Lab Cycle 1

CO1: Explore markup languages features and create interactive web pages using them.

<div style="border:1px solid black">

Program # 1

Create a simple HTML webpage for your CV to showcase the use of text embedding, tables, Lists and links within a page and link to another.

</div>

PROGRAM CODE:

CV.html

```
<html>
<head>
<title>Resume</title>
</head>
<body>
<h1>ANNA ASHNA JOY<img align="right"
src="C:\Users\HP\Downloads\Docs\AnnaAshnaJoy.jpeg" alt="Anna Ashna Joy"
width="150" height="200"></h1>
<p><br><br><br><b>Mobile No    :</b> +91 8590867320<br>
<b>DOB          :</b> 12-07-2003<br>
<b>Email Address:</b> <a
href="mailto:annaashnajoy001@gmail.com">annaashnajoy001@gmail.com</a>
<br>
<b>LinkedIn     :</b> <a
href="https://www.linkedin.com/in/annaashnajoy">annaashnajoy.linkedin</a><b
r>
<b>Place        :</b>Kochi,Kerala,India<br>
<hr size="2" color="black">

<h3>CAREER OBJECTIVE</h3>
<p>To pursue a responsible position in an IT company that challenges me to gain
practical experienceand hone my
skills in this field where I can broaden my knowledge and employ my skills
efficiently to advance the
success and growth of the organization. I have strong analytical and problem-
solving skills,
as well as a keen interest in learning new trends and tools in IT.</p>
<hr size="2" color="black">
```

```
<h3>BEHAVIORAL SKILLS</h3>
<ul>
      <li>Learship</li>
      <li>Team PlayerMYSQL</li>
      <li>Time Management</li>
</ul>
<hr size="2" color="black">



<h3>TECHNICAL SKILLS</h3>
<ul>
      <li>Languages- C,C++</li>
      <li>Database- MYSQL</li>
      <li>Cyber Security</li>
      <li>Cloud</li>
</ul>
<hr size="2" color="black">

<h3>EDUCATIONAL QUALIFICATIONS</h3>
<table border="1">
      <th>Course/Degree</th>
      <th>Institution</th>
      <th>Board/University</th>
      <th>Year of Passing</th>
      <th>Mark (%)</th>

      <tr>
            <td>MCA</td>
            <td>Muthoot Institute of Technology and Science, Puthencruz</td>
            <td>APJ Abdul Kalam Technological University</td>
            <td>2026</td>
            <td></td>
      </tr>

      <tr>
            <td>BCA</td>
            <td>St.Teresa's College, Ernakulam</td>
            <td>Mahatma GandhiUniversity, Kottayam</td>
            <td>2024</td>
            <td>76</td>
      </tr>

      <tr>
            <td>Plus Two</td>
            <td>Sacred Heart HigherSecondary School,Thevara</td>
```

```
                    <td>Government Of Kerala Board of Public Examination</td>
                    <td>2021</td>
                    <td>93.5</td>
            </tr>

            <tr>
                    <td>SSLC</td>
                    <td>Our Lady's Convent GirlsHigh School,Thoppumpady</td>
                    <td>Government Of Kerala Board of Public Examination</td>
                    <td>2019</td>
                    <td>99</td>
            </tr>
    </table>
    <hr size="2" color="black">

    <h3>INTERNSHIP</h3>
    <b>Company Name: </b> TechByHeart, Kadavathara<br>
    <b>Domain      : </b> Cyber Security and Ethical Hacking<br>
    <b>Duration    : </b> 26 JAN 2023- 14 FEB 2023 (19 DAYS)</br>
    <b>Learnings   : </b> As an intern, I have gained practical
    experience in Kali Linux and also coveredan introduction to ethical
    hacking using it. Came to familiarize new techniques,environments, and
    tools for scanning, and vulnerability analysis and learnedhow to use them
    efficiently.<br></p>
    <hr size="2" color="black">

    <h3>POSITION OF RESPONSIBILITIES</h3>
    <ul>
            <li>Ex Student Head of Department Newsletter</li>
            <li>Ex Event Management Member of Colege</li>
            <li>Ex Green Protocol Club Core Member</li>
            <li>Ex Student Placement Co-ordinator</li>

    </ul>
    <hr size="2" color="black">

    <h3>CERTIFICATION COURSES</h3>
    <ul>
            <li><a href="https://www.credly.com/badges/f8542445-6b9c-4e34-9aee-
    edc3277a04f9/linked_in?t=rpbqed">
                Cyber Security Fundamentals Digital Badge, IBM</a></li>
            <li><a
    href="https://www.coursera.org/account/accomplishments/verify/MFYTLMLVQ
    EEF?utm_source=mobile&utm_medium=certificate&utm_content=cert_image&
    utm_campaign=sharing_cta&utm_product=course">
```

Bits and Bytes of Computer Networking, Google

            Network Defense Essesntials, EC-Council

            Fundamentals of Information Security, Infosys

            AWS Cloud Practitioner Essentials: Cloud Concepts

            AWS Foundations: Securing Your AWS Cloud

<hr size="2" color="black">

<h3>LANGUAGES </h3>

        English- Fluent
        Malayalam- Fluent
        Hindi- Beginner

<hr size="2" color="black">

<h3>HOBBIES </h3>

        String Art
        Craft Works

<hr size="2" color="black">

</body>
</html>

OUTPUT

ANNA ASHNA JOY

Mobile No : +91 8590867320
DOB : 12-07-2003
Email Address: annaashnajoy001@gmail.com
LinkedIn : annaashnajoy.linkedin
Place : Kochi,Kerala,India

CAREER OBJECTIVE

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- Learship
- Team PlayerMYSQL
- Time Management

TECHNICAL SKILLS

- Languages- C,C++
- Database- MYSQL
- Cyber Security
- Cloud

EDUCATIONAL QUALIFICATIONS

Course/Degree	Institution	Board/University	Year of Passing	Mark (%)
MCA	Muthoot Institute of Technology and Science, Puthencruz	APJ Abdul Kalam Technological University	2026	
BCA	St.Teresa's College, Ernakulam	Mahatma GandhiUniversity, Kottayam	2024	76
Plus Two	Sacred Heart HigherSecondary School,Thevara	Government Of Kerala Board of Public Examination	2021	93.5
SSLC	Our Lady's Convent GirlsHigh School,Thoppumpady	Government Of Kerala Board of Public Examination	2019	99

INTERNSHIP

Company Name: TechByHeart, Kadavathara
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- Ex Student Head of Department Newsletter
- Ex Event Management Member of Colege
- Ex Green Protocol Club Core Member
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CERTIFICATION COURSES

- Cyber Security Fundamentals Digital Badge, IBM
- Bits and Bytes of Computer Networking, Google
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- Fundamentals of Information Security, Infosys
- AWS Cloud Practitioner Essentials: Cloud Concepts
- AWS Foundations: Securing Your AWS Cloud

LANGUAGES

- English- Fluent
- Malayalam- Fluent
- Hindi- Beginner

HOBBIES

- String Art
- Craft Works

Program # 2

Create a web page of two parts, Part 1: MCA student registration form Part 2: Webpage of the college. Use frames and various form elements to create the webpage.

Program:
Frames.html

```
<html>
<title>Application Form</title>
<frameset cols="50%,50%">
    <frame src="C:\Users\HP\Desktop\RegistrationForm.html" >
    <frame src="C:\Users\HP\Desktop\mitsSite.html">
</frameset>
</html>
```

RegistrationForm.html

```
<html>
<title>Student Registration Form</title>

<center><img src="C:\Users\HP\Desktop\mitslogo.jpeg" alt="MITS Logo"></center>

<head><h2><center><b> STUDENT REGISTRATION FORM </b></h2></head></center>

<fieldset>
    <legend><b>STUDENT DETAILS</b></legend><br>
First Name: <br><input type="text" name="firstname"/> <br><br>
Middle Name:  <br><input type="text" name="middlename"/> <br><br>
Last Name:  <br><input type="text" name="lastname"/><br><br>

<label for="email">Email: </label><br>
    <input type="email" id="email" name="email"/> <br><br>

<label for="dob">Date of Birth:</label><br>
    <input type="date" id="dob" name="dob"><br><br>

<label for="gender">Gender: </label>
    <input type="radio" id="gender" name="gender" value="male"/>Male
    <input type="radio" id="gender" name="gender" value="female"/>Female <br><br>
</fieldset><br><br>
```

```
<fieldset>
    <legend><b>COURSE DETAILS</b></legend><br>
Course : <select id="course" name="course">
    <option value="Choose" selected>Select a Course </option>
    <option value="B.tech">B.Tech</option>
<option value="M.tech">M.Tech</option>
    <option value="MCA">MCA</option>
</select> <br><br>

Semester : <select id="sem" name="sem">
    <option value="Choose" selected>Select Semester </option>
    <option value="s1">SEM 1</option>
<option value="s2">SEM 2</option>
    <option value="s3">SEM 3</option>
<option value="s4">SEM 4</option>
<option value="s5">SEM 5</option>
    <option value="s6">SEM 6</option>
</select> <br><br>

<label for="start">Staring Year:</label><br>
    <input type="date" id="start" name="start"><br><br>

<label for="ending">Ending Year:</label><br>
    <input type="date" id="end" name="end"><br><br>
</fieldset><br><br>

<fieldset>
    <legend><b>CLUBS</b></legend><br>
Select Interested Clubs:<br>
<input type="checkbox" id="c1" name="club" value="c">
    <label for="c1"> Tech Club</label><br>
<input type="checkbox" id="c2" name="club" value="c"
<label for="c2"> Music Club</label><br>
<input type="checkbox" id="c3" name="club" value="c"
<label for="c3"> Media Club</label><br>
<input type="checkbox" id="c4" name="club" value="c"
<label for="c4"> Dance Club</label><br>
<input type="checkbox" id="c5" name="club" value="c"
<label for="c5"> Maths Club</label><br>
</fieldset><br><br>

<fieldset>
    <legend><b>ACCOUNT SETTINGS</b></legend><br>
```

7

```
<label for="passd1">Type Password: </label>
    <input type="password" id="password" name="passd1">

<label for="passd2">Conform Password: </label>
    <input type="password" id="passd2" name="password"><br><br>
</fieldset><br><br>

<input type="submit" value="Submit">

</html>
```

mitsSite.html
Original site's html code was saved directly.

OUTPUT

<div style="border:1px solid black; padding:10px;">

Program # 3

Create a webpage about your hometown and its tourist attractions using Html, and External, Internal, and inline CSS. The following elements should be included in the webpage: 1. Html text formatting 2. Links to Wikipedia pages for further references 3. External, Internal, and Inline CSS 4. CSS should include font colour, positioning, background colours, text alignment etc. 5. Images of the hometown and its attractions. 6. Usage of div elements for styling.

</div>

Program:

hometown.html

```html
<!DOCTYPE html>
<html>

<head>
 <!-- EXTERNAL CSS -->
 <link rel="stylesheet" href="hometown.css" />

 <!-- INTERNAL CSS -->
 <style>
 p {
   font-color: #BBE1CC;
   font-family: Garamond;
 }
</style>
</head>


<!-- INLINE CSS-->
<body style="background-color:#BBE1CC;">
}
</style>
 <!-- INTRO SECTION -->
 <div class="intro">
   <h1 id="title">Fort Kochi </h1>
   <p id="fk">♀Fort Kochi</p>
   <img src="fkk.webp" height="400" width="700">
   <h2 id="intro">
     Kochi – the historical city and area of Fort Kochi is one of my favorite cities in Kerala. Kochi–
formerly known as Cochin is a major
     seaport of the Malabar coast and Arabian sea. Called the "Queen of the Arabian Sea", Kochi
was an important spice trading center
     on the west coast of India. The Kingdom of Cochin allied with the Ming Dynasty, Portuguese
Dynasty, and Dutch and became a princely
```

state of British India. Earlier the small fishing village, later became the first European Township and so you can see the history
    at every nook and corner in Kochi.
  </h2>
 </div>

 <!-- ACTIVITIES SECTION -->
 <h2>What to do in Fort Kochi?</h2>
 <div id="activities">
   <div id="images">

    <div id="activity">

     <h4>Chinese Fish Nets</h4>
     <p>
      Locally known as 'Cheenavalla'- Chinese Fishing Nets in Kochi date back more than 500 years. These nets were introduced by local
  fisherman by Kublai Khan's traders between 1350 and 1450 CE. They were introduced by Chinese admiral Cheng Ho and to date,
  it is used by fishermen in Kochi. Most of the nets are rebuilt today but the technque
  is same as used to be.
     </p>
     </div>

    <div id="activity">

<h4>Streets and Street Arts</h4>
     <p>
      Art lovers will be deligted to see the beautiful and colorful Murals around the streets of Kochi.
  You can see the best art forms of the different artists who showcases the power of
  artisans. It will also give you a few Insta-Worthy pictures to!!!</div>
 <div You can also find beautiful buildings, but desppite their current state of decay.
  So if you are a fan of abondoned buildings don't miss exploring this isde of Fort- Kochi
     </p>
     </div>

    <div id="activity">

     <h4>Visit Churches </h4>
     <p>
      St. Francis Church in Fort Kochi, built by Portuguese Franciscan friars in the 16th century, St Francis Church is

the oldest church in Fort Kochi and one of the oldest European churches in India. Originally made of wood and mud, it was later rebuilt in 1516 and dedicated to
Santo Antonio. Over the centuries, it changed hands multiple times—first to the Dutch in 1663, who renovated it and built an adjacent cemetery, then to the British in 1804.
    </p>
    </div>

