

**Ex.No:1**  
**Date:19/7/24**

## **Create a web page with the following using HTML**

### **Aim:**

To create a web page with the following using HTML

- a. To embed a map in a web page.
- b. To fix the hot spots in that map.
- c. Show all the related information when the hot spots are clicked.

### **Algorithm:**

1. Start the program.
2. Get the india map image and link it to the package.
3. Fix the hotspots in that image.
4. Map the reference of the hotspots in the image.
5. Mention the derived link.
6. Click the link to get the desired image.
7. Stop the program.

### **Implementation:**

#### **Main.html**

```
<!DOCTYPE html>
<html>
<body>
<h1>The map and area elements</h1>
<p>Click on the Hotspots to go to a new page and read more about the Places:</p>

<map name="workmap">
<area shape="rect" coords="83,41,57,63" alt="delhi" href="delhi.html">
  <area shape="rect" coords="149,129,124,83" alt="calcutta" href="calcutta.html">
  <area shape="rect" coords="89,184,56,226" alt="tamilnadu" href="tamilnadu.html">
</map>
</body>
</html>
```

#### **Tamiladu.html**

```
<html>
<body bgcolor="SKYBLUE">
<font face="Arial" size="4" color="RED">
<center><b>
  <h2>This is Tamil Nadu, Capital of Tamil Nadu is </h2>
  <h1>Chennai</h1>
</b></center>
</font>
</body>
</head>
<center>
  

  <p>Tamil Nadu Map</p>
</center>
<p>Tamil Nadu, a leader in education and economic development among Indian states, boasts
```

impressive literacy rates.

</p>

<style>

```
table,th,td{
    border : 1px solid black;
    border-collapse: collapse;
}
```

</style>

<body>

<center>

<table style="width:50%">

<tr>

<th>Gender</th>

<th>Population</th>

<th>Literacy rate</th>

</tr>

<tr>

<td>Male</td>

<td>20,027,412</td>

<td>89.71</td>

</tr>

<tr>

<td>Female</td>

<td>15,048,412</td>

<td>78.86</td>

</tr>

</table>

</center>

</body>

</html>

**Kerala.html**

<html>

<body bgcolor="SKYBLUE">

<font face="Arial" size="4" color="RED">

<center><b>

<h2>This is Kerala, Capital of Kerala is </h2>

<h1>Thiruvananthapuram</h1>

</b></center>

</font>

</body>

</head>

<center>



<p>Kerala Map</p>

</center>

<p>Kerala, often referred to as India's most literate state, boasts an impressive literacy rate. According to the 2011 Census, Kerala's overall literacy rate stands at 94.2%, with males at 96.2% and females at 92.2%.

</p>

```
<style>
  table,th,td{
    border : 1px solid black;
    border-collapse: collapse;
  }
```

```
</style>
```

```
<body>
```

```
  <center>
```

```
    <table style="width:50%">
```

```
      <tr>
```

```
        <th>Gender</th>
```

```
        <th>Population</th>
```

```
        <th>Literacy rate</th>
```

```
      </tr>
```

```
      <tr>
```

```
        <td>Male</td>
```

```
        <td>20,027,412</td>
```

```
        <td>96.71</td>
```

```
      </tr>
```

```
      <tr>
```

```
        <td>Female</td>
```

```
        <td>15,048,412</td>
```

```
        <td>92.86</td>
```

```
      </tr>
```

```
    </table>
```

```
  </center>
```

```
</body>
```

```
</html>
```

### delhi.html

```
<html>
```

```
<body bgcolor="SKYBLUE">
```

```
<font face="Arial" size="4" color="RED">
```

```
<center><b>
```

```
  <h2>This is New Delhi</h2>
```

```
  <h1>New Delhi is the Capital of India</h1>
```

```
</b></center>
```

```
</font>
```

```
</body>
```

```
</head>
```

```
<center>
```

```
  
```

```
  <p>Delhi Map</p>
```

```
</center>
```

```
<p>Delhi, the capital city of India, boasts a remarkable literacy rate, with significant strides made in bridging the gender gap. According to the 2011 Census, Delhi's overall literacy rate stands at 86.34%.
```

```
</p>
```

```
<style>
```

```
  table,th,td{
```

```
    border : 1px solid black;
```

```
border-collapse: collapse;
}
```

```
</style>
```

```
<body>
```

```
  <center>
```

```
    <table style="width:50%">
```

```
      <tr>
```

```
        <th>Gender</th>
```

```
        <th>Population</th>
```

```
        <th>Literacy rate</th>
```

```
      </tr>
```

```
      <tr>
```

```
        <td>Male</td>
```

```
        <td>16,027,412</td>
```

```
        <td>96.11</td>
```

```
      </tr>
```

```
      <tr>
```

```
        <td>Female</td>
```

```
        <td>16,027,412</td>
```

```
        <td>87.12</td>
```

```
      </tr>
```

```
    </table>
```

```
  </center>
```

```
</body>
```

```
</html>
```

```
Bihar.html
```

```
<html>
```

```
<body bgcolor="SKYBLUE">
```

```
<font face="Arial" size="4" color="RED">
```

```
<center><b>
```

```
  <h2>This is Bihar, Capital of Bihar is </h2>
```

```
  <h1>Patna</h1>
```

```
</b></center>
```

```
</font>
```

```
</body>
```

```
</head>
```

```
<center>
```

```
  
```

```
  <p>Bihar Map</p>
```

```
</center>
```

```
<p>Bihar, one of India's most populous states, continues to grapple with significant literacy challenges, particularly among its female population.
```

```
</p>
```

```
<style>
```

```
  table,th,td{
```

```
    border : 1px solid black;
```

```
    border-collapse: collapse;
```

```
  }
```

```
</style>
<body>
  <center>
    <table style="width:50%">
      <tr>
        <th>Gender</th>
        <th>Population</th>
        <th>Literacy rate</th>
      </tr>
      <tr>
        <td>Male</td>
        <td>20,027,412</td>
        <td>71.2</td>
      </tr>
      <tr>
        <td>Female</td>
        <td>15,048,412</td>
        <td>51.5</td>
      </tr>
    </table>
  </center>
</body>
```

</html>  
**Output:**

# The map and area elements

Click on the Hotspots to go to a new page and read more about the Places:



This is Tamil Nadu, Capital of Tamil Nadu is  
**Chennai**



Tamil Nadu Map

Tamil Nadu, a leader in education and economic development among Indian states, boasts impressive literacy rates. According to the 2011 Census, Tamil Nadu's overall literacy rate stands at 80.33%, with males at 86.81% and females at 73.86%. Initiatives like the "Tamil Nadu Government's Free Bicycle Scheme" for school-going girls and the "Kalaraignar Kurnanidhi Memorial Scheme" for disadvantaged students have contributed significantly. Urban areas show higher literacy rates (87.7%) compared to rural areas (76.7%). Tamil Nadu's focus on education has propelled its socio-economic growth.

Gender	Population	Literacy rate
Male	20,027,412	89.71
Female	15,048,412	78.86

This is New Delhi

**New Delhi is the Capital of India**



### Delhi Map

Delhi, the capital city of India, boasts a remarkable literacy rate, with significant strides made in bridging the gender gap. According to the 2011 Census, Delhi's overall literacy rate stands at 86.34%. A notable aspect is the narrowing disparity between male and female literacy rates. Male literacy rates in Delhi stand at 91.03%, while female literacy rates have made substantial progress, reaching 81.03%. This represents a considerable improvement over the past decade, with female literacy rates increasing by over 10%. Despite the progress, a slight gap persists, emphasizing the need for sustained efforts to promote girls' education and empowerment. Nonetheless, Delhi's literacy rates surpass the national average, underscoring the city's commitment to education and its role as a beacon for social development.

Gender	Population	Literacy rate
Male	16,027,412	96.11
Female	16,027,412	87.12

This is Kerala, Capital of Kerala is

Thiruvananthapuram



Kerala Map

Kerala, often referred to as India's most literate state, boasts an impressive literacy rate. According to the 2011 Census, Kerala's overall literacy rate stands at 94.2%, with males at 96.2% and females at 92.2%. This remarkable achievement is attributed to Kerala's long-standing emphasis on education, social welfare, and inclusive policies. Kerala's literacy rates surpass national averages, with minimal gaps between rural (93.1%) and urban (96.2%) areas. The state's pioneering initiatives, such as the "Kerala State Literacy Mission" and "Sarva Shiksha Abhiyan," have ensured universal education.

Gender	Population	Literacy rate
Male	20,027,412	96.71
Female	15,048,412	92.86

This is Bihar, Capital of Bihar is

Patna



Bihar Map

Bihar, one of India's most populous states, continues to grapple with significant literacy challenges, particularly among its female population. According to the 2011 Census, Bihar's overall literacy rate stands at 61.8%, with a notable disparity between male and female literacy rates. Male literacy rates in Bihar are 71.2%, whereas female literacy rates lag behind at 51.5%. This substantial gap underscores the state's struggle to provide equal educational opportunities, especially in rural areas. Despite progress over the past decade, Bihar remains one of the lowest-ranked states in terms of literacy. Initiatives aimed at promoting girls' education and adult literacy programs are crucial to bridging this gap and fostering inclusive development.

