details</th></tr>
        <tr><td>Batch A</td><td>DBMS Lab</td></tr>
        <tr><td>Batch B</td><td>OS Lab</td></tr>
      </table>
    </td>
  </tr>

  <tr>
    <th>Thursday</th>
    <td colspan="2">Workshop</td>
    <td>Physics</td>
    <td>Break</td>
    <td>Mathematics</td>
    <td>English</td>
    <td>Seminar</td>
  </tr>

  <tr>
    <th>Friday</th>
    <td>Computer Networks</td>
    <td>English</td>
    <td>Physics</td>
    <td>Break</td>
    <td colspan="3">Project Work</td>
  </tr>
```

```
  </table>

</body>
</html>
```

Output:

College Timetable - CSE Department

Day / Time	9:00 - 10:00	10:00 - 11:00	11:00 - 12:00	12:00 - 1:00	1:00 - 2:00	2:00 - 3:00	3:00 - 4:00
Monday	Mathematics	English	Physics	Break	Computer Lab		Sports
Tuesday		C Programming		Break	Electronics Lab		Library
Wednesday	Mathematics	English		Break	Computer Networks	**Lab Details**: Batch A – DBMS Lab; Batch B – OS Lab	
Thursday	Workshop		Physics	Break	Mathematics	English	Seminar
Friday	Computer Networks	English	Physics	Break	Project Work		

Outcome:

- Successfully created a college timetable webpage using HTML tables.
- Implemented rowspan, colspan, headers, captions, and nested tables.
- Learned to organize tabular data in a structured webpage format.

Experiment-4

Create Web page for Hotel room booking form: Use of input fields, labels, select, textarea, and buttons.

Objectives

1. To design a hotel room booking form using HTML.
2. To understand the use of input fields for collecting user details.
3. To apply labels for form accessibility.
4. To implement dropdown menus (select) and text areas.
5. To create functional buttons for form submission and reset.

Tools Required

- Computer / Laptop with any OS
- Text Editor (Notepad, VS Code, Sublime Text)
- Web Browser (Chrome, Edge, Firefox)

Theory

1. **Form (<form>)**: Defines a section for user input.
2. **Input Fields (<input>)**: Used for text, numbers, emails, dates, etc.
3. <input type="text" name="username">
4. **Labels (<label>)**: Connects text with form elements for better usability.
5. <label for="name">Name:</label>
6. **Select (<select>)**: Provides a dropdown menu.
7. <select><option>Single</option><option>Double</option></select>
8. **Textarea (<textarea>)**: Allows multi-line text input.
9. **Buttons (<button> or <input type="submit">)**: Used for form submission or reset.

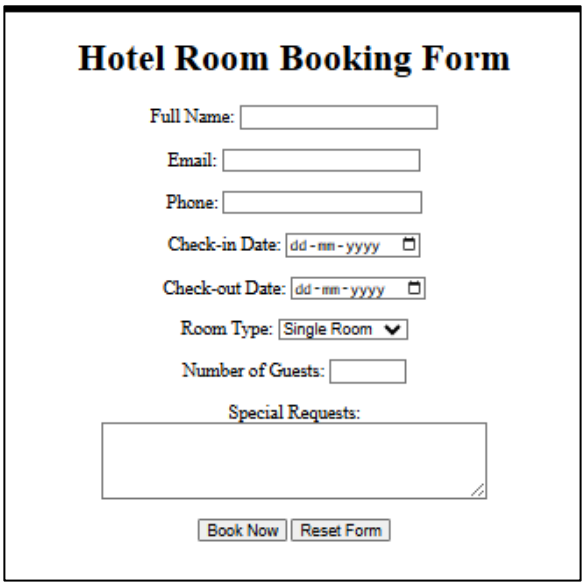
Code Implementation

index.html

```
<!DOCTYPE html>
<html>
<head>
   <title>Hotel Room Booking Form</title>
</head>
<body>

   <h1 align="center">Hotel Room Booking Form</h1>
   <form action="#" method="post" align="center">