    <div id="activity">

    <h4>Explore Heritage </h4>
    <p>
  It is the old buildings which most clearly reveal this
  deep-rooted colonial influence. Though a few are in ruins, many of them have been converted into
  restaurants, offices or are being used for homestay for tourists.
    Some of these must-see buildings of Fort Kochi are Vasco House, Koder House, Old Harbour House,
    David Hall and the Bastion Bungalow.
      </p>
    </div>

    <div id="activity">

    <h4>Indulge Shopping </h4>
    <p>
    Fort Kochi offers unique shopping with antique stores in Jew Town, handcrafted jewelry on Princess
Street, and vibrant spice markets in Mattancherry. From local art and textiles to spices, it's a perfect
spot to find a piece of Kerala's heritage.
      </p>
    </div>

    <div id="activity">

    <h4>Artistry Cafés</h4>
    <p>
  Fort Kochi's artistry cafés offer a unique fusion of creativity, culture, and cuisine. Popular spots
  like Kashi Art Café, Pepper House Café, and Mocha Art Café, blend creative ambiance with local flavors.
Each café offers more than just coffee—think art-filled walls, heritage spaces, and a welcoming vibe that
draws artists and travelers alike.
      </p>

```
    </div>
    </div><br><br>



  <!-- Gmap embedded link -->
  <h2>How to get there?</h2>
  <iframe
src="https://www.google.com/maps/embed?pb=!1m18!1m12!1m3!1d7538.34800606664!2d76.24
27792596298!3d9.962729465949474!2m3!1f0!2f0!3f0!3m2!1i1024!2i768!4f13.1!3m3!1m2!1s0x
3b086d314f0b178d%3A0xc545233f390db43b!2sFort%20Kochi%2C%20Kochi%2C%20Kerala!5
e0!3m2!1sen!2sin!4v1730733004262!5m2!1sen!2sin" width="600" height="450"
style="border:0;" allowfullscreen="" loading="lazy" referrerpolicy="no-referrer-when-
downgrade"></iframe>
  <!-- GUIDE SECTION -->
  <div class="footer note">
  <div class="footer">
    <h2>Developed By,</h2>
    <h3>~ANNA ASHNA JOY</h3>
    <a href="https://fernwehrahee.com/best-things-to-do-in-fort-kochi-one-day-itinerary/">Click
Here To Know More :-)</a>
    </div>
  </div>
</body>
</html>
```

hometown.css

```
body {
  margin: 0;
  text-align: center;
  font-family: "Poppins", sans-serif;
  color: #1d3557;
  line-height: 25px;
}

#fk {
  background: #1d3557;
  border-radius: 5px;
  padding: 5px;
}

.intro{
  color: #ffffff;
```

```
  background-image: url(images/taroudant.jpg);
  background-size: cover;
  background-position: center;
  background-repeat: no-repeat;
  display: flex;
  flex-direction: column;
  align-items: center;
  padding: 4%;
}

h3 {
  margin-top: 0;
  padding-bottom: 20px;
}
#title {
  background: #1d3557;
  padding: 5px 10px;
  border-radius: 5px;
  margin: 0 0 0 0;
  margin-top: 80px;
}
#intro {
  background: #457b9d;
  padding: 5px 10px;
  border-radius: 5px;
  margin: 5px 0 10px 0;
  width: 800px;
  line-height: 35px;
}

#activities {
  background-color: #f1faee;
  padding-top: 50px;
  padding-bottom: 50px;
  display: flex;
  flex-direction: column;
  align-items: center;
}
#images {
  width: 950px;
  display: flex;
  flex-direction: row;
  justify-content: space-between;
```

```css
}
#activities img {
  width: 150px;
  height: 150px;
  border-radius: 50%;
  object-fit: cover;
}

#activity {
  width: 250px;
  font-weight: 500;
}

.avatar {
  width: 150px;
}

.footer{
  width: 450px;
  margin: 80px auto;
  align-items: center;
  text-align: center;
  background: #a8dadc;
  color: #2b2839;
  border-radius: 10px;
}


.footer note {
  object-fit: cover;
  width: auto;
  border-radius: 10px;
  height: auto;
  width: 250px;
}
```

14

OUTPUT

Program # 4

Create MITS college Website with the help of frames, style sheets, background colours, images, tables, and lists. There should be multiple webpages which are easily navigable by hyperlinks. Apply style sheets as well as floating, mixed, and navigation frames to design the webpages.

Program:
home.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>MITS College - Home</title>
  <link rel="stylesheet" href="styleSheet.css">
</head>
<body>

  <!-- Header with Navigation Links -->
  <div class="header">
   <img src="mitslogo.jpeg" alt="mits logo" style="width: 400px; height: 100px;">
   <h1>Welcome to MITS College</h1>
   <nav>
    <a href="index.html">Home</a>
    <a href="about.html">About</a>
    <a href="courses.html">Courses</a>
   </nav>
  </div>

  <!-- Main Content Area -->
  <div class="content">
   <!-- Left Frame using flexbox -->
   <div class="frame left-frame">
    <h2>Latest News</h2>
    <ul>
     <li>New courses added for 2024!</li>
     <li>Admissions open for the new semester.</li>
     <li>Apply for scholarships now!</li>
    </ul>
   </div>

   <!-- Main Frame -->
```

```html
    <div class="frame main-frame">
      <h2>About MITS College</h2>
      <p>MITS College offers top-quality education in technology, science, and management. Our aim is to prepare students for a successful future.</p>
      <img src="campus.webp" alt="Campus Image">
    </div>

    <!-- Right Frame for Embedded Content -->
    <div class="frame right-frame">
      <h2>Explore Our Campus</h2>
      <!-- Embedded frame using iframe -->
      <iframe src="https://www.google.com/maps/embed?pb=!1m18!1m12!1m3!1d4423.628325976396!2d76.40557101627209!3d9.963940029039556!2m3!1f0!2f0!3f0!3m2!1i1024!2i768!4f13.1!3m3!1m2!1s0x3b0874de563bc58b%3A0xde7ecbfa110cfbda!2sMuthoot%20Institute%20of%20Technology%20%26%20Science!5e0!3m2!1sen!2sin!4v1731513189113!5m2!1sen!2sin" width="600" height="450" style="border:0;" allowfullscreen="" loading="lazy" referrerpolicy="no-referrer-when-downgrade"></iframe>
    </div>
  </div>

  <!-- Footer -->
  <footer>
    <p>&copy; 2024 MITS College. All rights reserved.</p>
  </footer>

</body>
</html>
```

about.html
```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>About MITS College</title>
  <link rel="stylesheet" href="styleSheet.css">
</head>
<body>

  <!-- Header with Navigation Links -->
  <div class="header">
    <img src="mitslogo.jpeg" alt="mits logo" style="width: 400px; height: 100px;">
    <h1>About The Muthoot Group</h1>
```

```
  <nav>
    <a href="index.html">Home</a>
    <a href="about.html">About</a>
    <a href="courses.html">Courses</a>
    </nav>
  </div>

  <!-- Main Content for About Page -->
  <div class="about-content">

    <p>The Muthoot Group, with a reputation that has been shaped over decades with high-quality
practices, total customer satisfaction, and steady growth, spanning 130 years in the field of
business, is a legacy built on God-given values of trust, truth, transparency, and tradition, and has
become one of the top business houses today by the grace of God.</p>

    <p>Muthoot takes its name from its Family, which is a branch of a traditional Orthodox
Christian family, based in Kozhencherry, a small town in the erstwhile primary state of Travancore
(Kerala). In the year 1887, Muthoot Ninan Mathai (Patron Founder of the group) started in a
humble way as a retail and wholesale trader of grains at Kozhencherry. The family partition took
place in the year 1979, which led to the genesis of Muthoot George Group (MGG). Over the years,
the business grew gradually into <strong>gold loans</strong> and chits during the 1950s and
expanded into Financial Services, Information Technology, Media, Healthcare, Education, Power
Generation, Infrastructure, Plantations, Precious metal, Tourism, and Hospitality.</p>

    <p>The Muthoot Group is a flourishing business empire that has pervaded into each and every
big & small town of the country, is home to 18 diversified divisions and 4500 plus branches with a
global presence. Over 2,53,000 customers visit The Muthoot Group branches every day. The
Group has served over 48 crore customers (including repeat customers) to date. The story of The
Muthoot Group is built on the foundations of passion, commitment, honesty, traditions, and values.
The principle of continuous growth and expansion forms the essence of all its activities.</p>

    <p>The Group recently celebrated 130 years of unblemished business excellence, lending
services to millions of underserved Indians, leading to Financial Inclusion even in the most remote
and rural areas of the country. Since its inception, The Muthoot Group has been transforming the
lives of millions of Indians across the country, giving wings to their dreams and creating successful
realities. The Muthoot Group has not only grown exponentially but has also facilitated growth for
a sizeable population of the country that falls in the underprivileged category.</p>

    <p>For more details, visit <a href="https://www.muthootfinance.com"
target="_blank">www.muthootfinance.com</a></p>
  </div>

  <!-- Footer -->
  <footer>
```

```
    <p>&copy; 2024 MITS College. All rights reserved.</p>
  </footer>

</body>
</html>
```

Courses.html
```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>MITS College - Courses</title>
  <link rel="stylesheet" href="styleSheet.css">
</head>
<body>

  <div class="header">
   <img src="mitslogo.jpeg" alt="mits logo" style="width: 400px; height: 100px;">
   <h1>Our Courses</h1>
   <nav>
    <a href="index.html">Home</a>
    <a href="about.html">About</a>
    <a href="courses.html">Courses</a>
    </nav>
  </div>

  <div class="content">
   <div class="frame main-frame">
    <table border="1" cellspacing="0" cellpadding="5">
     <thead>
      <tr>
       <th>Course Code</th>
       <th>Course Name</th>
       <th>Duration</th>
       <th>Fees</th>
      </tr>
     </thead>
     <tbody>
      <tr>
       <td>MCA024</td>
       <td>Master of Computer Applications</td>
       <td>1 semester</td>
       <td>45000</td>
```

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```
        </tr>
        <tr>
         <td>CS00124</td>
         <td>B.Tech</td>
         <td>1 semester</td>
         <td>50000</td>
        </tr>
      </tbody>
    </table>
  </div>
 </div>


 <footer>
  <p>&copy; 2024 MITS College. All rights reserved.</p>
 </footer>


</body>
</html>
```

index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <title>MITS College - Home</title>
 <link rel="stylesheet" href="styleSheet.css">
</head>
<body>

 <!-- Header with Navigation Links -->
 <div class="header">
  <img src="mitslogo.jpeg" alt="mits logo" style="width: 400px; height: 100px;">
  <h1>Welcome to MITS College</h1>
  <nav>
   <a href="index.html">Home</a>
   <a href="about.html">About</a>
   <a href="courses.html">Courses</a>
   <a href="contact.html">Contact</a>
  </nav>
 </div>

 <!-- Main Content Area -->
```

```
  <div class="content">
    <!-- Left Frame using flexbox -->
    <div class="frame left-frame">
     <h2>Latest News</h2>
     <ul>
      <li>New courses added for 2024!</li>
      <li>Admissions open for the new semester.</li>
      <li>Apply for scholarships now!</li>
     </ul>
    </div>

    <!-- Main Frame -->
    <div class="frame main-frame">
     <h2>About MITS College</h2>
     <p>MITS College offers top-quality education in technology, science, and management. Our
aim is to prepare students for a successful future.</p>
     <img src="campus.webp" alt="Campus Image">
    </div>

    <!-- Right Frame for Embedded Content -->
    <div class="frame right-frame">
     <h2>Explore Our Campus</h2>
     <!-- Embedded frame using iframe -->
     <iframe
src="https://www.google.com/maps/embed?pb=!1m18!1m12!1m3!1d4423.628325976396!2d76.4
0557101627209!3d9.963940029039556!2m3!1f0!2f0!3f0!3m2!1i1024!
2i768!4f13.1!3m3!1m2!1s0x3b0874de563bc58b%3A0xde7ecbfa110cfbda!2sMuthoot%20Institute
%20of%20Technology%20%26%20Science!5e0!3m2!1sen!2sin!4v1731513189113!5m2!1sen!2si
n" width="600" height="450" style="border:0;" allowfullscreen="" loading="lazy"
referrerpolicy="no-referrer-when-downgrade"></iframe>
    </div>
  </div>

  <!-- Footer -->
  <footer>
   <p>&copy; 2024 MITS College. All rights reserved.</p>
  </footer>

</body>
</html>
```
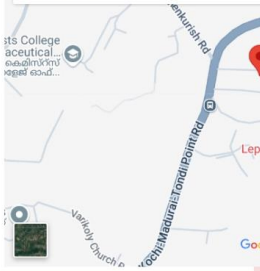
stylesheet.css

```css
/* Basic styling */
body {
  font-family: Arial, sans-serif;
  margin: 0;
  padding: 0;
  background-color: #f7dfdf;
}

.header {
  background-color: #de0d0d;
  color: white;
  padding: 1em;
  text-align: center;
}

.header nav {
  margin-top: 1em;
}

.header nav a {
  color: white;
  margin: 0 10px;
  text-decoration: none;
  font-weight: bold;
}

.header nav a:hover {
  text-decoration: underline;
}

/* Floating frames */
.content {
  overflow: hidden; /* Clear floats */
  padding: 20px;
}