Gender	Population	Literacy rate
Male	20,027,412	71.2
Female	15,048,412	51.5

## Result:

Thus the Webpage has been created by using HTML language and verified Successfully

**Ex. No:2**

**Date:22/7/24**

## **Create a Web Page Using HTML with CSS**

### **Aim:**

To write a webpage to create all types of cascading style sheets.

### **Algorithm:**

1. Start the program.
2. Create a web page with framesets consisting two frames.
3. In the first frame include the links.
4. In the second frameset display the webpage of the link.
5. Create an external style sheets.
6. Create an inline and internal style and make a link to the external style sheet.
7. Stop the program.

### **Implementation:**

#### **Main.html**

```
<html>
<head>
<title>Bharath university</title>
<link rel="stylesheet" href="style3.css">
</head>
<body alink="blue" vlink="yellow">
<center><h1 style="font-family: Georgia, serif; background-color: rgba(215, 231, 250, 0.529); text-
shadow: 2px 2px 4px rgba(0, 0, 0, 0.3);"><u><b>
WELCOME TO BHARATH UNIVERSITY</font></b></u></h1> </center>
<br />
<font face="Georgia"size="6"> <ol>
<li><a href="inline.html" style="text-decoration :none;"> KNOW MORE ABOUT US</a><br />
</li>
<li><a href="embedded.html" style="text-decoration :none;"> FEE STRUCTURE</a><br /> </li>
<li><a href="external.html" style="text-decoration :none;">CONTACT INFORMATION</a><br />
</li>
<li><a href="import.html" style="text-decoration :none;">COURSES OFFERED</a><br /> </li>
</ol>
</font>
</body>
</html>
```

#### **Inline.html**

```
<html>
<head>
<title>about us</title>

</head>
<body>

<ol class="decimal">
<h1 style="font-family :Georgia ;background-color:rgba(215, 231, 250, 0.529) ;"><li>
ABOUT US</li></h1>
<h3>
<p style="text-indent :30pt;color:rgba(123, 207, 27, 0.871);font-family :arial;">
```



Sri Lakshmi Ammal Educational Trust was established with a visionary mission to revolutionize higher education in Tamil Nadu. In 1984, under the dynamic leadership of Dr. S. Jagathrakshakan,

Today, BIHER Encompasses a Wide Range of Specialized Institutions, including

- Bharath Medical College and Hospital (BMCH), Chennai
- Sree Balaji College of Nursing, Chennai
- Sree Balaji Medical College and Hospital (SBMCH), Chennai
- Sree Balaji College of Physiotherapy, Chennai
- Sri Lakshmi Narayana Institute of Medical Sciences (SLIMS), Puducherry

BIHER Collectively, these institutions reflect the Trust's unwavering commitment to providing world-class education.

#### Embedded.html

<html>

<head>

<title>fee structure</title>

<style>

table {

width: 100%;

border-collapse: collapse;

margin: 20px 0;

overflow-x: auto;

}

th, td {

border: 1px solid rgb(225, 17, 222);

padding: 10px;

text-align: left;

}

/\* Header Styling \*/

th {

background-color: rgb(225, 17, 222);

color: white;

font-weight: bold;

position: sticky;

top: 0;

z-index: 1;

}

/\* Row Hover Effect \*/

tr:hover {

background-color: rgba(225, 17, 222, 0.1);

}

/\* Striped Rows \*/

tr:nth-child(even) {

background-color: rgba(225, 17, 222, 0.05);

}

```

/* Responsive Table */
@media (max-width: 768px) {
    table {
        display: block;
        overflow-x: auto;
        white-space: nowrap;
    }
    th, td {
        display: inline-block;
        min-width: 120px;
    }
}

/* Border Radius */
table, th, td {
    border-radius: 5px;
}
</style>
</head>
<body>
<ol class="lroman"><h1>
<li>fee structure</li></h1>
<br />
<table style="width:50%">
    <tr>
        <th>serial no</th>
        <th>course </th>
        <th>tuition fee</th>
    </tr>
    <tr>
        <td>1.</td>
        <td>B.Tech-Aerospace</td>
        <td>Rs. 300000 PA</td>
    </tr>
    <tr>
        <td>2.</td>
        <td>B.Tech-Aeronautical</td>
        <td>Rs. 300000 PA</td>
    </tr>
    <tr>
        <td>3.</td>
        <td>B.Tech Automobile</td>
        <td>Rs. 250000 PA</td>
    </tr>
    <tr>
        <td>4.</td>
        <td>B.Tech Bio Medical</td>
        <td>Rs. 250000 PA</td>
    </tr>

</table>
</h3></ol>
</body>
</html>

```

## External.html

```
<head>
  <title>External Style Sheet</title>
  <link rel=Stylesheet href="style2.css" type="text/css" />
</head>
<body>
  <h1>contact information</h1><br />
  <h3>
    <b>Bharath Institute of Higher Education and Research</b>
    #173 Agharam Road Selaiyur,<br>
    Chennai- 600 073 <br>
    Tamil Nadu, India <br>
    Phone: +91 - 44-2229 0742, 2229 0125 <br>
    Fax: +91-44-2229 3886 <br>
    <br>
    <b>For Admission</b>
    Phone: +91-44-2229 0247<br>
    Email: admission@bharathuniv.ac.in<br>
    Phone: + 91-44-2229 9013<br><br>

    <b>Corporate Office</b><br>
    #1, First Main Road Kasturibai Nagar,<br>
    Adyar, Chennai - 600 020<br>
    Tamil Nadu, India<br>
    Phone: 91-44-4211 5251<br>
    Mobile: 98410 64199<br></h3>
  </body>
</html>
```

## Import.html

```
<html>
<head><title>Courses Offered</title>
<link rel= stylesheet href="style2.css" type="text/css">
</head>
<body>
  <h1>Courses Offered</h1>
  <h3><ol>
    <li>Aeronautical Engineering</li>
    <li>Aerospace Engineering</li>
    <li>Automobile Engineering</li>
    <li>Biotechnology with Specialization in Agricultural Biotechnology</li>
    <li>Biotechnology with Specialization in Genetic Engineering</li>
    <li>BioMedical Engineering</li>
  </ol></h3>
</body>
</html>
```

## Style2.css

```
body {
  background-image: url("rr.jpg");
  background-attachment: fixed;
  background-position: center center; /* Centers the image */
  background-repeat: no-repeat; /* Prevents tiling of the image */
}
```

```
background-size: cover; /* Ensures the image covers the entire background */
margin: 0;
font-family: Arial, sans-serif;
}
```

```
h1 {
  text-align: center;
  background: rgb(199, 195, 107);
  font-family: 'Georgia', Times, serif;
  color: aliceblue;
  padding: 20px;
  margin: 20px 0;
  border-radius: 10px;
  box-shadow: 0 4px 8px rgba(0, 0, 0, 0.3);
  transition: background 0.3s, transform 0.3s;
}
```

```
h1:hover {
  background: rgb(179, 169, 90);
  transform: scale(1.05);
}
```

```
h3 {
  text-align: left;
  font-family: Arial, sans-serif;
  color: aliceblue;
  padding: 10px 20px;
  background: rgba(0, 0, 0, 0.5);
  border-radius: 5px;
  margin: 20px 0;
}
```