      <!-- Name -->
      <label for="fullname">Full Name:</label>
      <input type="text" id="fullname" name="fullname" required>
      <br><br>

      <!-- Email -->
      <label for="email">Email:</label>
      <input type="email" id="email" name="email" required>
```

```
    <br><br>

    <!-- Phone -->
    <label for="phone">Phone:</label>
    <input type="tel" id="phone" name="phone" required>
    <br><br>

    <!-- Check-in & Check-out -->
    <label for="checkin">Check-in Date:</label>
    <input type="date" id="checkin" name="checkin">
    <br><br>

    <label for="checkout">Check-out Date:</label>
    <input type="date" id="checkout" name="checkout">
    <br><br>

    <!-- Room Type -->
    <label for="room">Room Type:</label>
    <select id="room" name="room">
      <option value="single">Single Room</option>
      <option value="double">Double Room</option>
      <option value="deluxe">Deluxe Room</option>
      <option value="suite">Suite</option>
    </select>
    <br><br>

    <!-- Number of Guests -->
    <label for="guests">Number of Guests:</label>
    <input type="number" id="guests" name="guests" min="1" max="10">
    <br><br>

    <!-- Special Requests -->
    <label for="requests">Special Requests:</label><br>
    <textarea id="requests" name="requests" rows="4" cols="40"></textarea>
    <br><br>

    <!-- Buttons -->
    <input type="submit" value="Book Now">
    <input type="reset" value="Reset Form">

  </form>

</body>
</html>
```

Output:



Outcome

- Successfully created a hotel room booking form webpage using HTML.
- Implemented input fields, labels, select, textarea, and buttons.
- Learned practical form design techniques for web applications.

Experiment 5

Create a Web Page for Student Registration Form with Email Validation by applying form attributes (method, action, placeholder, required).

Objectives

1. To design a **student registration form** using HTML.
2. To apply form attributes:
    - method → Defines how data is sent.
    - action → Defines where data is sent.
    - placeholder → Displays hint text.
    - required → Ensures mandatory fields are filled.
3. To implement **basic email validation** using the type="email" attribute.

Tools Required

- Text Editor (Notepad, VS Code, Sublime Text)
- Web Browser (Chrome, Edge, Firefox)

Theory

- **HTML Forms** (<form>): Used to collect user input.
- **Form Attributes:**
    - method="post" → Sends form data securely.
    - action="submit.html" → Defines where the form data goes (dummy page here).
    - placeholder="Enter Name" → Shows hint text inside input box.
    - required → Makes the field compulsory.
- **Email Validation:**
    - type="email" → Ensures user enters data in email format (e.g., abc@example.com).

Code Implementation

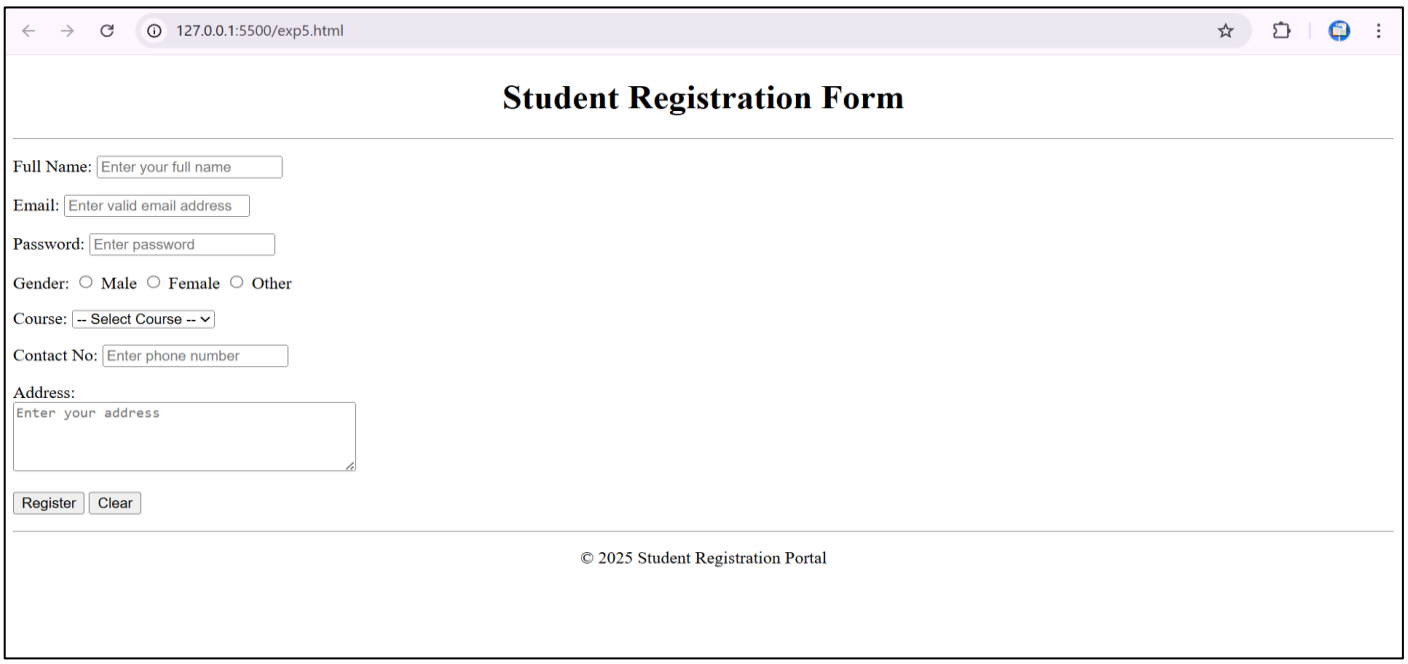
Here's the HTML code:
Index.html