.left-frame, .right-frame {
  width: 19%;
  background-color: white;
  padding: 10px;
  margin: 5px;
  float: left; /* Float the left frame */
```

22

```
}

.right-frame {
  float: right; /* Float the right frame */
}

.main-frame {
  width: 55%;
  background-color: #ffffff;
  padding: 20px;
  margin: 5px auto;
  position: relative;
  float: left; /* Center content in between floats */
}

img {
  width: 100%;
  height: auto;
  margin-top: 10px;
  border-radius: 8px;
}

/* Footer styling */
footer {
  background-color: #de0d0d;
  color: white;
  text-align: center;
  padding: 1em 0;
  clear: both; /* Ensures footer stays below floating frames */
}
```

Department of Computer Application   MITS

OUTPUT

home

About

Courses

Program # 5

Apply positioning methods of elements on a webpage with div elements and their corresponding classes using two external stylesheets. Compare the output with absolute, and relative positioning of div elements.

Program:

Prg05.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Positioning Comparison</title>
    <link rel="stylesheet" href="relative.css" id="stylesheet"> <!-- Link to first stylesheet -->
    <style>
      /* Add some styling for buttons */
      .button-container {
        margin-bottom: 20px;
        text-align: center;
      }

      button {
        padding: 10px 20px;
        margin: 0 10px;
        font-size: 16px;
        cursor: pointer;
      }
    </style>
</head>
<body>
    <!-- Button container to hold the buttons above the boxes -->
    <div class="button-container">
      <button onclick="switchStylesheet('relative.css')">Relative Positioning</button>
      <button onclick="switchStylesheet('absolute.css')">Absolute Positioning</button>
    </div>

    <!-- Container with boxes -->
    <div class="container">
      <div class="box" id="box1">Box 1</div>
      <div class="box" id="box2">Box 2</div>
      <div class="box" id="box3">Box 3</div>
```

```
    </div>

    <script>
      function switchStylesheet(fileName) {
          document.getElementById("stylesheet").href = fileName;
      }
    </script>
</body>
</html>
```

<u>relative.css</u>
```css
/* relative.css */

.container {
    position: relative;
    width: 100%;
    height: 300px;
    background-color: lightgray;
}

.box {
    position: relative;
    width: 100px;
    height: 100px;
    background-color: cornflowerblue;
    margin: 10px;
    color: white;
    text-align: center;
    line-height: 100px;
}

/* Additional relative adjustments */
#box1 {
    top: 10px;
    left: 10px;
}

#box2 {
    top: 20px;
    left: 50px;
}

#box3 {
    top: 30px;
```

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```
    left: 100px;
  }
```

absolute.css

```css
/* absolute.css */

.container {
  position: relative;
  width: 100%;
  height: 300px;
  background-color: lightgray;
}

.box {
  position: absolute;
  width: 100px;
  height: 100px;
  background-color: tomato;
  color: white;
  text-align: center;
  line-height: 100px;
}

/* Additional absolute adjustments */
#box1 {
  top: 10px;
  left: 10px;
}

#box2 {
  top: 20px;
  left: 50px;
}

#box3 {
  top: 30px;
  left: 100px;
}
```
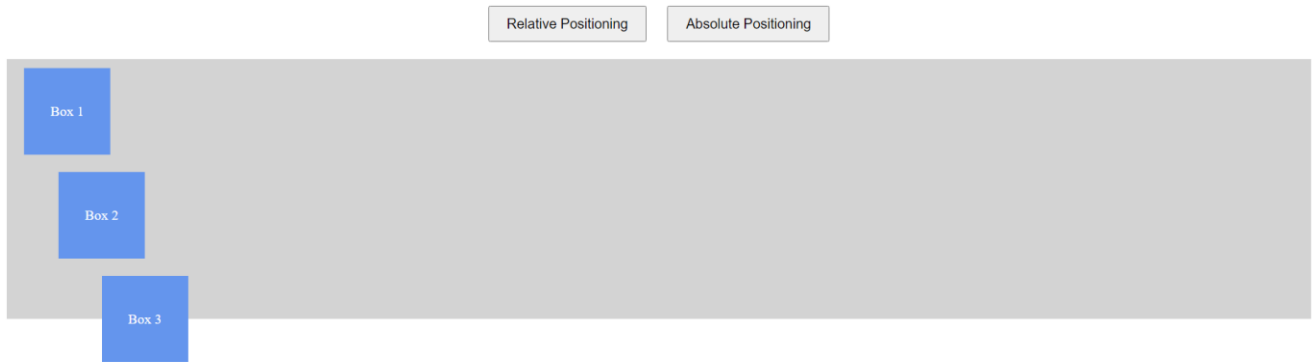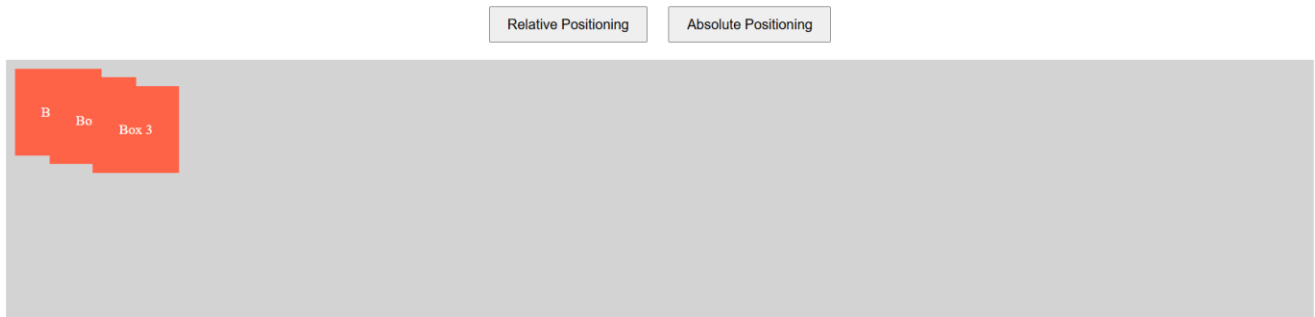
28

OUTPUT

relative

Absolute

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Lab Cycle 2

CO2: Explore markup languages features and create interactive web pages using them.

Program # 6

To Create an HTML page to demonstrate the use of various predefined functions in a string and math object in java script.

Program:
String.html

```
<html>
<title>String and Math Functions</title>

<head><h2><center><b> WPL 06 </b></h2></head></center>

<p id="demo1"></p>
<p id="demo2"></p>
<p id="upcase"></p>
<p id="lowcase"></p>
<p id="concat"></p>
<script>
    let course1 = "Web Programming Lab";
    let course2= 'Data Structures';
    document.getElementById("demo1").innerHTML = course1+ " " + course2
    let strlen=course1.length;
    document.getElementById("demo2").innerHTML = strlen
    let up=course1.toUpperCase();
    document.getElementById("upcase").innerHTML = up
    let low=up.toLowerCase();
    document.getElementById("lowcase").innerHTML = low
    let strconcat= course1.concat(" ",course2);
    document.getElementById("concat").innerHTML = strconcat
</script>




<p id="extract1"></p>
<p id="extract2"></p>
<p id="extract3"></p>
<p id="demo3"></p>
<script>
    let fruits= "orange, pineapple, grapes";
    let part1 = fruits.slice(8,17);
```

```
    let part2 = fruits.substring(19,25);
    let part3 = fruits.substr(-7);
    let replace = fruits.replace("orange", "watermelon");
    document.getElementById("extract1").innerHTML = part1;
    document.getElementById("extract2").innerHTML = part2;
    document.getElementById("extract3").innerHTML = replace;
</script>

<p id="round1"></p>
<p id="round2"></p>
<p id="round3"></p>
<p id="ceil"></p>
<p id="floor"></p>
<p id="trunc"></p>
<p id="sign"></p>
<p id="pow"></p>
<p id="sqrt"></p>
<p id="abs"></p>
<p id="min"></p>
<p id="max"></p>
<p id="random"></p>
<p id="log"></p>
<p id="log10"></p>

<script>
    document.getElementById("round1").innerHTML = Math.round(10.8);
    document.getElementById("round2").innerHTML = Math.round(10.1);
    document.getElementById("round3").innerHTML = Math.round(10.5);
    document.getElementById("ceil").innerHTML = Math.ceil(10.1);
    document.getElementById("floor").innerHTML = Math.floor(10.8);
    document.getElementById("trunc").innerHTML = Math.trunc(10.8);
    document.getElementById("sign").innerHTML = Math.sign(5);
    document.getElementById("pow").innerHTML = Math.pow(2,4);
    document.getElementById("sqrt").innerHTML = Math.sqrt(81);
    document.getElementById("abs").innerHTML = Math.abs(-10.8);
    document.getElementById("min").innerHTML = Math.min(1, 150, 50, 10, -80, 200);
    document.getElementById("max").innerHTML = Math.max(1, 150, 50, 10, -80, 200);
    document.getElementById("random").innerHTML = Math.random();
    document.getElementById("log").innerHTML = Math.log(2);
    document.getElementById("log10").innerHTML = Math.log10(1000);

</script>
</html>
```
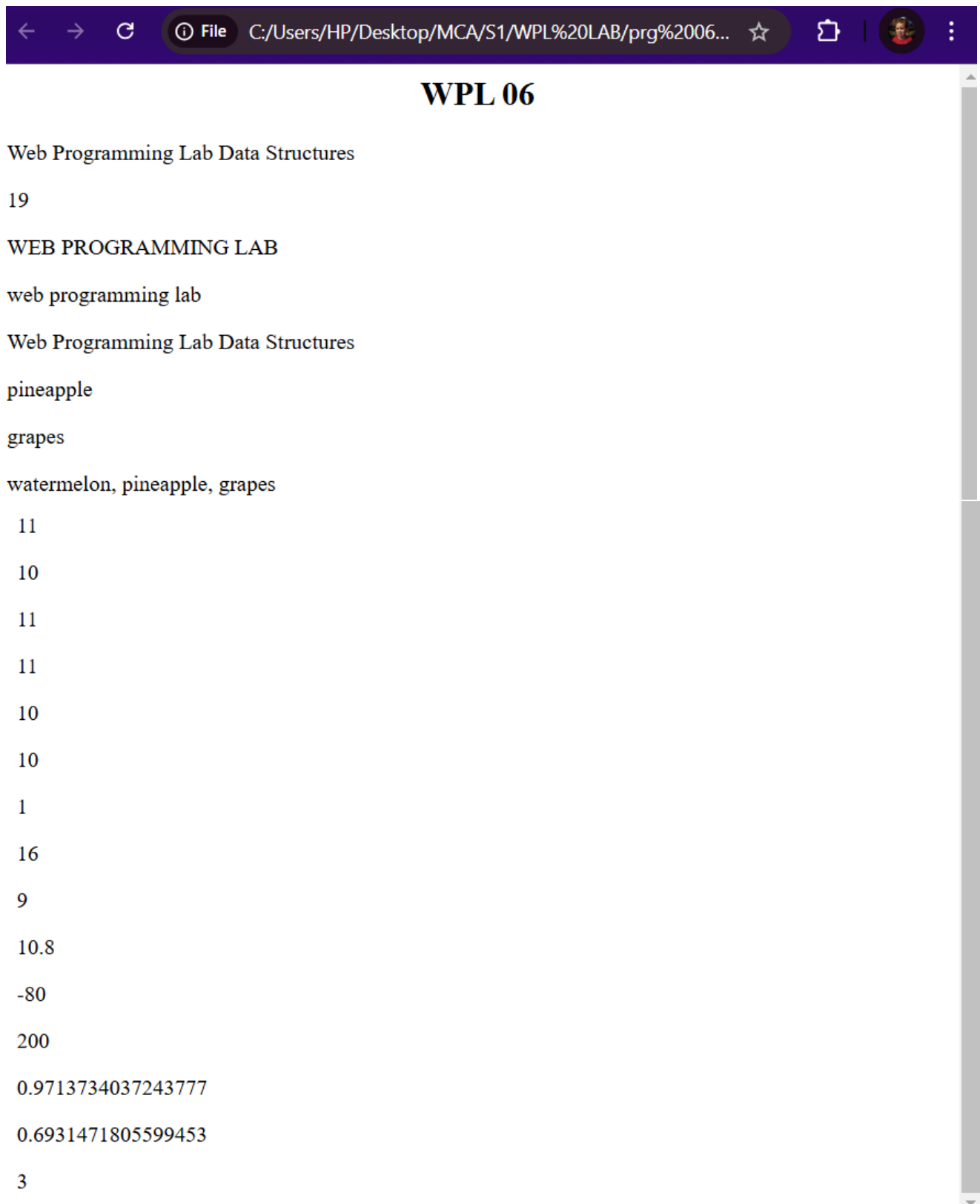
OUTPUT

WPL 06

Web Programming Lab Data Structures

19

WEB PROGRAMMING LAB

web programming lab

Web Programming Lab Data Structures

pineapple

grapes

watermelon, pineapple, grapes

11

10

11

11

10

10

1

16

9

10.8

-80

200

0.9713734037243777

0.6931471805599453

3

Program # 7

Generate the calendar of a month using JavaScript code by getting the year and month from the user.

Program:

```html
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Simple Calendar</title>
</head>
<body>
<h1>Calendar</h1>
<label for="year">Year:</label>
<input type="number" id="year" value="">
<label for="month">Month (1-12):</label>
<input type="number" id="month" value="" min="1" max="12">
<button onclick="generateCalendar()">Generate Calendar</button>
<div id="calendar"></div>
<script>
function generateCalendar() {
const year = document.getElementById('year').value;
const month = document.getElementById('month').value - 1; // 0-based index for months
const calendarElement = document.getElementById('calendar');
calendarElement.innerHTML = ''; // Clear previous calendar
const firstDay = new Date(year, month, 1);
const lastDay = new Date(year, month + 1, 0);
const totalDays = lastDay.getDate();
const startDay = firstDay.getDay(); // Day of the week for the 1st day of the month
let calendarHTML = '<table border="1"><tr>';
const daysOfWeek = ['Sun', 'Mon', 'Tue', 'Wed', 'Thu', 'Fri', 'Sat'];
// Add days of the week header
for (let i = 0; i < 7; i++) {
calendarHTML += `<th>${daysOfWeek[i]}</th>`;
}
calendarHTML += '</tr><tr>';
// Add empty cells before the 1st day of the month
for (let i = 0; i < startDay; i++) {
calendarHTML += '<td></td>';
}
// Add the days of the month
for (let day = 1; day <= totalDays; day++) {
if ((startDay + day - 1) % 7 === 0 && day !== 1) {
calendarHTML += '</tr><tr>'; // Start a new row after Saturday
```

```
}
calendarHTML += `<td>${day}</td>`;
}
calendarHTML += '</tr></table>';
calendarElement.innerHTML = calendarHTML;
}
// Initial call to generate the calendar for the default date
generateCalendar();
</script>
</body>
</html>
```

OUTPUT

Calendar

Year: `2003` Month (1-12): `7` `Generate Calendar`

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Program # 8

Create a program using the JavaScript Event Listener to add multiple events on the same button.

Program:

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <style>
            button {
                    padding: 9px;
                    width: 100px;
                    margin-left: 650px;
                    margin-top: 200px;
            }
    </style>
</head>
<body>
    <button id="btn">Click here</button>
    <script>
            const bt = document.getElementById("btn");

            // to show an alert when button is clicked
            bt.addEventListener('click', fun1);
            function fun1() {
                    alert("Button clicked");
            }

            // to change the background and border when mouse is placed over the button
            bt.addEventListener('mouseover', fun2);
            function fun2() {
                    bt.style.backgroundColor = 'lightblue';
                    bt.style.border = '3px solid black';
            }

            // to change background and text color after the button is clicked.
            bt.addEventListener('mouseout', fun3);
            function fun3() {
                    bt.style.backgroundColor = 'crimson';
                    bt.style.color = 'white';
            }
```

```
                    // to change the button text after clivking the button
                    bt.addEventListener('click', fun4);
                    function fun4() {
                            bt.textContent = 'Clicked!';
                    }
            </script>
        </body>
        </html>
```
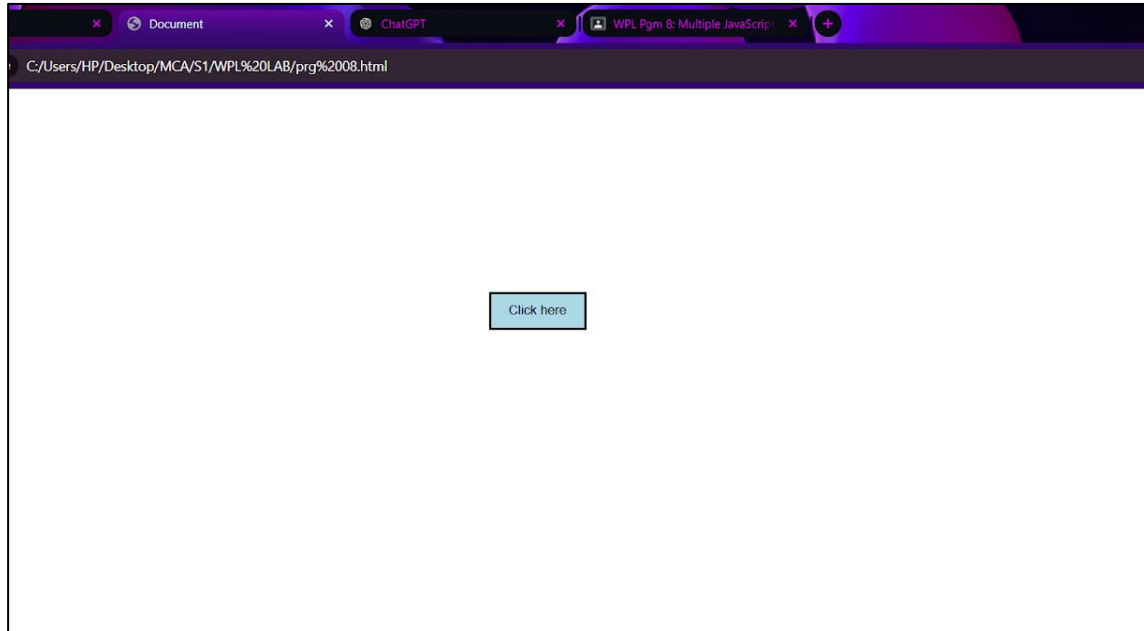
OUTPUT

- **Initial button before any event happens.**

a) **To show an alert when button is clicked**

Department of Computer Application   MITS
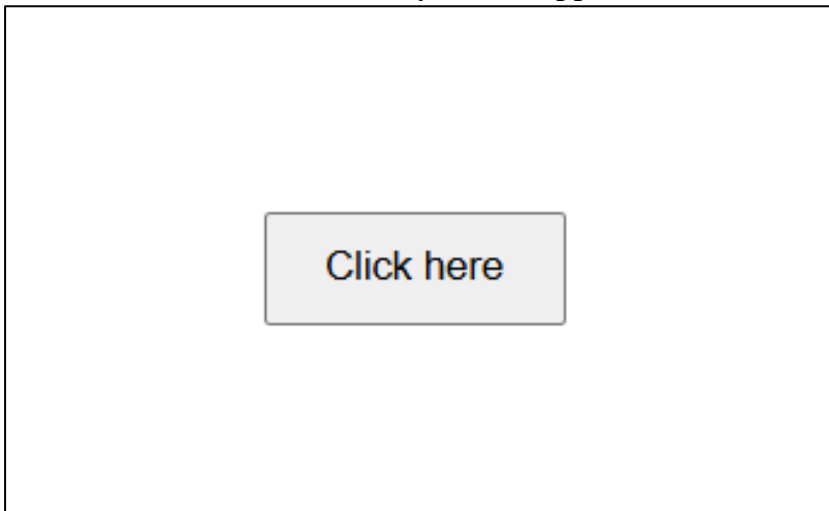
b) o change the background and border when the mouse is placed over the button (mouse pointer is not showing while taking a screenshot. The button color changes to blue when mouse pointer is overthe button)

c)To change background and text color after the button is clicked. (button color changed to red after clicking)

d) change the button text after clicking the button (button text changed from Click here to Clicked)

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Program # 9

Develop a JavaScript Event Handling mechanism to change the background colour of an HTML page.

Program:

```
<!DOCTYPE html>
<html lang="en">
<head>
        <meta charset="UTF-8">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
        <title>Background Color Changer</title>
        <style>
                body {
                        text-align: center;
                        padding: 50px;
                }

                button {
                        padding: 10px 20px;
                        margin: 10px;
                        font-size: 16px;
                        cursor: pointer;
                }
        </style>
</head>
<body>
        <h1>Click a Button to Change Background Color</h1>
        <button id="yellow">Yellow</button>
        <button id="cyan">Cyan</button>
        <button id="red">Red</button>
        <button id="white">White</button>

        <script>
                // buttons
                const redButton = document.getElementById('red');
                        const yellowButton = document.getElementById('yellow');
                const cyanButton = document.getElementById('cyan');
                        const whiteButton = document.getElementById('white');




                // Event listeners to change the background colors
                redButton.addEventListener('click', () => {
```

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```
                                document.body.style.backgroundColor = 'red';
                });

                yellowButton.addEventListener('click', () => {
                                document.body.style.backgroundColor = 'yellow';
                });