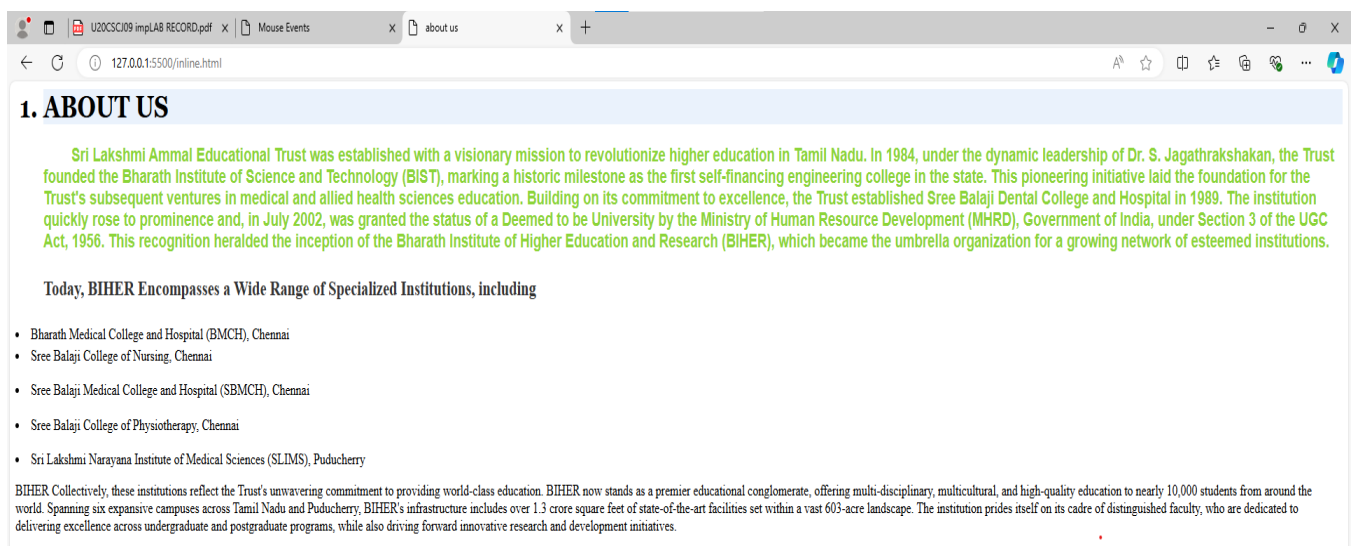
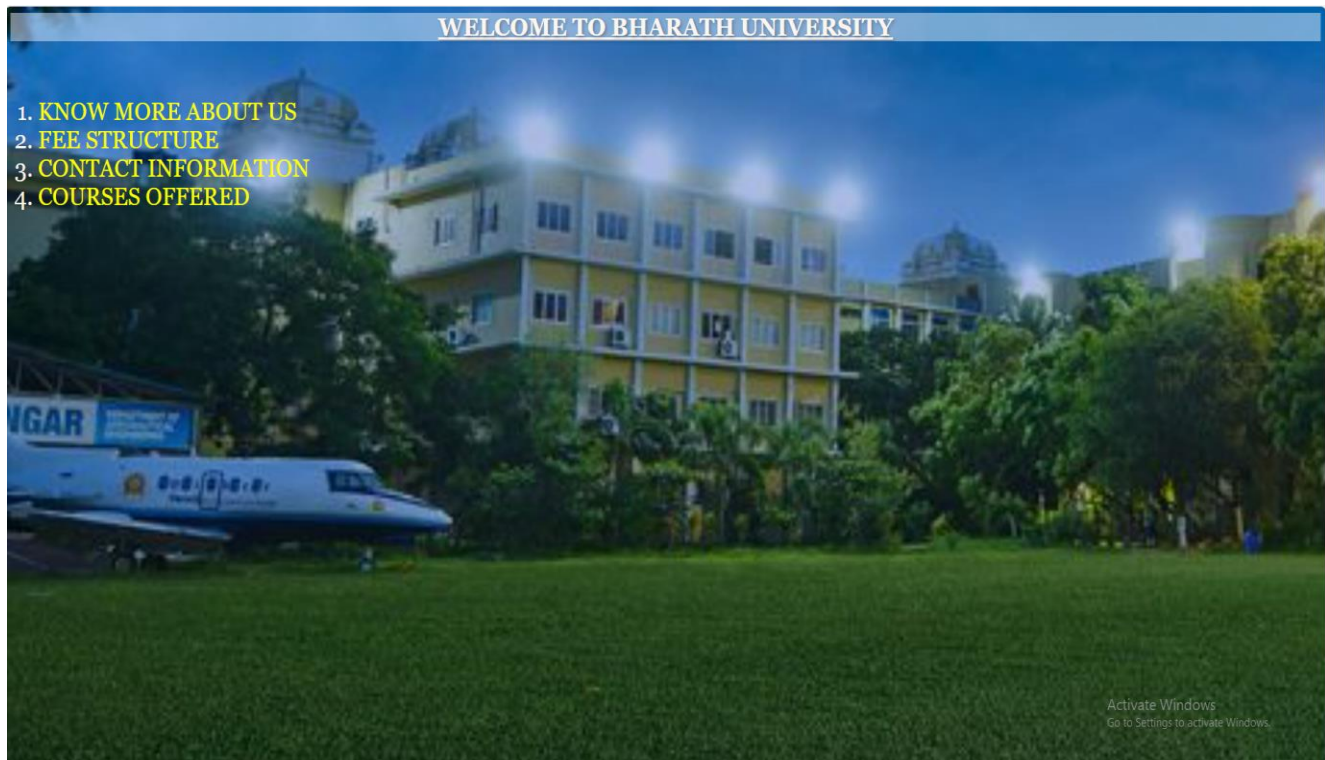
```
ol {
  list-style-type: decimal;
  margin: 0;
  padding: 20px;
  background: rgba(75, 18, 180, 0.8);
  border: 2px solid #ddd;
  border-radius: 10px;
  box-shadow: 0 4px 6px rgba(0, 0, 0, 0.1);
}
```

```
ol li {
  padding: 10px;
  margin-bottom: 10px;
  font-size: 1.1em;
  transition: background-color 0.3s, color 0.3s;
}
ol li:hover {
  background-color: rgba(0, 0, 0, 0.1);
  color: #007BFF;
}
```

## Style3.css

```
body{
    background-image: url("CC.jpg");
    background-repeat:none;
    background-size: cover;
    font-family: 'Times New Roman', Times, serif;
    color: rgb(255, 246, 240);
}
```

## Output:



U20CSC09 implAB RECORD.pdfMouse Eventsfee structure

127.0.0.1:5500/embedded.html

1. fee structure

serial no	course	tuition fee
1.	B.Tech-Aerospace	Rs. 300000 PA
2.	B.Tech-Aeronautical	Rs. 300000 PA
3.	B.Tech Automobile	Rs. 250000 PA
4.	B.Tech Bio Medical	Rs. 250000 PA

Activate Windows  
Go to Settings to activate Windows.

Type here to search

Nifty smicap+0.79%

ENG 11:40 AM  
IN 8/30/2024

U20CSC09 implAB RECORD.pdfMouse EventsExternal Style Sheet

127.0.0.1:5500/external.html

contact information

Bharath Institute of Higher Education and Research #173 Agharam Road Selayur,  
Chennai- 600 073  
Tamil Nadu, India  
Phone: +91 - 44-2229 0742, 2229 0125  
Fax: +91-44-2229 3886

For Admission Phone: +91-44-2229 0247  
Email: admission@bharathuniv.ac.in  
Phone: + 91-44-2229 9013

Corporate Office  
#1, First Main Road Kasturibal Nagar,  
Adyar, Chennai - 600 020  
Tamil Nadu, India  
Phone: 91-44-4211 5251  
Mobile: 98410 64199

Input Switch Notification  
Input language switching  
Typing Left Alt + Shift changes your input language. You can turn this feature off or change your hot key sequence by selecting Customize.  
Activate Windows  
Go to Settings to activate Windows  
CustomizeDismiss

Type here to search

Nifty smicap+0.79%

ENG 11:40 AM  
IN 8/30/2024

## Courses Offered

1. Aeronautical Engineering
2. Aerospace Engineering
3. Automobile Engineering
4. Biotechnology with Specialization in Agricultural Biotechnology
5. Biotechnology with Specialization in Genetic Engineering
6. BioMedical Engineering

**Result:**

Thus the web page is created using all styles of cascading style sheets are executed and verified successfully.

**Ex.No:3**  
**Date:2/8/24**

## **Create DHTML Event Handling Program**

### **Aim:**

To Create Dhtml Event Handling Program for mouseover ,mouseout, onmousedown,click, dblclick and keypress.

### **Algorithm:**

1. Start the Program.
2. Select Elements: Get the div and input elements using getElementById.
3. Attach Event Listeners: Attach mouseover, mouseout, click, dblclick, and keypress events to the respective elements..
4. Handle Events: Change the element's style or content based on the interaction, Display the feedback message dynamically.
5. Save the program as .html and execute the same in the browser.
6. Stop the program.

### **Implementation:**

```
<!DOCTYPE html>
<html>
<head>
<title>Mouse Events</title>
<script>
function myFunction() {
    document.getElementById("demo").innerHTML = "This is the Output of ondblclick Mouse Event";
    document.getElementById("demo").style.color = "red";
    document.getElementById("demo").style.fontWeight = "bold";
}

function keyFunction() {
    document.getElementById("keyDemo").innerHTML = "A key was pressed!";
}

function resizeFunction() {
    document.body.style.backgroundColor = "lightgreen";
}
</script>
</head>
<body onresize="resizeFunction()">
<center>
<h2>Select the Background Color</h2>
<button onclick="document.body.style.backgroundColor='violet'">Violet</button>
<button onclick="document.body.style.backgroundColor='yellow'">Yellow</button>
<button onclick="document.body.style.backgroundColor='skyblue'">Skyblue</button>
<button onclick="document.body.style.backgroundColor='white'">White</button>
```