```
<!DOCTYPE html>
<html>
<head>
  <title>Student Registration Form</title>
</head>
<body>
```

```html
<h1 align="center">Student Registration Form</h1>
<hr>

<!-- Registration Form -->
<form method="post" action="submit.html">

    <!-- Full Name -->
    <p>
        <label>Full Name: </label>
        <input type="text" name="fullname" placeholder="Enter your full name" required>
    </p>

    <!-- Email with validation -->
    <p>
        <label>Email: </label>
        <input type="email" name="email" placeholder="Enter valid email address" required>
    </p>

    <!-- Password -->
    <p>
        <label>Password: </label>
        <input type="password" name="password" placeholder="Enter password" required>
    </p>

    <!-- Gender (Radio Buttons) -->
    <p>
        <label>Gender: </label>
        <input type="radio" name="gender" value="male" required> Male
        <input type="radio" name="gender" value="female"> Female

    </p>

    <!-- Course Selection (Dropdown) -->
    <p>
        <label>Course: </label>
        <select name="course" required>
            <option value="">-- Select Course --</option>
            <option value="btech">B.Tech</option>
            <option value="bca">BCA</option>
            <option value="mba">MBA</option>
            <option value="mca">MCA</option>
        </select>
    </p>

    <!-- Contact Number -->
```

```
    <p>
      <label>Contact No: </label>
      <input type="tel" name="contact" placeholder="Enter phone number" required>
    </p>

    <!-- Address (Textarea) -->
    <p>
      <label>Address: </label><br>
      <textarea name="address" rows="4" cols="40" placeholder="Enter your address" required></textarea>
    </p>

    <!-- Submit and Reset -->
    <p>
      <input type="submit" value="Register">
      <input type="reset" value="Clear">
    </p>
  </form>

  <hr>
  <p align="center">&copy; 2025 Student Registration Portal</p>

</body>
</html>
```

Output



Outcome

- Successfully created a **Student Registration Form** using only HTML.
- Applied **form attributes**: method, action, placeholder, required.
- Implemented **email validation** using type="email".
- Learned to design a **structured form** without CSS.