                cyanButton.addEventListener('click', () => {
                                document.body.style.backgroundColor = 'cyan';
                });
                whiteButton.addEventListener('click', () => {
                                document.body.style.backgroundColor = 'white';
                });
        </script>
    </body>
</html>
```

OUTPUT

● Buttons and page before any event happening

Click a Button to Change Background Color

| Yellow | Cyan | Red | White |
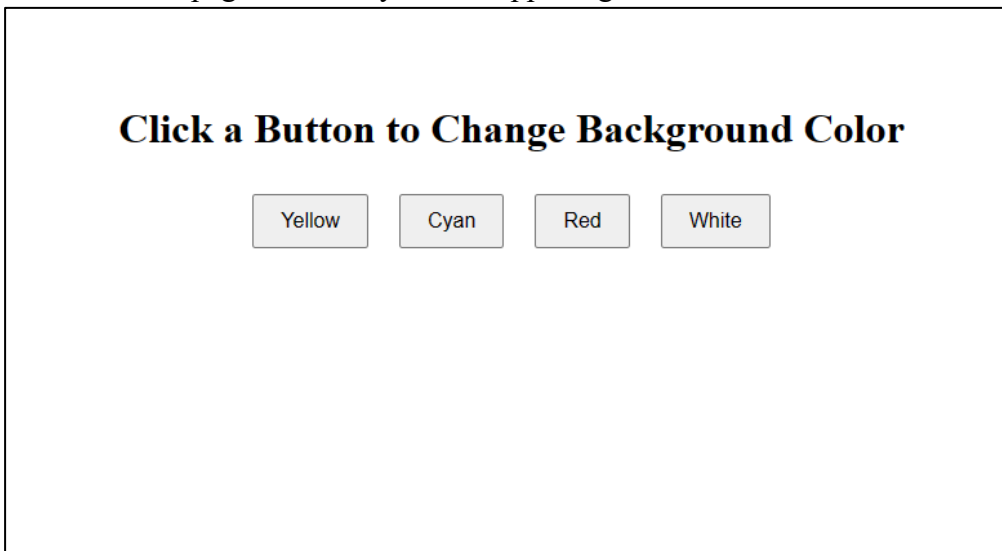
a) When the yellow button clicked.
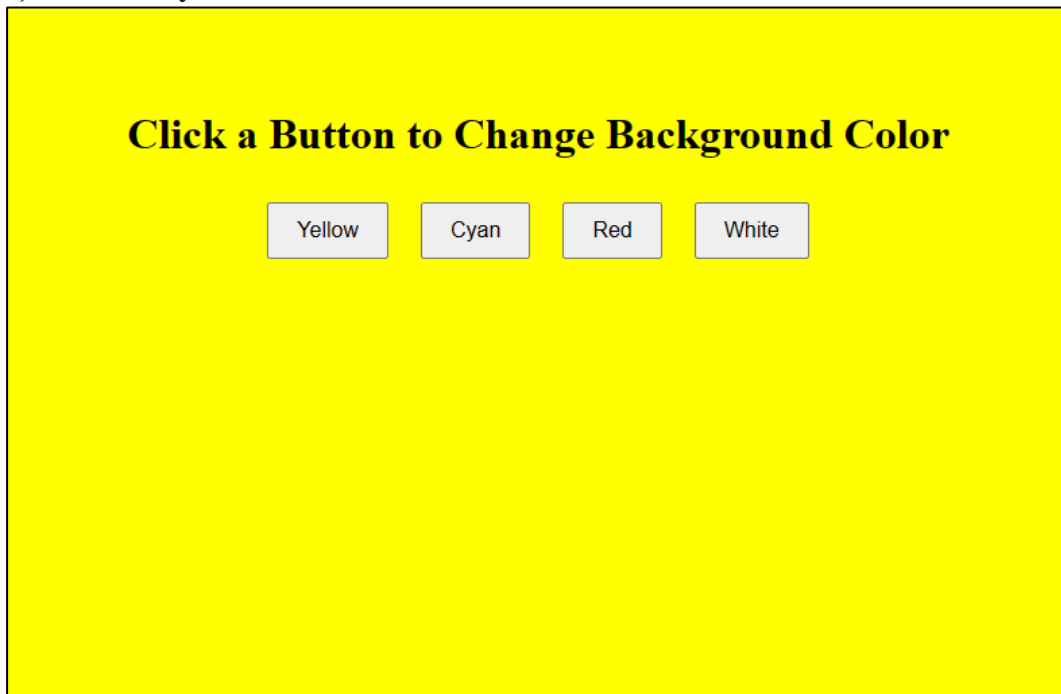
b) When the cyan button clicked.
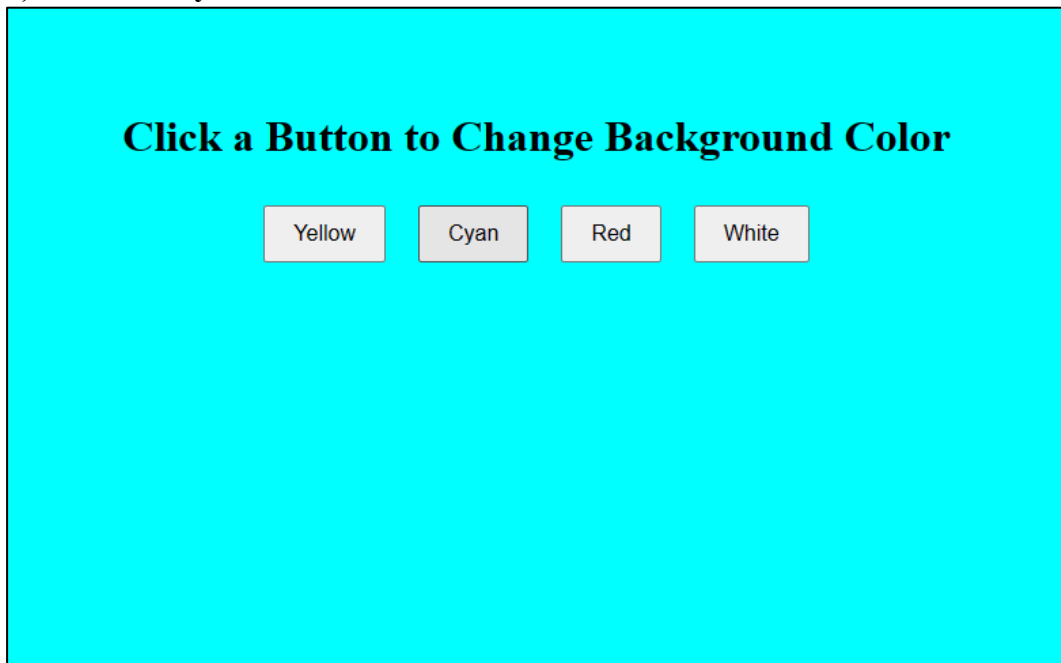
c) When the red button clicked.
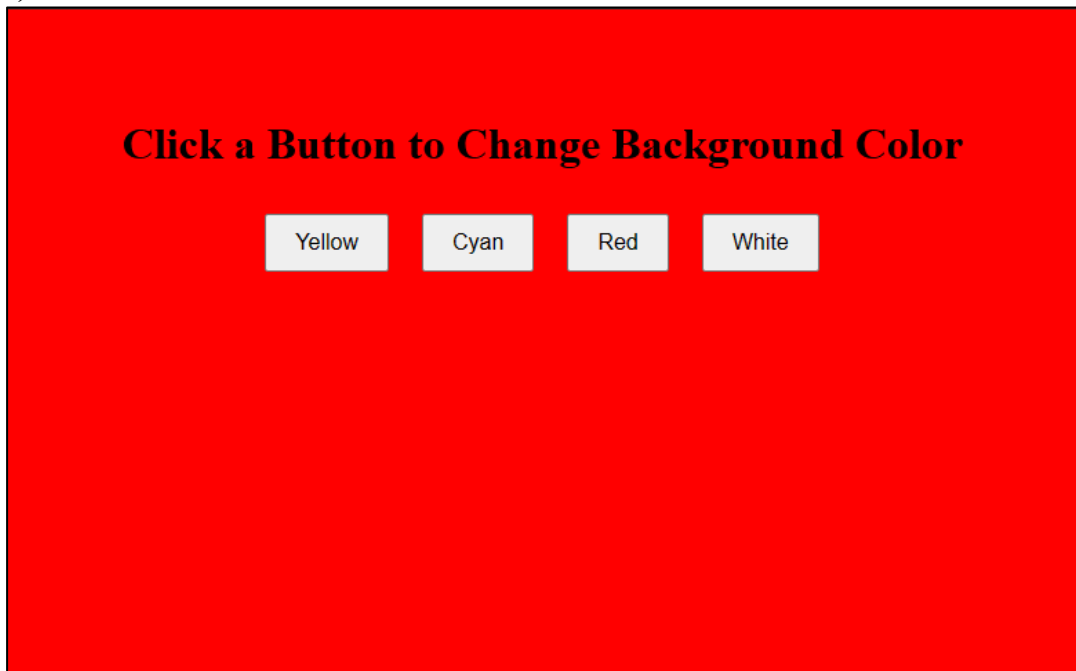
d) When the white button clicked.
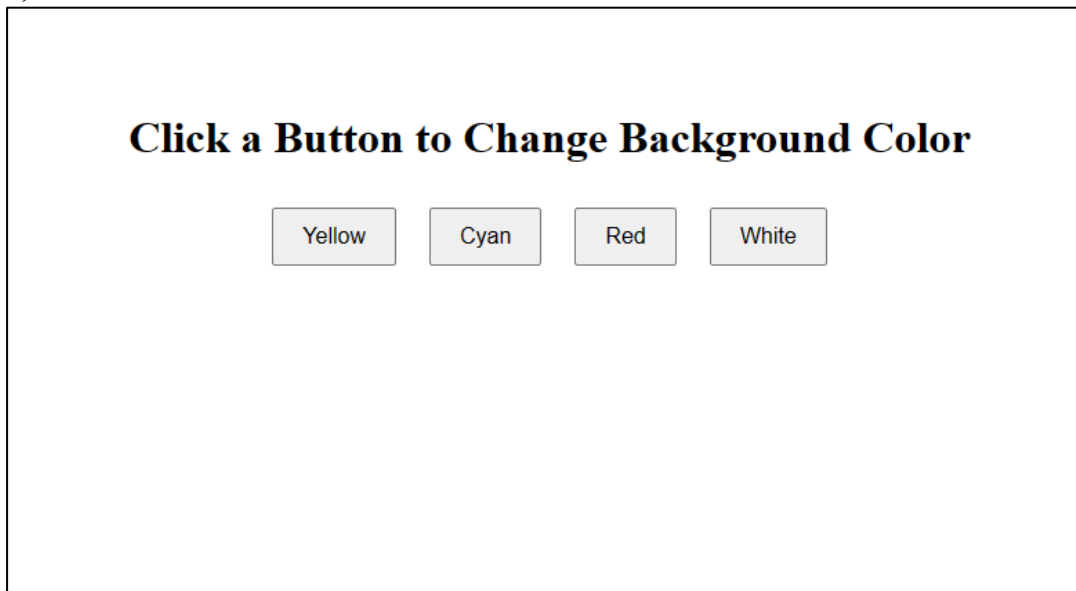
Program # 10

Create an HTML page to display a new image and text when the mouse comes over the existing content in the page using JavaScript Event Handling mechanism.

Program:

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>WPL 10</title>
    <style>
        body {
            text-align: center;
            margin-top: 50px;
        }

        img {
            width: 300px;
            height: auto;
            cursor: pointer;
        }

        img:hover {
            transform: scale(1.1);
        }

        #new-content {
            display: none; /* Initially hide new content */
            margin-top: 20px;
        }
    </style>
</head>
<body>
    <h1>WPL 10</h1>
    <!-- Main Image -->
    <img id="main-image" src="mitslogo.jpeg" alt="Original Image">

    <!-- Hidden New Content -->
    <div id="new-content">
        <p>Here is the new content that appears!</p>
        <img src="campus.webp" alt="New Image">
    </div>
```

```
  <script>
    const mainImage = document.getElementById("main-image");
    const newContent = document.getElementById("new-content");

    // Image paths
    const originalImage = "mitslogo.jpeg";
    const hoverImage = "campus.webp";

    // Mouseover to change image and show content
    mainImage.addEventListener("mouseover", () => {
      newContent.style.display = "block";
    });

    // Mouseout to revert image and hide content
    mainImage.addEventListener("mouseout", () => {
      mainImage.src = originalImage;
      newContent.style.display = "none";
    });
  </script>
</body>
</html>
```

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OUTPUT
● **Page by hiding event occurrence content (before the event occurs).**
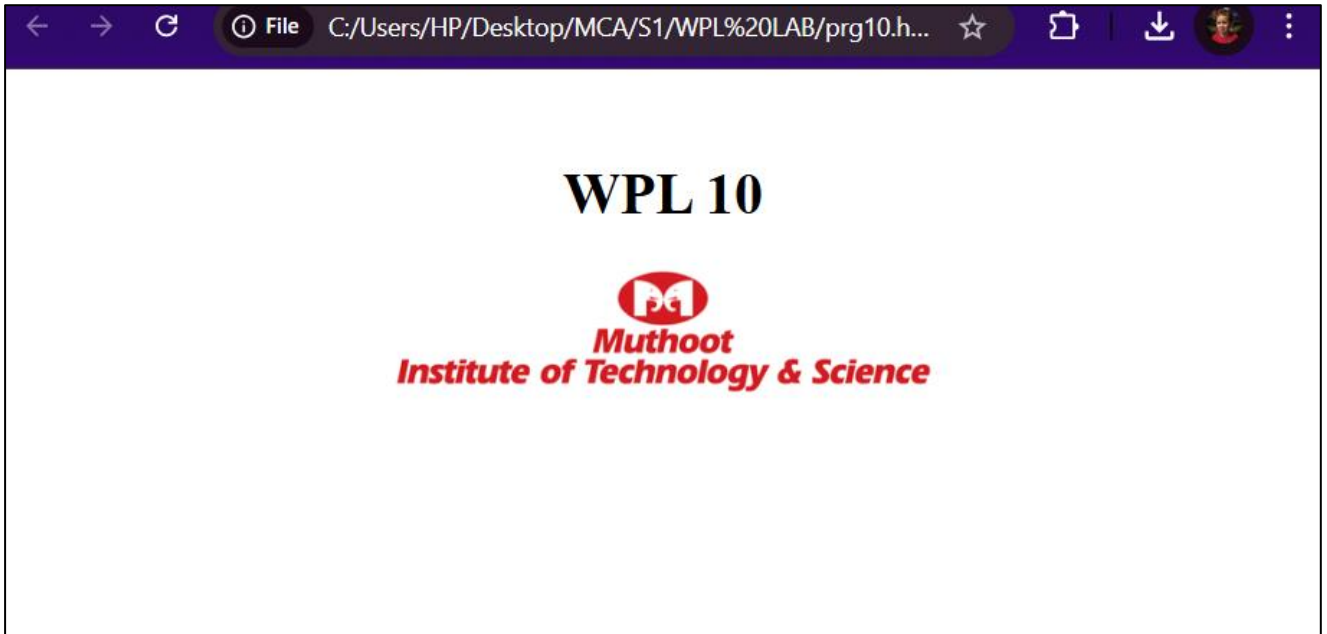
● **After the mouse is dragged to the image new text content and the image is shown.**

Program #11

Create a HTML registration form and to validate the form using JavaScript code.

Program:

```html
<!DOCTYPE html>
<html>
<head>
  <title>Student Registration Form</title>
  <script>
    // Function to validate the form
    function validateForm(event) {
      // Prevent form submission for validation
      event.preventDefault();

      // Validate first name
      let firstName = document.forms["studentForm"]["firstname"].value;
      if (firstName == "") {
        alert("First Name must be filled out");
        return false;
      }

      // Validate email
      let email = document.forms["studentForm"]["email"].value;
      let atposition = email.indexOf("@");
      let dotposition = email.lastIndexOf(".");
      if (atposition < 1 || dotposition < atposition + 2 || dotposition + 2 >= email.length) {
        alert("Please enter a valid email address");
        return false;
      }

      // Validate course selection
      let course = document.forms["studentForm"]["course"].value;
      if (course === "Choose") {
        alert("Please select a course.");
        return false;
      }

      // Validate semester selection
      let semester = document.forms["studentForm"]["sem"].value;
      if (semester === "Choose") {
        alert("Please select a semester.");
        return false;
      }
```

```
      // Validate password
      let password = document.forms["studentForm"]["passd1"].value;
      let confirmPassword = document.forms["studentForm"]["passd2"].value;
      let strongPasswordRegex = /^(?=.*[a-z])(?=.*[A-Z])(?=.*\d)(?=.*[@$!%*?&])[A-Za-
z\d@$!%*?&]{8,}$/;
      if (!password.match(strongPasswordRegex)) {
        alert(
           "Password must be at least 8 characters long, include at least one uppercase letter, one
lowercase letter, one number, and one special character."
        );
        return false;
      }

      // Confirm password match
      if (password !== confirmPassword) {
        alert("Passwords do not match");
        return false;
      }

      alert("Form submitted successfully!");
      return true;
    }
  </script>
</head>
<body>
  <center><img src="mitslogo.jpeg" alt="MITS Logo"></center>
  <h2><center><b>STUDENT REGISTRATION FORM</b></center></h2>

  <form id="studentForm" name="studentForm" onsubmit="return validateForm(event)">
    <fieldset>
      <legend>STUDENT DETAILS</legend>
      First Name: <br>
      <input type="text" name="firstname" /> <br><br>
      Middle Name: <br>
      <input type="text" name="middlename" /> <br><br>
      Last Name: <br>
      <input type="text" name="lastname" /> <br><br>
      <label for="email">Email:</label> <br>
      <input type="email" id="email" name="email" /> <br><br>
      <label for="dob">Date of Birth:</label> <br>
      <input type="date" id="dob" name="dob" /> <br><br>
      <label for="gender">Gender:</label>
      <input type="radio" name="gender" value="male" />Male
      <input type="radio" name="gender" value="female" />Female <br><br>
    </fieldset>
```

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```html
<fieldset>
  <legend>COURSE DETAILS</legend>
  Course:
  <select id="course" name="course">
    <option value="Choose" selected>Select a Course</option>
    <option value="B.tech">B.Tech</option>
    <option value="M.tech">M.Tech</option>
    <option value="MCA">MCA</option>
  </select> <br><br>
  Semester:
  <select id="sem" name="sem">
    <option value="Choose" selected>Select Semester</option>
    <option value="s1">SEM 1</option>
    <option value="s2">SEM 2</option>
    <option value="s3">SEM 3</option>
    <option value="s4">SEM 4</option>
    <option value="s5">SEM 5</option>
    <option value="s6">SEM 6</option>
  </select> <br><br>
  <label for="start">Starting Year:</label> <br>
  <input type="date" id="start" name="start" /> <br><br>
  <label for="end">Ending Year:</label> <br>
  <input type="date" id="end" name="end" /> <br><br>
</fieldset>