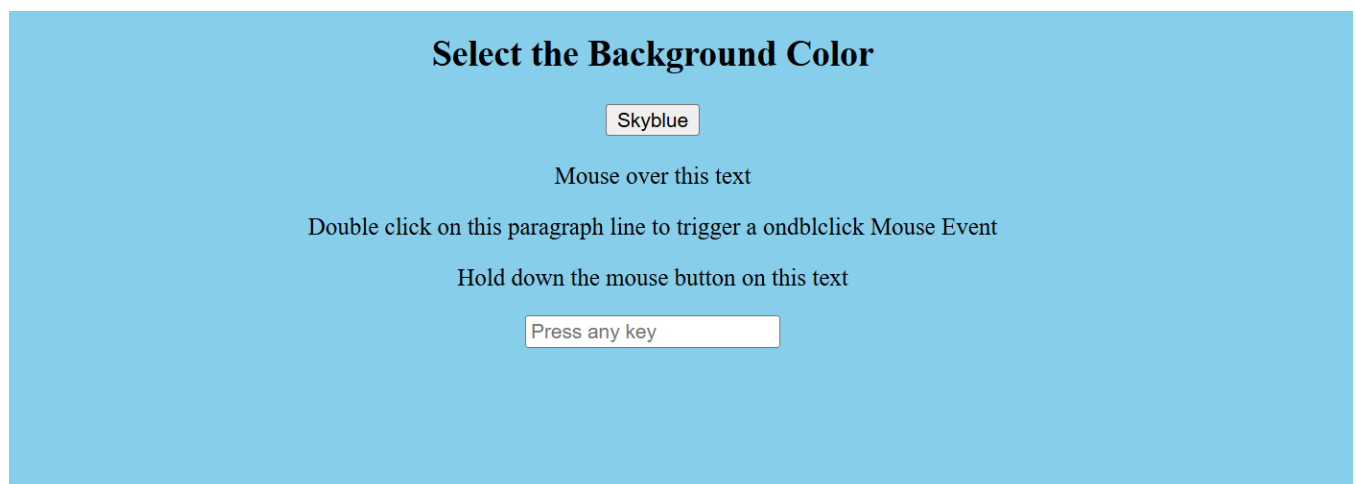


```

<br><br>
<span
  onmouseover="style.color='red';style.fontWeight = 'bold'"
  onmouseout="style.color='black';style.fontWeight = 'normal'">
  Mouse over this text
</span>
<p ondblclick="myFunction()">Double click on this paragraph line to trigger a ondblclick Mouse
Event</p>
<p id="demo"></p>
<p
  onmousedown="this.style.color='blue'; this.style.fontWeight='bold';"
  onmouseup="this.style.color='black'; this.style.fontWeight='normal';">
  Hold down the mouse button on this text
</p>
<p id="keyDemo"></p>
<input type="text" onkeydown="keyFunction()" placeholder="Press any key">
</center>
</body>
</html>

```

### Output:



## Select the Background Color

Skyblue

**Mouse over this text**

Double click on this paragraph line to trigger a ondblclick Mouse Event

Hold down the mouse button on this text

Press any key

## Select the Background Color

Skyblue

Mouse over this text

Double click on this paragraph line to trigger a ondblclick Mouse Event

**This is the Output of ondblclick Mouse Event**

Hold down the mouse button on this text

Press any key

## Select the Background Color

Skyblue

Mouse over this text

Double click on this paragraph line to trigger a ondblclick Mouse Event

**Hold down the mouse button on this text**

Press any key

## Select the Background Color

Skyblue

Mouse over this text

Double click on this paragraph line to trigger a ondblclick Mouse Event

Hold down the mouse button on this text

A key was pressed!

hello

### Result:

Thus the Dhtml Event Handling Program using mouseover, mouseout, click, dblclick and keypress events are executed successfully.

**Ex.No:4**  
**Date:9/8/24**

## **Create a web page with the following using HTML and JavaScript**

**Aim:** Create a web page with the following using HTML and JavaScript

**Algorithm:**

1. Start the Program.
2. Create JavaScript functions (one for each input field whose value is to validate)
3. All those functions are called from another function.
4. It sets the focus to the input field until the user supplies a valid value.
5. When the user does so, they may proceed and can supply value to the next available field.
6. The later JavaScript function created is called on the on submit event of the form
7. Stop the program.

### **4a.User login and Registration**

#### **login.html**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Login Page</title>
  <link rel="stylesheet" href="style.css">
</head>
<body>
  <div class="container">
    <h1>Login</h1>
    <form id="login-form">
      <div class="form-group">
        <label for="username">Username:</label>
        <input type="text" id="username" placeholder="Enter username" required pattern="[a-zA-Z]+">
        <span id="username-error"></span>
      </div>
      <div class="form-group">
        <label for="password">Password:</label>
        <input type="password" id="password" placeholder="Enter password" required minlength="6">
        <span id="password-error"></span>
      </div>
      <button type="submit" class="login-btn" id="login-btn">Login</button>
      <a href="regform.html">
        <button class="register-btn" id="register-btn">Register </button>
      </a>
    </form>
  </div>
  <script src="script.js"></script>
</body>
</html>
```

## regform.html

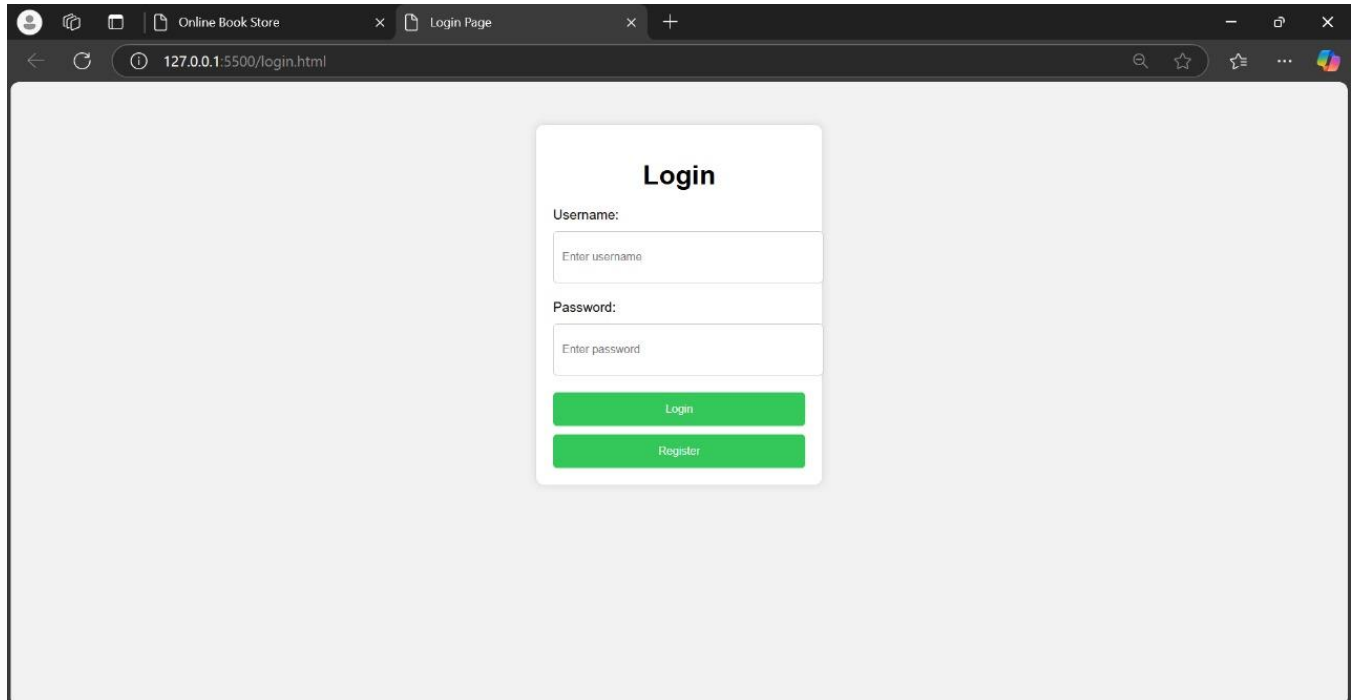
```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Registration Form</title>
  <link rel="stylesheet" href="style1.css">
</head>
<body>
  <div class="container">
    <h1>Registration Form</h1>
    <form id="registration-form">
      <div class="form-group">
        <label for="firstName">First Name:</label>
        <input type="text" id="firstName" placeholder="Enter first name" required pattern="[a-zA-Z]+">
        <span id="firstName-error"></span>
      </div>
      <div class="form-group">
        <label for="lastName">Last Name:</label>
        <input type="text" id="lastName" placeholder="Enter last name" required pattern="[a-zA-Z]+">
        <span id="lastName-error"></span>
      </div>
      <div class="form-group">
        <label for="email">Email:</label>
        <input type="email" id="email" placeholder="Enter email" required pattern="[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,}$">
        <span id="email-error"></span>
      </div>
      <div class="form-group">
        <label for="dob">Date of Birth:</label>
        <input type="date" id="dob" required>
      </div>
      <div class="form-group">
        <label for="mobileNumber">Mobile Number:</label>
        <input type="tel" id="mobileNumber" placeholder="Enter mobile number" required pattern="[0-9]{10}">
        <span id="mobileNumber-error"></span>
      </div>
      <div class="form-group">
        <label for="countryCode">Country Code:</label>
        <select id="countryCode" required>
          <option value="">Select</option>
          <option value="+1">USA (+1)</option>
          <option value="+91">India (+91)</option>
          <option value="+44">UK (+44)</option>
        </select>
      </div>
      <div class="form-group">
        <label for="password">Password:</label>
        <input type="password" id="password" placeholder="Enter password" required minlength="6">
      </div>
    </form>
  </div>
</body>
</html>
```

```

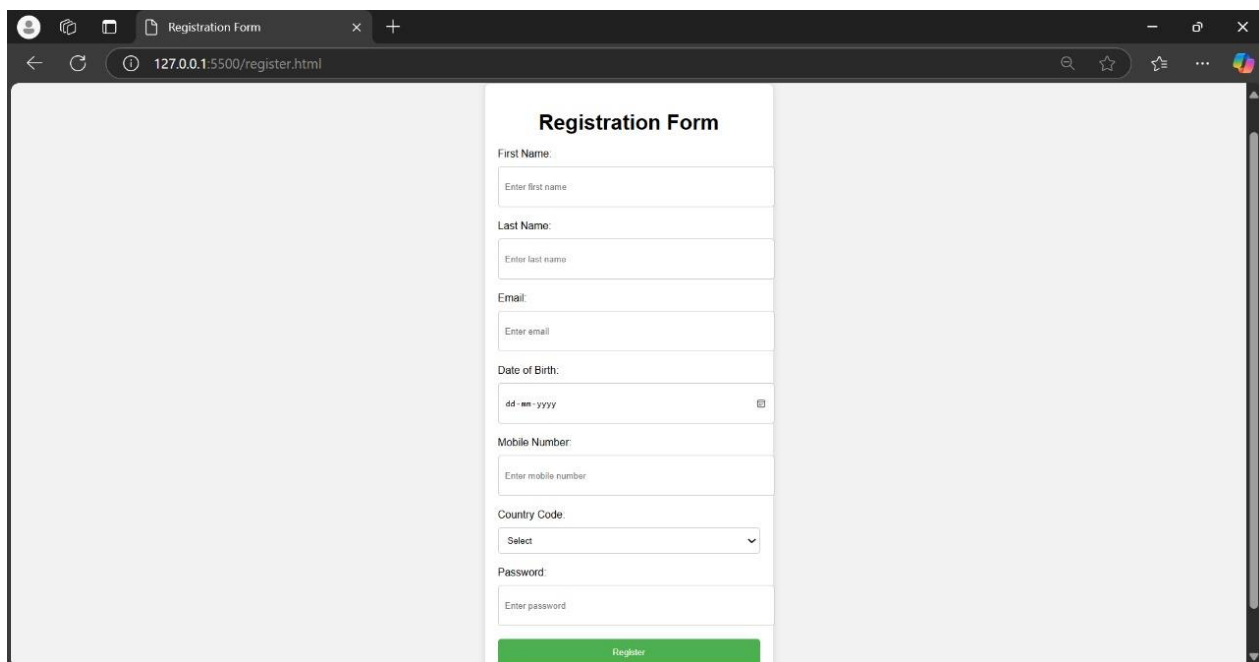
<span id="password-error"></span>
    </div>
    <button type="submit" class="register-btn">Register</button>
  </form>
</div>
<script src="script1.js"></script>
</body>
</html>

```

## Output:



The screenshot shows a web browser window with two tabs: "Online Book Store" and "Login Page". The address bar displays "127.0.0.1:5500/login.html". The main content area features a centered "Login" form. The form has a title "Login" in bold. Below the title, there are two input fields: "Username:" with a placeholder "Enter username" and "Password:" with a placeholder "Enter password". At the bottom of the form, there are two green buttons: "Login" and "Register".



The screenshot shows a web browser window with a tab titled "Registration Form". The address bar displays "127.0.0.1:5500/register.html". The main content area features a centered "Registration Form". The form has a title "Registration Form" in bold. Below the title, there are several input fields: "First Name:" with a placeholder "Enter first name", "Last Name:" with a placeholder "Enter last name", "Email:" with a placeholder "Enter email", "Date of Birth:" with a placeholder "dd-mm-yyyy" and a calendar icon, "Mobile Number:" with a placeholder "Enter mobile number", "Country Code:" with a dropdown menu showing "Select", and "Password:" with a placeholder "Enter password". At the bottom of the form, there is a green button labeled "Register".

**Date:16/8/24**

## **4b. validate the registration and user profile**

### **Main.html**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Online Book Store</title>
  <link rel="stylesheet" href="style2.css">
</head>
<body>
  <header>
    <nav>
      <ul>
        <li><a href="login.html">Login</a></li>
        <li><a href="register.html">User Profile</a></li>
        <li><a href="books.html">Books Catalogue</a></li>
        <li><a href="Shop.html">Shopping Cart</a></li>
        <li><a href="Pay.html">Payment</a></li>
      </ul>
    </nav>
  </header>
  <main>
    <h1>Online Book Store</h1>
    <section class="featured-books">
      <h2>Featured Books</h2>
      <div class="book-container">
        <div class="book">
          
          <h3>The Complete Reference JAVA</h3>
          <p>Herbert Schildt</p>
          <p>$10.99</p>
        </div>
        <div class="book">
          
          <h3>Algorithms to Live By</h3>
          <p>Brian Christian</p>
          <p>$12.99</p>
        </div>
        <div class="book">
          
          <h3>Structure and Interpretation of Computer Programs</h3>
          <p>Robert C. Martin</p>
          <p>$9.99</p>
        </div>
      </div>
    </section>
  </main>
  <script src="script2.js"></script>
</body>
</html>
```

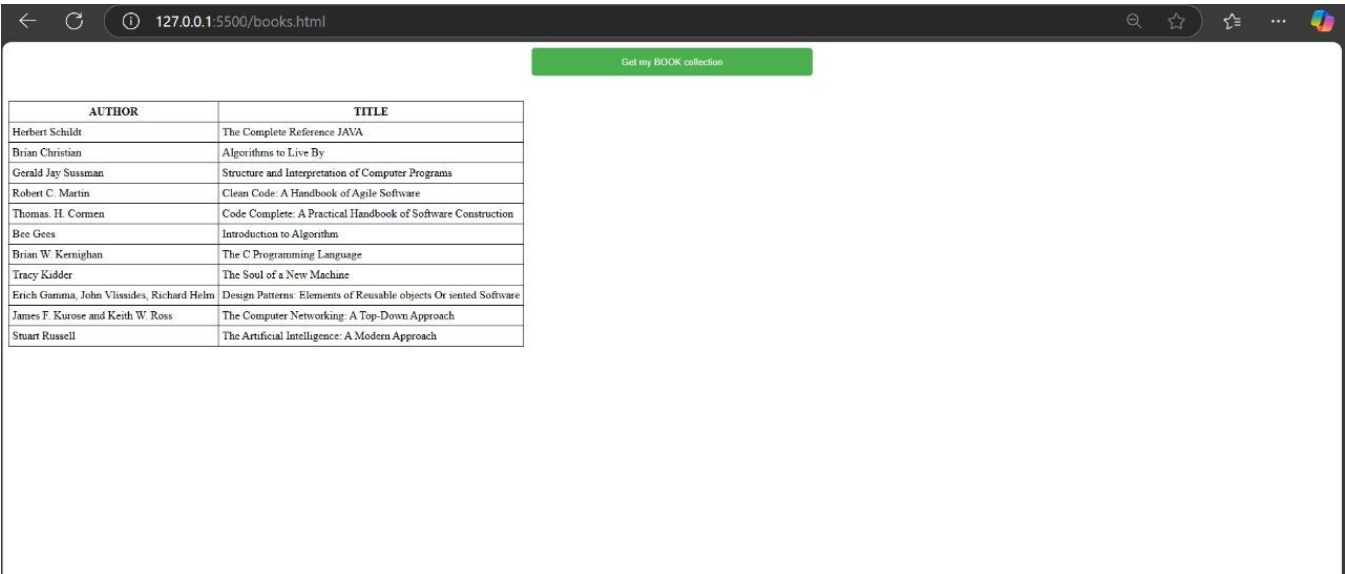
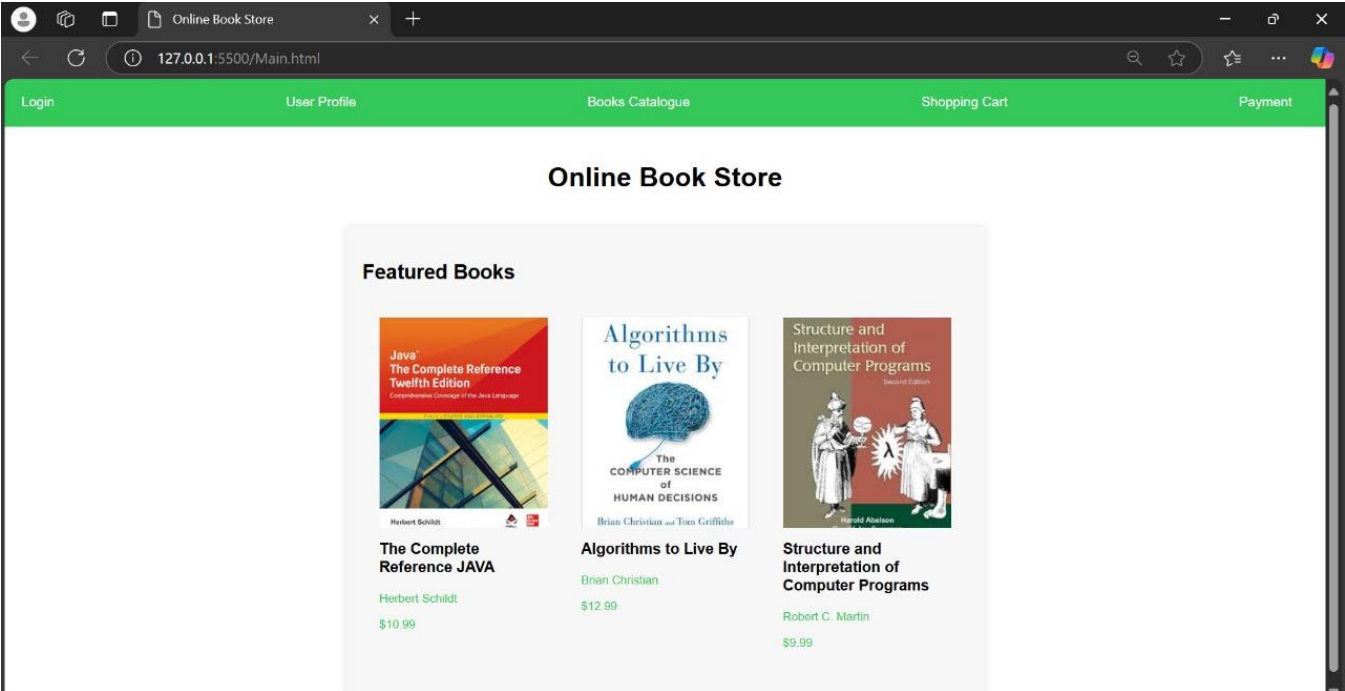
## **Book\_Catalog.xml**

```
<CATALOG>
<CD>
<TITLE>The Complete Reference JAVA</TITLE>
<AUTHOR>Herbert Schildt</AUTHOR>
<PRICE>10.90</PRICE>
</CD>
<CD>
<TITLE>Algorithms to Live By</TITLE>
<AUTHOR>Brian Christian</AUTHOR>
<PRICE>9.90</PRICE>
</CD>
<CD>
<TITLE>Structure and Interpretation of Computer Programs</TITLE>
<AUTHOR>Gerald Jay Sussman</AUTHOR>
<PRICE>9.90</PRICE>
</CD>
<CD>
<TITLE>Clean Code: A Handbook of Agile Software</TITLE>
<AUTHOR>Robert C. Martin</AUTHOR>
<PRICE>10.20</PRICE>
</CD>
<CD>
<TITLE>Code Complete: A Practical Handbook of Software Construction</TITLE>
<AUTHOR>Thomas. H. Cormen</AUTHOR>
<PRICE>9.90</PRICE>
</CD>
<CD>
<TITLE>Introduction to Algorithm</TITLE>
<AUTHOR>Bee Gees</AUTHOR>
<PRICE>10.90</PRICE>
</CD>
<CD>
<TITLE>The C Programming Language</TITLE>
<AUTHOR>Brian W. Kernighan</AUTHOR>
<PRICE>8.10</PRICE>
</CD>
<CD>
<TITLE>The Soul of a New Machine </TITLE>
<AUTHOR>Tracy Kidder</AUTHOR>
<PRICE>8.50</PRICE>
</CD>
<CD>
<TITLE>Design Patterns: Elements of Reusable objects Or iented Software </TITLE>
<AUTHOR>Erich Gamma, John Vlissides, Richard Helm</AUTHOR>
<PRICE>10.80</PRICE>
</CD>
<CD>
<TITLE>The Computer Networking: A Top-Down Approach</TITLE>
<AUTHOR>James F. Kurose and Keith W. Ross</AUTHOR>
<PRICE>8.70</PRICE>
</CD>
<CD>
<TITLE>The Artificial Intelligence: A Modern Approach</TITLE>
```