<fieldset>
  <legend>CLUBS</legend>
  Select Interested Clubs:<br>
  <input type="checkbox" id="c1" name="club" value="Tech Club" /> Tech Club<br>
  <input type="checkbox" id="c2" name="club" value="Music Club" /> Music Club<br>
  <input type="checkbox" id="c3" name="club" value="Media Club" /> Media Club<br>
  <input type="checkbox" id="c4" name="club" value="Dance Club" /> Dance Club<br>
  <input type="checkbox" id="c5" name="club" value="Maths Club" /> Maths Club<br>
</fieldset>

<fieldset>
  <legend>ACCOUNT SETTINGS</legend>
  <label for="passd1">Type Password:</label>
  <input type="password" id="password" name="passd1" /> <br><br>
  <label for="passd2">Confirm Password:</label>
  <input type="password" id="passd2" name="passd2" /> <br><br>
</fieldset>

<input type="submit" value="Submit" />
```
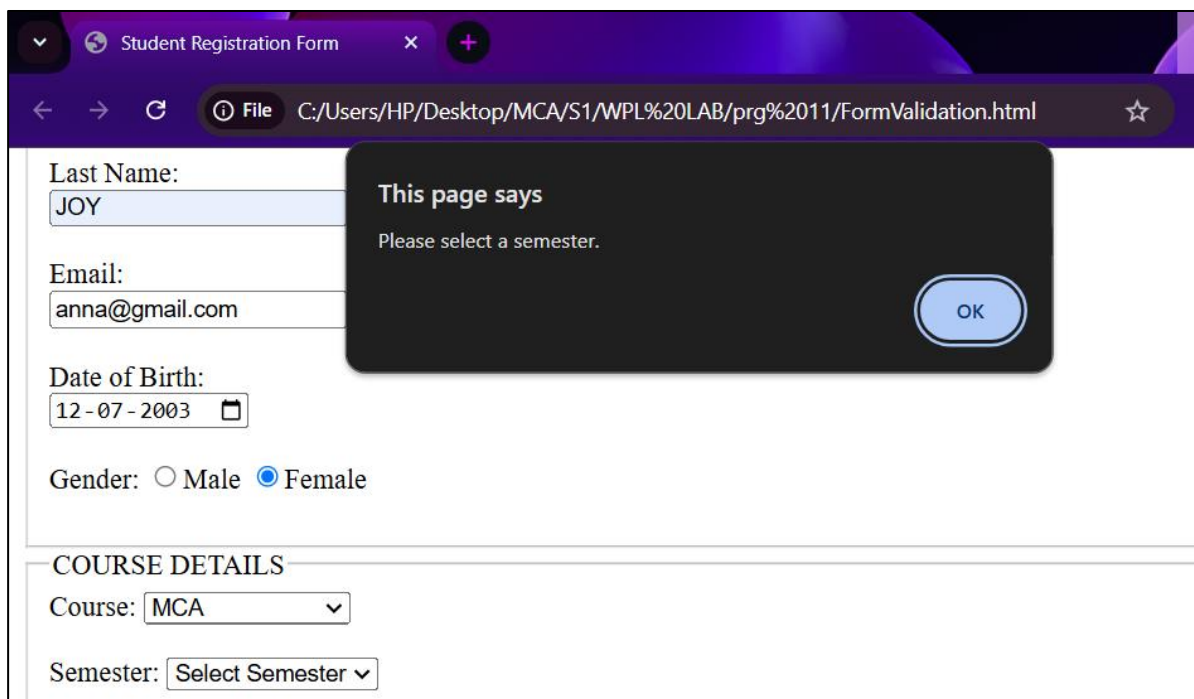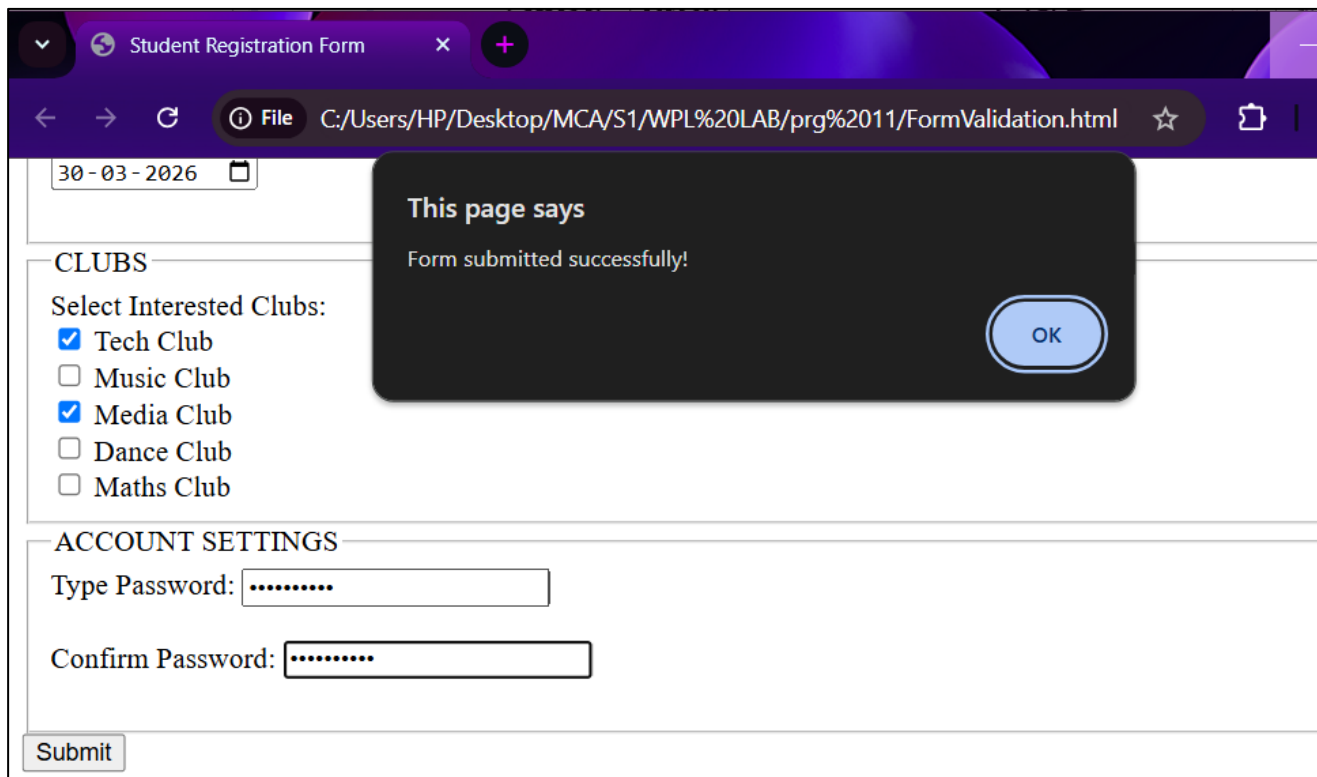
```
    </form>
</body>
</html>
```
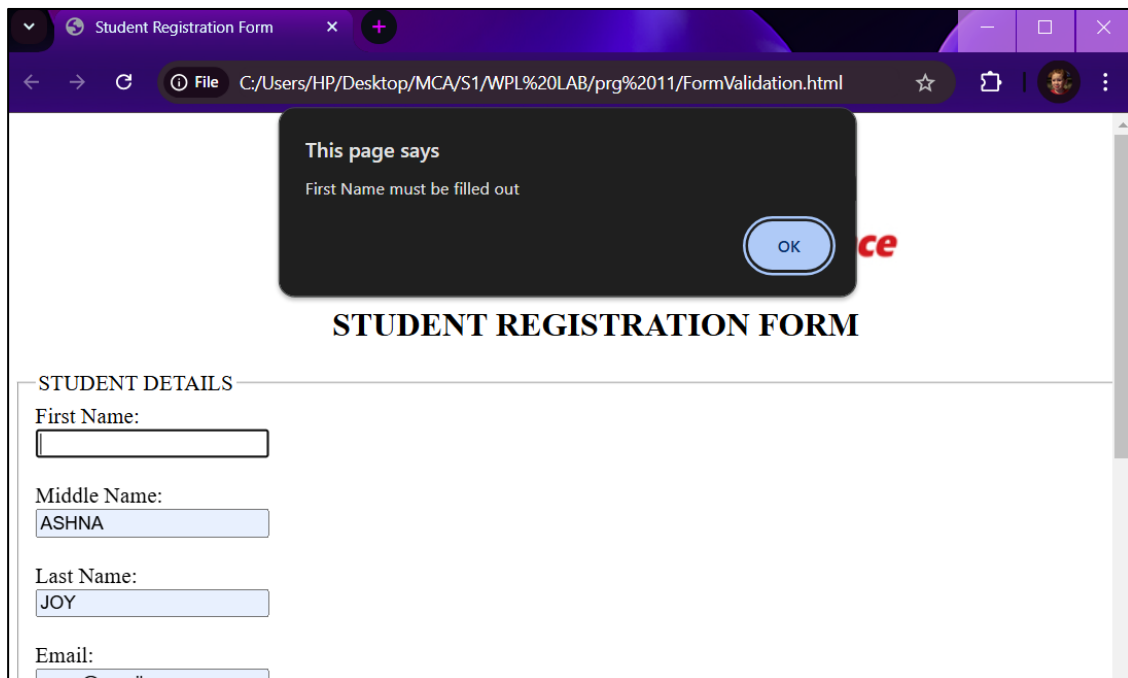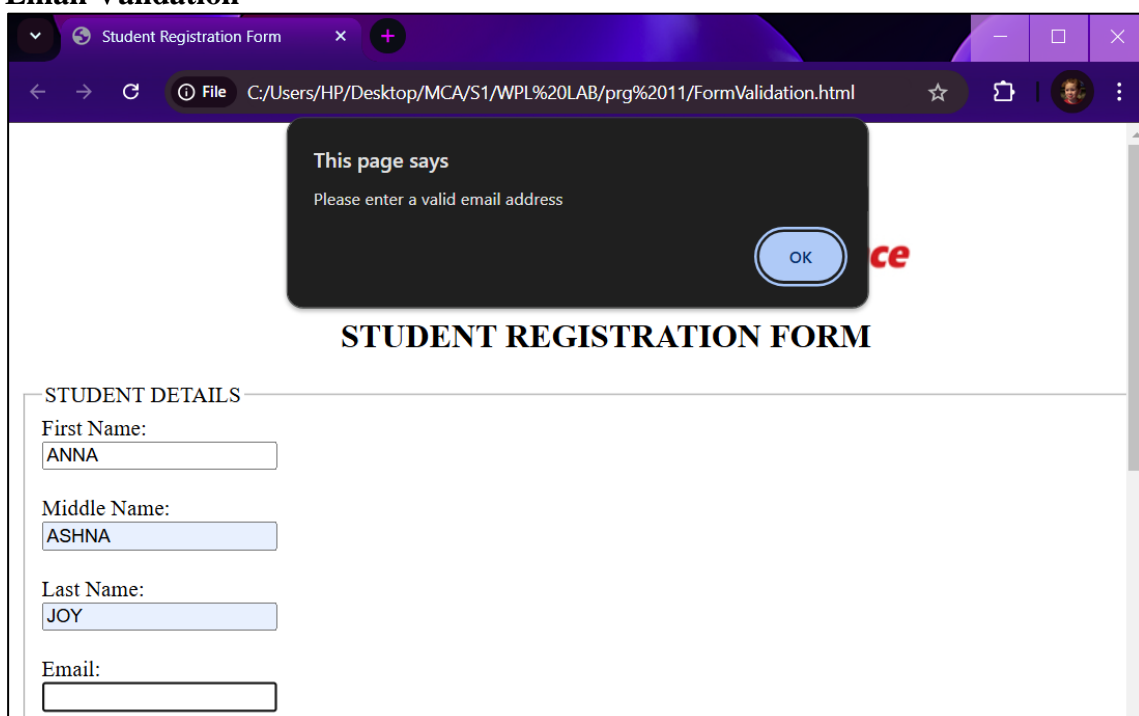
OUTPUT

- **First Name Validation**

- **Email Validation**

- **Password Strength Validation**

- **Password Match Validation**

- **Course Selection Validation**

- **Semester Selection Validation**

- **Form Submission**

Program #12

Design and develop a complete Online exam using Html, CSS and JavaScript. Minimum 4-5 questions should be there in the exam.

Program:
exam.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Marvel Online Exam</title>
</head>
<body>
    <h1>Marvel Online Exam</h1>
    <form id="examForm">

        <!-- Question 1 -->
        <p>1. Who is the ruler of the Dark Dimension?</p>
        <input type="radio" name="q1" value="a"> a) Doctor Strange <br>
        <input type="radio" name="q1" value="b"> b) Dormammu <br>
        <input type="radio" name="q1" value="c"> c) Loki <br>
        <input type="radio" name="q1" value="d"> d) Thanos <br>

        <!-- Question 2 -->
        <p>2. Who created The Infinity Stones?</p>
        <input type="radio" name="q2" value="a"> a) Odin <br>
        <input type="radio" name="q2" value="b"> b) The Celestials <br>
        <input type="radio" name="q2" value="c"> c) Thanos <br>
        <input type="radio" name="q2" value="d"> d) Eternals <br>

        <!-- Question 3 -->
        <p>3. What is the name of the ancient super-computer created by Tony Stark?</p>
        <input type="radio" name="q3" value="a"> a) Ultron <br>
        <input type="radio" name="q3" value="b"> b) Jarvis <br>
        <input type="radio" name="q3" value="c"> c) Friday <br>
        <input type="radio" name="q3" value="d"> d) Vision <br>

        <!-- Question 4 -->
        <p>4. Wanda Maximoff, also known as...</p>
        <input type="radio" name="q4" value="a"> a) Scarlet Witch <br>
        <input type="radio" name="q4" value="b"> b) Black Widow <br>
        <input type="radio" name="q4" value="c"> c) WandaVision <br>
```

```
        <input type="radio" name="q4" value="d"> d) The Witch of Wundagore <br>

        <!-- Question 5 -->
        <p>5. Who all are the Original 6 Avengers from the given list? (Multiple choice)</p>
        <input type="checkbox" name="q5" value="a"> a) Spider-Man <br>
        <input type="checkbox" name="q5" value="b"> b) Hawkeye <br>
        <input type="checkbox" name="q5" value="c"> c) Black Panther <br>
        <input type="checkbox" name="q5" value="d"> d) Black Widow <br>

        <button type="button" onclick="submitExam()">Submit Exam</button>
    </form>

    <div id="result"></div>
    <script src="exam.js"></script>
</body>
</html>
```