<AUTHOR>Stuart Russell</AUTHOR>  
<PRICE>10.90</PRICE>  
</CD>  
</CATALOG>

Output:



**Date:23/8/24**

## **4c. Shopping cart and payment by credit card pages**

### **Shopping cart**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Shopping Cart</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      background-color: #f5f5f5;
      margin: 0;
      padding: 20px;
    }
    h1 {
      text-align: center;
      margin-bottom: 20px;
    }
    .shopping-cart {
      width: 80%;
      margin: 0 auto;
      background: #fff;
      box-shadow: 0px 0px 10px rgba(0, 0, 0, 0.2);
      padding: 20px;
      border-radius: 8px;
    }
    .column-labels {
      display: flex;
      justify-content: space-between;
      font-weight: bold;
      border-bottom: 2px solid #ddd;
      padding-bottom: 10px;
    }
    .product {
      display: flex;
      justify-content: space-between;
      align-items: center;
      margin-top: 20px;
      padding-bottom: 20px;
      border-bottom: 1px solid #ddd;
    }
    .product-image img {
      width: 80px;
      height: auto;
    }
    .product-details {
      flex: 2;
      padding-left: 10px;
    }
    .product-price,
    .product-quantity,
    .product-line-price {
```

```

flex: 1;
    text-align: center;
}
.product-removal {
    flex: 1;
    text-align: center;
}
.product-removal button {
    background-color: #e74c3c;
    color: #fff;
    border: none;
    padding: 8px 12px;
    border-radius: 5px;
    cursor: pointer;
}
.product-removal button:hover {
    background-color: #c0392b;
}
.totals {
    text-align: right;
    margin-top: 20px;
    font-weight: bold;
}
.totals .total-value {
    color: #34C759;
}
</style>
</head>
<body>
<h1>Shopping Cart</h1>
<div class="shopping-cart">
    <div class="column-labels">
        <span>Image</span>
        <span>Product</span>
        <span>Price</span>
        <span>Quantity</span>
        <span>Remove</span>
        <span>Total</span>
    </div>

    <div class="product" data-price="181.99">
        <div class="product-image">
            
        </div>
        <div class="product-details">
            <div class="product-title">Cloud Computing</div>
            <p>The best book for Cloud Computing.</p>
        </div>
        <div class="product-price">$181.99</div>
        <div class="product-quantity">
            <input type="number" value="1" min="1" class="quantity">
        </div>
        <div class="product-removal">
            <button class="remove">Remove</button>

```

```

</div>
  <div class="product-line-price">$181.99</div>
</div>

<div class="product" data-price="245.99">
  <div class="product-image">
    
  </div>
  <div class="product-details">
    <div class="product-title">C Programming</div>
    <p>Book for C programming.</p>
  </div>
  <div class="product-price">$245.99</div>
  <div class="product-quantity">
    <input type="number" value="1" min="1" class="quantity">
  </div>
  <div class="product-removal">
    <button class="remove">Remove</button>
  </div>
  <div class="product-line-price">$245.99</div>
</div>

<div class="totals">
  <span>Total: $</span><span class="total-value">427.98</span>
</div>
</div>

<script>
function updateTotal() {
  let total = 0;
  const products = document.querySelectorAll(".product");
  products.forEach(product => {
    const price = parseFloat(product.dataset.price);
    const quantity = product.querySelector(".quantity").value;
    const lineTotal = price * quantity;
    product.querySelector(".product-line-price").textContent = `$$${lineTotal.toFixed(2)}`;
    total += lineTotal;
  });
  document.querySelector(".total-value").textContent = total.toFixed(2);
}

document.querySelectorAll(".quantity").forEach(input => {
  input.addEventListener("change", updateTotal);
});

document.querySelectorAll(".remove").forEach(button => {
  button.addEventListener("click", event => {
    const product = event.target.closest(".product");
    product.remove();
    updateTotal();
  });
});

updateTotal();

```

```
</script>
</body>
</html>
```

### **Pay.html**

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Payment Form</title>
</head>
```

```
<style>
*{
margin: 0;
padding: 0;
box-sizing: border-box;
}
body{
background-color: #f5f5f5;
font-family: Arial, Helvetica, sans-serif;
}
.wrapper{
background-color: #fff;
width: 500px;
padding: 25px;
margin: 25px auto 0;
box-shadow: 0px 0px 20px rgba(0,0,0,0.5);
}
.wrapper h2{
background-color: #fcfcfc;
color: #34C759;
font-size: 24px;
padding: 10px;
margin-bottom: 20px;
text-align: center;
border: 1px dotted #333;
}
h4{
padding-bottom: 5px;
color: #34C759;
}
.input-group{
margin-bottom: 8px;
width: 100%;
position: relative;
display: flex;
flex-direction: row;
padding: 5px 0;
}

.input-box{
width: 100%;
```

```
margin-right: 12px;
position: relative;
}
.input-box:last-child{
margin-right: 0;
}
.name{
padding: 14px 10px 14px 50px;
width: 100%;
background-color: #fcfcfc;
border: 1px solid #00000033;
outline: none;

letter-spacing: 1px;

transition: 0.3s;
border-radius: 3px;
color: #333;
}
.name:focus, .dob:focus{
-webkit-box-shadow:0 0 2px 1px #7ed32180;
-moz-box-shadow:0 0 2px 1px #7ed32180;
box-shadow: 0 0 2px 1px #7ed32180;
border: 1px solid #34C759;
}
.input-box .icon{
width: 48px;
display: flex;
justify-content: center;
align-items: center;
position: absolute;
top: 0px;
left: 0px;
bottom: 0px;
color: #333;
background-color: #f1f1f1;
border-radius: 2px 0 0 2px;
transition: 0.3s;
font-size: 20px;
pointer-events: none;
border: 1px solid #00000033;
border-right: none;
}
.name:focus + .icon{
background-color: #34C759;
color: #fff;
border-right: 1px solid #34C759;
border: none;
transition: 1s;
}
.dob{
width: 30%;
padding: 14px;
```

```
text-align: center;
background-color: #fcfcfc;
transition: 0.3s;
outline: none;
border: 1px solid #c0bfbf;
border-radius: 3px;
}
.radio{
display: none;
}
.input-box label{
width: 50%;
padding: 13px;

background-color: #fcfcfc;
display: inline-block;

float: left;
text-align: center;
border: 1px solid #c0bfbf;
}
.input-box label:first-of-type{
border-top-left-radius: 3px;
border-bottom-left-radius: 3px;
border-right: none;
}
.input-box label:last-of-type{
border-top-right-radius: 3px;
border-bottom-right-radius: 3px;
}
.radio:checked + label{
background-color: #34C759;
color: #fff;
transition: 0.5s;
}
.input-box select{
display: inline-block;
width: 50%;
padding: 12px;
background-color: #fcfcfc;
float: left;
text-align: center;
font-size: 16px;
outline: none;
border: 1px solid #c0bfbf;
cursor: pointer;
transition: all 0.2s ease;
}
.input-box select:focus{
background-color: #34C759;
color: #fff;
text-align: center;
}
button{
```

```
width: 100%;
background: transparent;
border: none;
background: #34C759;
color: #fff;
padding: 15px;
border-radius: 4px;
font-size: 16px;
transition: all 0.35s ease;
}
button:hover{
cursor: pointer;
background: #5eb105;
```

```
}
</style>
<body>
```

```
<div class="wrapper">
<h2>Payment Form</h2>
<form method="POST">
<h4>Account</h4>
<div class="input-group">
<div class="input-box">
<input type="text" placeholder="Full Name" required class="name">
<i class="fa fa-user icon"></i>
</div>
<div class="input-box">
<input type="text" placeholder="Nick Name" required class="name">
<i class="fa fa-user icon"></i>
</div>
</div>
<div class="input-group">
<div class="input-box">
<input type="email" placeholder="Email Adress" required class="name">
<i class="fa fa-envelope icon"></i>
</div>
</div>
<div class="input-group">
<div class="input-box">
<h4> Date of Birth</h4>
<input type="text" placeholder="DD" class="dob">
<input type="text" placeholder="MM" class="dob">
<input type="text" placeholder="YYYY" class="dob">
</div>
<div class="input-box">
<h4> Gender</h4>
<input type="radio" id="b1" name="gendar" checked class="radio">
<label for="b1">Male</label>
<input type="radio" id="b2" name="gendar" class="radio">
<label for="b2">Female</label>
</div>
</div>
<div class="input-group">
```



```
<div class="input-box">
<h4>Payment Details</h4>
<input type="radio" name="pay" id="bc1" checked class="radio">
<label for="bc1"><span><i class="fa fa-cc-visa"></i> Credit Card</span></label>
<input type="radio" name="pay" id="bc2" class="radio">
<label for="bc2"><span><i class="fa fa-cc-paypal"></i> Paypal</span></label>
</div>
</div>
<div class="input-group">
<div class="input-box">
<input type="tel" placeholder="Card Number" required class="name">
<i class="fa fa-credit-card icon"></i>
</div>

</div>
<div class="input-group">
<div class="input-box">
<input type="tel" placeholder="Card CVC" required class="name">

<i class="fa fa-user icon"></i>
</div>
<div class="input-box">
<select>
<option>01 jun</option>
<option>02 jun</option>
<option>03 jun</option>
</select>
<select>
<option>2020</option>
<option>2021</option>
<option>2022</option>
</select>
</div>
</div>
<div class="input-group">
<div class="input-box">
<button type="submit">PAY NOW</button>
</div>
</div>
</form>
</div>
</body>
</html>
```

## Output:

Payment Form

Account

Full Name Nick Name

Email Address

Date of Birth Gender

DD MM YYYY Male Female

Payment Details

Credit Card Paypal

Card Number

Card CVC 01 Jun 2020

PAY NOW

## Shopping Cart

Image	Product	Price	Quantity	Remove	Total
	Cloud Computing The best book for Cloud Computing.	\$181.99	1	<a href="#">Remove</a>	\$181.99
	C Programming Book for C programming.	\$245.99	1	<a href="#">Remove</a>	\$245.99
					<b>Total: \$427.98</b>

## Result:

Thus the webpage has been created to validate the Registration, user login, user profile and payment by credit card pages using JavaScript.

**Ex.No:5**  
**Date:30/8/24**

## **Create a User Information using XML Document.**

### **Aim:**

To Create and save an XML document at the server, which contains 10 users Information.

### **Algorithm:**

1. start the program
2. create a root tag student.
3. create a parent tag person details
4. Get the details of ten students such as id, name, city, Branch, year
5. save the file
6. Run the XML document
7. Stop the program.

### **Implementation:**

#### **Student.xml**

```
<?xml version="1.0" encoding="UTF-8"?>
<Student>
  <PersonDetails>
    <id>101</id>
    <name>Anand</name>
    <city>Madurai</city>
    <Branch>CSE</Branch>
    <Year>I</Year>
  </PersonDetails>
  <PersonDetails>
    <id>102</id>
    <name>Anu</name>
    <city>Konam</city>
    <Branch>CSE</Branch>
    <Year>II</Year>
  </PersonDetails>
  <PersonDetails>
    <id>103</id>
    <name>Archana</name>
    <city>Madurai</city>
    <Branch>CSE</Branch>
    <Year>I</Year>
  </PersonDetails>
  <PersonDetails>
    <id>104</id>
    <name>Monica</name>
    <city>Nellai</city>
    <Branch>CSE</Branch>
    <Year>III</Year>
  </PersonDetails>
  <PersonDetails>
    <id>105</id>
    <name>Sundari</name>
    <city>Salem</city>
    <Branch>CSE</Branch>
```

```

<Year>III</Year>
</PersonDetails>
<PersonDetails>
<id>106</id>
<name>Kannan</name>
<city>Coimbatore</city>
<Branch>CSE</Branch>
<Year>III</Year>
</PersonDetails>
<PersonDetails>
<id>107</id>
<name>Naresh</name>
<city>Tiruchirappalli</city>
<Branch>CSE</Branch>
<Year>III</Year>
</PersonDetails>
<PersonDetails>
<id>108</id>
<name>Mani</name>
<city>Chennai</city>
<Branch>CSE</Branch>
<Year>III</Year>
</PersonDetails>
<PersonDetails>
<id>109</id>
<name>Gokul</name>
<city>Madurai</city>
<Branch>CSE</Branch>
<Year>III</Year>
</PersonDetails>
<PersonDetails>
<id>110</id>
<name>Joel</name>
<city>Chennai</city>
<Branch>CSE</Branch>
<Year>III</Year>
</PersonDetails>
</Student>