exam.js
```
function submitExam() {
    var score = 0;

    // Check if the answers are correct for each question
    if (document.querySelector('input[name="q1"]:checked')?.value === "b") {
        score++;
    }
    if (document.querySelector('input[name="q2"]:checked')?.value === "b") {
        score++;
    }
    if (document.querySelector('input[name="q3"]:checked')?.value === "a") {
        score++;
    }
    if (document.querySelector('input[name="q4"]:checked')?.value === "a") {
        score++;
    }

    // Check for multiple correct answers for Question 5
    var q5Answers = document.querySelectorAll('input[name="q5"]:checked');
    if (q5Answers.length === 2 &&
        Array.from(q5Answers).every(input => input.value === "b" || input.value === "d")) {
        score++;
    }

    // Display the result
    document.getElementById('result').textContent = "You scored " + score + " out of 5.";
```
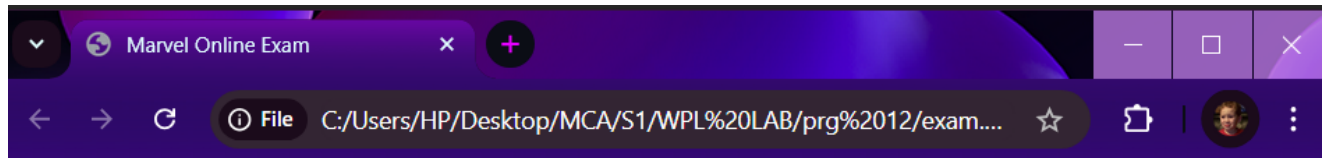
}

OUTPUT

- **Q&A with final score after submission of selected answers.**

Marvel Online Exam

1. Who is the ruler of the Dark Dimension?

- ○ a) Doctor Strange
- ◉ b) Dormammu
- ○ c) Loki
- ○ d) Thanos

2. Who created The Infinity Stones?

- ○ a) Odin
- ◉ b) The Celestials
- ○ c) Thanos
- ○ d) Eternals

3. What is the name of the ancient super-computer created by Tony Stark?

- ◉ a) Ultron
- ○ b) Jarvis
- ○ c) Friday
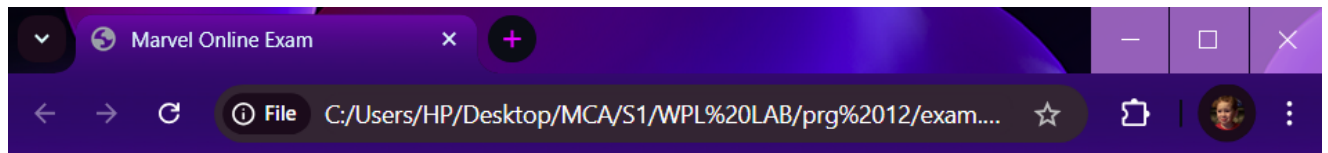- ○ d) Vision

4. Wanda Maximoff, also known as...

- ◉ a) Scarlet Witch
- ○ b) Black Widow
- ○ c) WandaVision
- ○ d) The Witch of Wundagore

5. Who all are the Original 6 Avengers from the given list? (Multiple choice)

- ☐ a) Spider-Man
- ☑ b) Hawkeye
- ☐ c) Black Panther
- ☑ d) Black Widow

Submit Exam

You scored 5 out of 5.

Marvel Online Exam

1. Who is the ruler of the Dark Dimension?

- ⦿ a) Doctor Strange
- ○ b) Dormammu
- ○ c) Loki
- ○ d) Thanos

2. Who created The Infinity Stones?

- ○ a) Odin
- ⦿ b) The Celestials
- ○ c) Thanos
- ○ d) Eternals

3. What is the name of the ancient super-computer created by Tony Stark?

- ○ a) Ultron
- ⦿ b) Jarvis
- ○ c) Friday
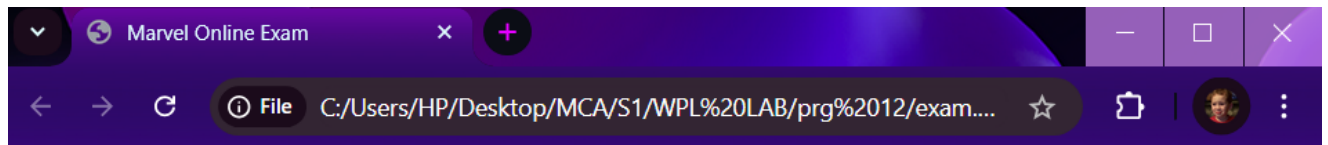- ○ d) Vision

4. Wanda Maximoff, also known as...

- ○ a) Scarlet Witch
- ○ b) Black Widow
- ⦿ c) WandaVision
- ○ d) The Witch of Wundagore

5. Who all are the Original 6 Avengers from the given list? (Multiple choice)

- ☐ a) Spider-Man
- ☑ b) Hawkeye
- ☑ c) Black Panther
- ☐ d) Black Widow

Submit Exam

You scored 1 out of 5.

Lab Cycle 3

CO4:Do Client-side and Server-side scripting.

Program # 13

Build a PHP code to store name of students in an array and display it using print_r function. Sort and display the same using asort & arsort functions.

Program:
prg13.php

```php
<?php
    $students = array("Anna", "Christi", "Hanna", "Vishnu", "Sandriya");  //Array
    echo "Original Array:";
    echo "<br>";
    print_r($students);     //To print array array using print_r
    echo "<br>";
    echo "<br>";
    asort($students);       //Sort the array in ascending order using asort()
    echo "Array sorted in ascending order usong asort:";
    echo "<br>";
    print_r($students);
    echo "<br>";
    echo "<br>";
    arsort($students);      //Sort the array in descending order using arsort()
    echo "Array sorted in descending order using arsort:";
    echo "<br>";
    print_r($students);
?>
```

OUTPUT

Original Array:
Array ([0] => Anna [1] => Christi [2] => Hanna [3] => Vishnu [4] => Sandriya)

Array sorted in ascending order usong asort:
Array ([0] => Anna [1] => Christi [2] => Hanna [4] => Sandriya [3] => Vishnu)

Array sorted in descending order using arsort:
Array ([3] => Vishnu [4] => Sandriya [2] => Hanna [1] => Christi [0] => Anna)

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Program # 14

Build a PHP code tostore name of Indian Cricket players in an array and display the same in HTML table.

Program:
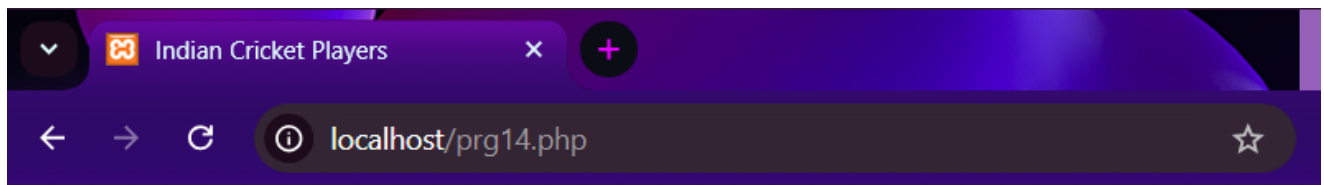**prg14.php**

```php
<?php
    $players = array("Virat Kohli", "Rohit Sharma", "KL Rahul", "Shubman Gill", "Hardik
Pandya", "Ravindra Jadeja");        //Array
?>

<!DOCTYPE html>
<head>
   <title>Indian Cricket Players</title>
</head>
<body>
   <h2 style="text-align: center;">List of Indian Cricket Players</h2>
   <table border="1">
     <tr>
       <th>No.s</th>
       <th>Player Name</th>
     </tr>

     <?php
     for ($i = 0; $i < count($players); $i++) {     //looping
       echo "<tr>";
       echo "<td>" . ($i + 1) . "</td>";
       echo "<td>" . $players[$i] . "</td>";
       echo "</tr>";
     }
     ?>

   </table>
</body>
</html>
```

OUTPUT

List of Indian Cricket Players

No.s	Player Name
1	Virat Kohli
2	Rohit Sharma
3	KL Rahul
4	Shubman Gill
5	Hardik Pandya
6	Ravindra Jadeja

Program # 15

Design a registration form in HTML, and do necessary server side validations using PHP.

Program:
prg15.php

```php
<html>
<head>
  <title> Registration Form</title>
</head>
<body>
<style>
  .error {
     color: red;
  }
</style>
<?php
$nameErr = $emailErr = $passwordErr = $phoneErr = $dobErr = $genderErr = "";
$name = $email = $password = $phone = $dob = $gender = "";

if ($_SERVER["REQUEST_METHOD"] == "POST") {

   if (empty($_POST["name"])) {
     $nameErr = "Name is required";
   } else {
     $name = htmlspecialchars($_POST["name"]);
   }

   if (empty($_POST["email"])) {
     $emailErr = "Email is required";
   } elseif (!filter_var($_POST["email"], FILTER_VALIDATE_EMAIL)) {
     $emailErr = "Invalid email format";
   } else {
     $email = htmlspecialchars($_POST["email"]);
   }

   if (empty($_POST["password"])) {
     $passwordErr = "Password is required";
   } else {
     if (strlen($_POST["password"]) < 6) {
        $passwordErr = "Password must be at least 6 characters";
     } else {
        $password = htmlspecialchars($_POST["password"]);
     }
   }

   if (empty($_POST["phone"])) {
     $phoneErr = "Phone number is required";
```

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```php
    } elseif (!preg_match("/^[0-9]{10}$/", $_POST["phone"])) {
      $phoneErr = "Invalid phone number (must be 10 digits)";
    } else {
      $phone = htmlspecialchars($_POST["phone"]);
    }

    if (empty($_POST["dob"])) {
      $dobErr = "Date of Birth is required";
    } else {
      $dob = htmlspecialchars($_POST["dob"]);
    }

    if (empty($_POST["gender"])) {
      $genderErr = "Gender is required";
    } else {
      $gender = htmlspecialchars($_POST["gender"]);
    }

    if (empty($nameErr) && empty($emailErr) && empty($passwordErr) &&
  empty($phoneErr) && empty($dobErr) && empty($genderErr)) {
      echo "<p style='color: green; text-align: center;'>Registration successful!</p>";
    }
}
?>
<table align=center>
<form method="post" action="">
  <tr>
    <td><label>Name :</label></td>
    <td><input type="text" name="name" value="<?php echo $name; ?>"></td>
    <td><span class="error"><?php echo $nameErr; ?></span></td>
  </tr>
  <tr>
    <td><label>Email :</label></td>
    <td><input type="email" name="email" value="<?php echo $email; ?>"></td>
    <td><span class="error"><?php echo $emailErr; ?></span></td>
  </tr>
  <tr>
    <td><label>Password :</label></td>
    <td><input type="password" name="password"></td>
    <td><span class="error"><?php echo $passwordErr; ?></span></td>
  </tr>
  <tr>
    <td><label>Phone :</label></td>
    <td><input type="text" name="phone" value="<?php echo $phone; ?>"></td>
    <td><span class="error"><?php echo $phoneErr; ?></span></td>
  </tr>
  <tr>
    <td><label>Date of Birth :</label></td>
    <td><input type="date" name="dob" value="<?php echo $dob; ?>"></td>
```

```
            <td><span class="error"><?php echo $dobErr; ?></span></td>
        </tr>
        <tr>
          <td><label>Gender :</label></td>
          <td>
              <input type="radio" name="gender" value="Male" <?php if ($gender == "Male") echo
"checked"; ?>> Male
              <input type="radio" name="gender" value="Female" <?php if ($gender == "Female")
echo "checked"; ?>> Female
          </td>
          <td><span class="error"><?php echo $genderErr; ?></span></td>
        </tr>
        <tr>
          <td colspan="2" align="center"><input type="submit" value="Register"></td>
        </tr>
      </form>
    </table>
  </body>
</html>
```

OUTPUT

- **validation**

Name :   [   ]   Name is required

Email :   [testtt@gmail.com]

Password :   [   ]   Password is required

Phone :   [1234567890]

Date of Birth : [12 - 07 - 2003 📅]

Gender :   ○ Male ● Female

[Register]

Name :   [Anna Ashna Joy]

Email :   [testtt@gmail.com]

Password :   [   ]

Phone :   [1234567890]

Date of Birth : [12 - 07 - 2003 📅]

Gender :   ○ Male ○ Female   Gender is required

[Register]

Program # 16

Develop a user friendly electricity bill calculator using PHP, based on the given tariff, collecting consumer data through an input form.

Tariff:
Rate of electricity for 1-100 units: Rs.5/unit
Rate of electricity from 101 units to 200 units: Rs. 7.5/unit
Rate of electricity from 201 units: Rs.10/unit.

Program:
prg16.php

```php
<?php
$units_consumed = 0;
$bill_amount = 0;

if ($_SERVER["REQUEST_METHOD"] == "POST") {

    $units = $_POST['units'];

        if ($units <= 100) {
            $bill_amount = $units * 5;
        } elseif ($units <= 200) {
            $bill_amount = (100 * 5) + (($units - 100) * 7.5);
        } else {
            $bill_amount = (100 * 5) + (100 * 7.5) + (($units - 200) * 10);
        }
}
?>

<!DOCTYPE html>
<html lang="en">
<head>
    <title>Electricity Bill Calculator</title>
</head>
<body>

    <h2>Electricity Bill Calculator</h2>
    <form action="electricity.php" method="post">
        <label for="units_consumed">Units Consumed (kWh):</label>
        <input type="number" id="units" name="units" value="<?php echo
htmlspecialchars($units_consumed); ?>" required min="1">
        <br><br>

        <button type="submit">Calculate Bill</button>
    </form>
```
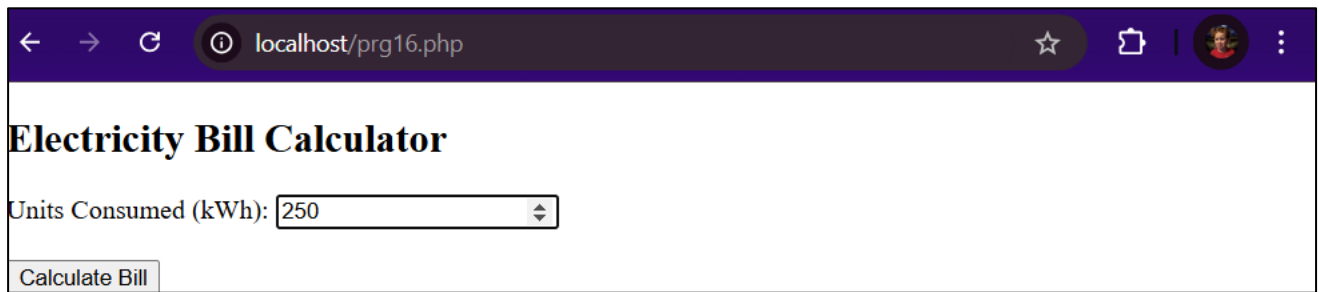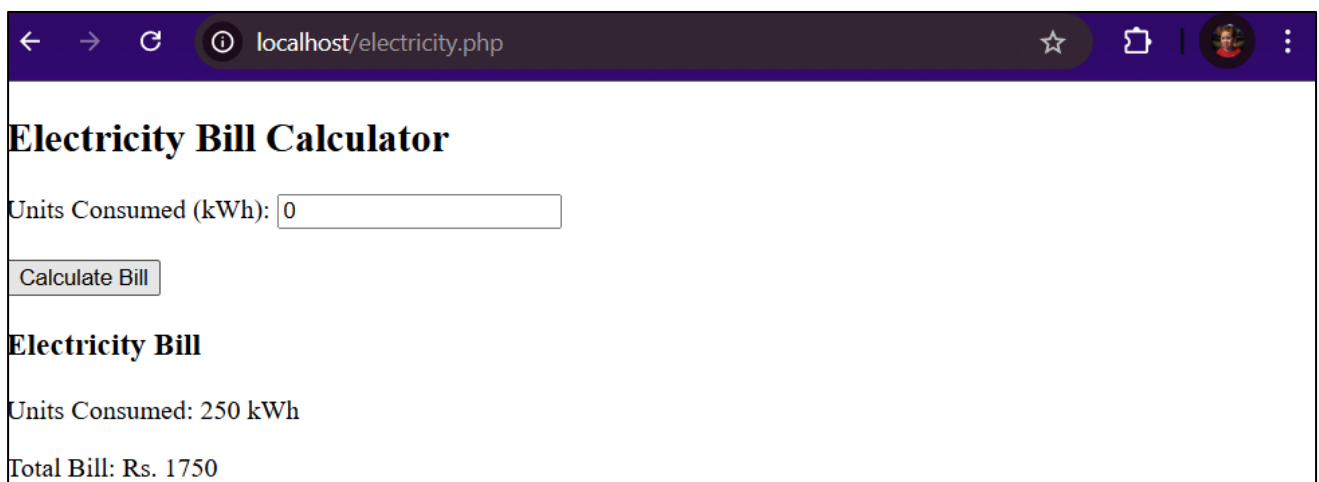
```php
<?php
if ($bill_amount > 0) {
    echo "<h3>Electricity Bill </h3>";
    echo "<p>Units Consumed: $units kWh</p>";
    echo "<p>Total Bill: Rs. $bill_amount</p>";
}
?>

</body>
</html>
```
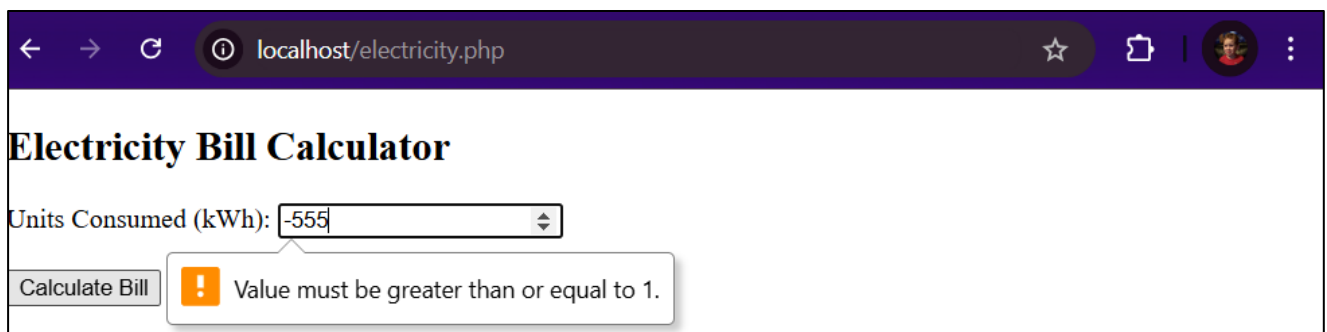
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OUTPUT

- **Validation**

Lab Cycle 4

CO3:Design front-end web page and connect to the back-end databases.

Program # 17

Develop a PHP program to connect to a database and retrieve data from a table and show the details in a neat format.

Program:
prg17.php

```php
<?php

// Database connection settings
$servername = "localhost";
$username = "root";
$password = "";
$database = "mca_mits_13";

//Creating connection
$conn = new mysqli($servername, $username, $password, $database);

//Connection check
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}

//SQL query
$sql = "SELECT `Reg.No`, `Name`, `E-mail`, `Age`, `Gender` FROM student";
$result = $conn->query($sql);
?>

<!--Table-->
<!DOCTYPE html>
<html>
<head>
    <title>WPL PRG 17</title>
</head>
<body>
    <h2>Student Details</h2>
    <table>
<table border="1">
    <tr>
```

```
        <th>Reg.No</th>
        <th>Name</th>
        <th>E-mail</th>
        <th>Age</th>
        <th>Gender</th>
    </tr>

    <?php
```

//Fetch and display data in table rows
```
    if ($result->num_rows > 0) {
        while($row = $result->fetch_assoc()) {
          echo "<tr>
                <td>" . $row["Reg.No"] . "</td>
                <td>" . $row["Name"] . "</td>
                <td>" . $row["E-mail"] . "</td>
                <td>" . $row["Age"] . "</td>
                <td>" . $row["Gender"] . "</td>
              </tr>";
        }
    }
else {
        echo "<tr><td colspan='5'>No records found</td></tr>";
    }

    // Close the connection
    $conn->close();
    ?>
  </table>
</body>
</html>?>
```

OUTPUT

- **My database table 'student'**

+ Options

Reg.No	Name	E-mail	Age	Gender
24mca55	Anna Ashna Joy	anna@gmail.com	21	F
24mca30	Hanna	hanna@gmail.com	21	F
24mca40	Nirmal	nirmal@gmail.com	21	M
24mca20	Sandriya	sandriya@gmail.com	22	F
24mca59	Vishnu	vishnu@gmail.com	22	M

- **Retrieved data from a table 'student' and shown the details on the webpage.**

← → C ⓘ localhost/prg17.php

Student Details

Reg.No	Name	E-mail	Age	Gender
24mca55	Anna Ashna Joy	anna@gmail.com	21	F
24mca30	Hanna	hanna@gmail.com	21	F
24mca40	Nirmal	nirmal@gmail.com	21	M
24mca20	Sandriya	sandriya@gmail.com	22	F
24mca59	Vishnu	vishnu@gmail.com	22	M

CO5: Develop Web Applications.

Program # 18

Develop an application in PHP and MySQL, to accept book details viz. Book id, title, authors, edition and publisher from an HTML form in a web page and save the records in a database and to search for a book using the author name and display the search results.

Program:
prg18.php

```php
<?php
// Database connection settings
$servername = "localhost";
$username = "root";
$password = "";
$database = "mca_mits_13";

// Create connection
$conn = new mysqli($servername, $username, $password, $database);

// Check connection
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}

// Initialize variables
$message = "";

// Handle form submission to add book details
if ($_SERVER["REQUEST_METHOD"] == "POST" && isset($_POST['add_book'])) {
    $book_id = $_POST['book_id'];
    $title = $_POST['title'];
    $authors = $_POST['authors'];
    $edition = $_POST['edition'];
    $publisher = $_POST['publisher'];

    $sql = "INSERT INTO bookdetails (book_id, title, authors, edition, publisher)
        VALUES ('$book_id', '$title', '$authors', '$edition', '$publisher')";

    if ($conn->query($sql) === TRUE) {
        $message = "Book details added successfully!";
    } else {
        $message = "Error: " . $sql . "<br>" . $conn->error;
    }
}
```

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```php
// Handle search query
$search_results = [];
if ($_SERVER["REQUEST_METHOD"] == "GET" && isset($_GET['search_book'])) {
    $author_name = $_GET['author_name'];
    $sql = "SELECT * FROM bookdetails WHERE authors LIKE '%$author_name%'";
    $result = $conn->query($sql);

    if ($result->num_rows > 0) {
        while ($row = $result->fetch_assoc()) {
            $search_results[] = $row;
        }
    } else {
        $message = "No books found for author: $author_name";
    }
}
?>
```

```html
<!DOCTYPE html>
<html>
<head>
    <title>WPL prg 18</title>
</head>
<body>
    <h2>Book Details</h2>

    <!-- Display connection status -->
    <?php if ($message): ?>
        <p class="message"><?php echo $message; ?></p>
    <?php endif; ?>

    <!-- Form to Add Book Details -->
    <form method="POST" action="">
        <h3>Add Book Details</h3>

        <label>Book ID:</label>
        <input type="text" name="book_id" required>

        <label>Title:</label>
        <input type="text" name="title" required>

        <label>Authors:</label>
        <input type="text" name="authors" required>

        <label>Edition:</label>
```

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```
      <input type="text" name="edition">

      <label>Publisher:</label>
      <input type="text" name="publisher">

      <input type="submit" name="add_book" value="Add Book">
   </form>

   <!-- Form to Search Books -->
   <form method="GET" action="">
      <h3>Search Book by Author</h3>
      <label>Author Name:</label>
      <input type="text" name="author_name" placeholder="Enter author name" required>
      <input type="submit" name="search_book" value="Search Book">
   </form>

   <!-- Display Search Results -->
   <?php if (!empty($search_results)): ?>
      <h3>Search Results</h3>
      <table>
         <table border="1">
         <tr>
            <th>Book ID</th>
            <th>Title</th>
            <th>Authors</th>
            <th>Edition</th>
            <th>Publisher</th>
         </tr>
         <?php foreach ($search_results as $book): ?>
            <tr>
               <td><?php echo $book['book_id']; ?></td>
               <td><?php echo $book['title']; ?></td>
               <td><?php echo $book['authors']; ?></td>
               <td><?php echo $book['edition']; ?></td>
               <td><?php echo $book['publisher']; ?></td>
            </tr>
         <?php endforeach; ?>
      </table>
   <?php endif; ?>
</body>
</html>

<?php
// Close the connection
$conn->close();
```

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?>

OUTPUT

- **Entering book details and displayed 'Book details added successfully!' message.**

- **Database table 'bookdetails' after data entry.**

book_id	title	authors	edition	publisher
1	test_title	test_author	test_edition	test_publisher
2	Pride and Prejudice	Jane Austen	1	T. Egerton, Whitehall
3	The Alchemist	Paulo Coelho	25th Anniversary Edition	HarperOne

- **Search result**

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