```

### **Login.html**

```

<!DOCTYPE html>
<html>
<head>
</head>
<body>
<script type="text/javascript"> function Display()
{
if (window.XMLHttpRequest)
{
xmlhttp = new XMLHttpRequest();
}
xmlhttp.open("GET", "StudentDetails.xml", false); xmlhttp.send();
xmlDoc = xmlhttp.responseXML;

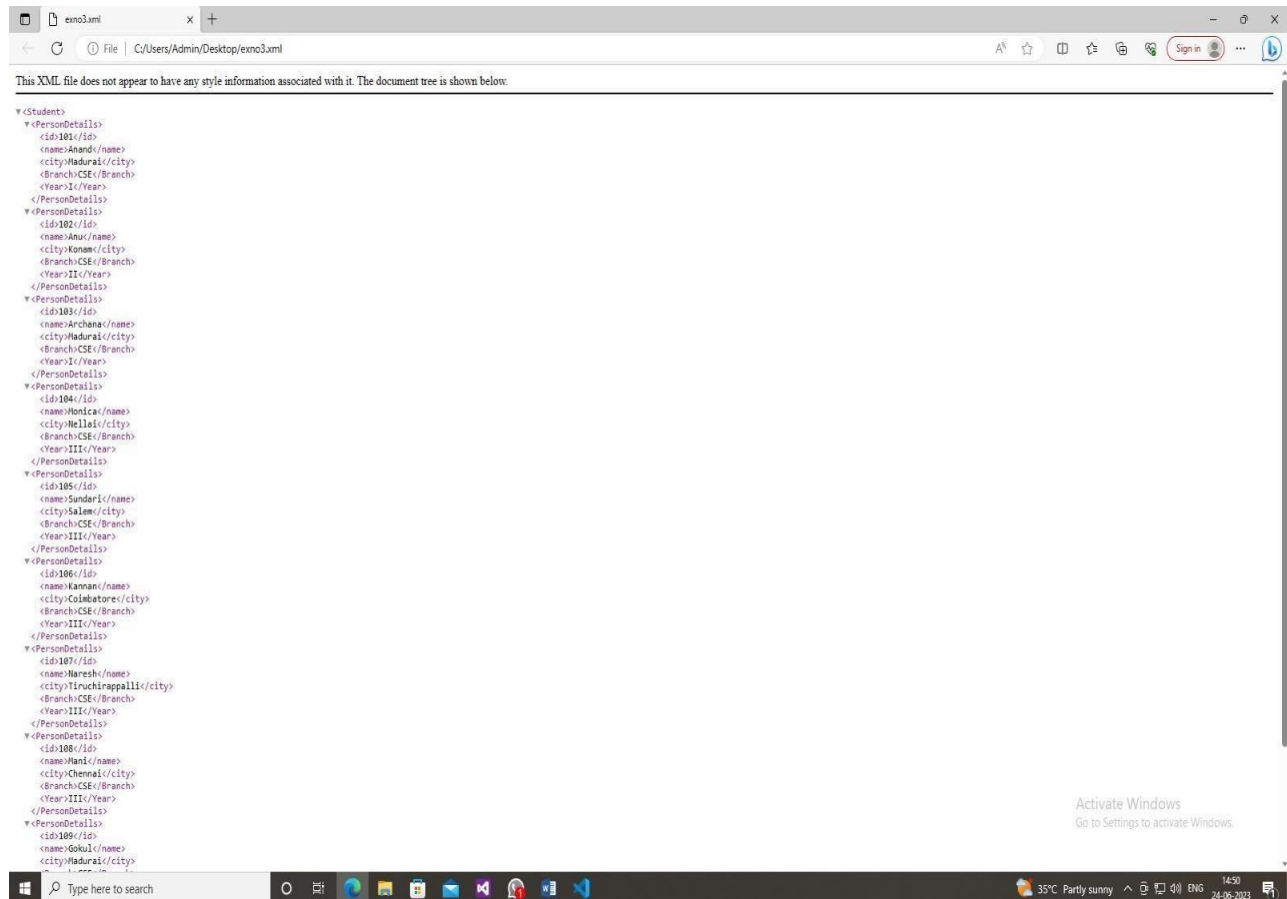
```

```

var x = xmlDoc.getElementsByTagName("PersonDetails"); var key_id =
document.getElementById("key").value;
for (i = 0; i < x.length; i++)
{
if (key_id.match(x[i].getElementsByTagName("id")[0].childNodes[0].nodeValue)) j = i;
}
document.write("<h3>User Details are...</h3><hr> Registration ID=");
document.write(x[j].getElementsByTagName("id")[0].childNodes[0].nodeValue);
document.write("<br> Name=");
document.write(x[j].getElementsByTagName("name")[0].childNodes[0].nodeValue);
document.write("<br> City=");
document.write(x[j].getElementsByTagName("city")[0].childNodes[0].nodeValue);

document.write("<br> Branch=");
document.write(x[j].getElementsByTagName("Branch")[0].childNodes[0].nodeValue);
document.write("<br> Year=");
document.write(x[j].getElementsByTagName("Year")[0].childNodes[0].nodeValue);
document.write("<br> ");
}
</script>
<form name='myform'> Enter ID:
<input type='text' id='key' /><br />
<input type='button' value='submit' onclick='Display()' />
</form>
</body>
</html>

```





User Details are...

Registration ID=101  
Name=Anand  
City=Madurai  
Branch=CSE  
Year=1



Enter ID:



## Result:

Thus, the program to create the user information using the xml document is executed successfully

**Ex.No:6**

## **Write a PHP program for creating Simple Calculator**

**Date:13/9/24**

### **Aim:**

To create a Simple Calculator program using PHP.

### **Algorithm:**

1. start the program.
2. Given the first number & Second number
3. we have given a operator's add, sub ,mul, div
4. Then we have to give the input type & submit button to get the answer
5. when we are clicking the submit button we can get the result
6. stop the program.

### **Implementation:**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Calculator</title>
  <script src="https://cdn.jsdelivr.net/npm/mathjs@10.6.4/dist/math.min.js"
    integrity="sha512-
iphNRh6dPbeuPGIrQbCdbBF/qcqadKWL35YPVfMZMHBSI6PLJh1om2xCTWhpVpmUyb4IvVS9iYnnYMkleVXLA=
="
    crossorigin="anonymous"
    referrerpolicy="no-referrer"></script>
<style>
  body {
    font-family: Arial, sans-serif;
    background-color: #f4f4f9;
    display: flex;
    justify-content: center;
    align-items: center;
    height: 100vh;
    margin: 0;
  }
  table {
    border-collapse: collapse;
    background-color: #ffffff;
    padding: 20px;
    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
    border-radius: 10px;
  }
  input[type="text"] {
    width: 100%;
    padding: 15px;
    font-size: 20px;
    border: 1px solid #ccc;
    border-radius: 5px;
    margin-bottom: 15px;
    box-sizing: border-box;
  }
  input[type="button"] {
    width: 70px;
    height: 70px;
    margin: 5px;
    font-size: 18px;
    font-weight: bold;
    background-color: #007bff;
    color: #fff;
```

```

border: none;
  border-radius: 5px;
  cursor: pointer;
}
input[type="button"]:hover {
  background-color: #0056b3;
}
</style>
</head>
<body>
<table>
  <tr>
    <td colspan="4">
      <input type="text" id="answer" placeholder="0" readonly>
    </td>
  </tr>
  <tr>
    <td><input type="button" value="AC" onclick="clearInput()"></td>
    <td><input type="button" value="(" onclick="addValue('(')"></td>
    <td><input type="button" value=")" onclick="addValue(')'"></td>
    <td><input type="button" value="/" onclick="addValue('/')"></td>
  </tr>
  <tr>
    <td><input type="button" value="7" onclick="addValue('7')"></td>
    <td><input type="button" value="8" onclick="addValue('8')"></td>
    <td><input type="button" value="9" onclick="addValue('9')"></td>
    <td><input type="button" value="*" onclick="addValue('*)"></td>
  </tr>
  <tr>
    <td><input type="button" value="4" onclick="addValue('4')"></td>
    <td><input type="button" value="5" onclick="addValue('5')"></td>
    <td><input type="button" value="6" onclick="addValue('6')"></td>
    <td><input type="button" value="-" onclick="addValue('-)"></td>
  </tr>
  <tr>
    <td><input type="button" value="1" onclick="addValue('1')"></td>
    <td><input type="button" value="2" onclick="addValue('2')"></td>
    <td><input type="button" value="3" onclick="addValue('3')"></td>
    <td><input type="button" value="+" onclick="addValue('+')"></td>
  </tr>
  <tr>
    <td><input type="button" value="0" onclick="addValue('0')"></td>
    <td><input type="button" value="." onclick="addValue('.')"></td>
    <td><input type="button" value="Backspace" onclick="backspace()"></td>
    <td><input type="button" value="=" onclick="calculate()"></td>
  </tr>
</table>

<script>
function addValue(val) {
  document.getElementById("answer").value += val;
}
function backspace() {
  let currentValue = document.getElementById("answer").value;
  document.getElementById("answer").value = currentValue.slice(0, -1);
}

function clearInput() {
  document.getElementById("answer").value = "";
}
function calculate() {
  let expression = document.getElementById("answer").value;
  if (expression.trim() === "") {
    document.getElementById("answer").value = "Error: Empty Input";
  }
}

```



```

return;
    }
    try {
        let result = math.evaluate(expression);
        document.getElementById("answer").value = result;
    } catch (error) {
        document.getElementById("answer").value = "Error";
    }
}
</script>
</body>
</html>

```

### Output:



**Result:** Thus the program to create a Simple Calculator program using PHP is executed successfully.

**Ex.No:7      To Validate the HTML Form (validation - Empty field, phone number, email id)**  
**Date:20/9/24**

**Aim:** Write programs to validate the HTML form by adding the empty field, phone number, email id

**Algorithm:**

1. Retrieve all input values from the form fields.
2. Check if any required field is empty and display an error if true.
3. Use a regex to validate the email format and display an error for invalid entries.
4. Use a regex to validate the phone number format and check its length.
5. Display appropriate error messages for each invalid field.
6. Prevent form submission if any validation fails.
7. Allow form submission if all validations pass.

**Implementation:**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>HTML Form Validation</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      background-color: #f8f9fa;
      padding: 20px;
    }
    form {
      max-width: 400px;
      margin: auto;
      background: #ffffff;
      padding: 20px;
      border-radius: 8px;
      box-shadow: 0 2px 8px rgba(0, 0, 0, 0.1);
    }
    input[type="text"], input[type="email"], input[type="tel"], button {
      width: 100%;
      padding: 10px;
      margin: 10px 0;
      border: 1px solid #ccc;
      border-radius: 4px;
      font-size: 16px;
    }
    button {
      background-color: #007bff;
      color: white;
      font-weight: bold;
      cursor: pointer;
    }
    button:hover {
      background-color: #0056b3;
    }
    .error {
      color: red;
      font-size: 14px;
    }
  </style>
</head>
<body>
  <form id="validationForm" onsubmit="return validateForm()">
    <h2>Form Validation</h2>
    <label for="name">Name:</label>
    <input type="text" id="name" name="name" placeholder="Enter your name">
```

```

<span class="error" id="nameError"></span>

<label for="email">Email:</label>
<input type="email" id="email" name="email" placeholder="Enter your email">
<span class="error" id="emailError"></span>

<label for="phone">Phone:</label>
<input type="tel" id="phone" name="phone" placeholder="Enter your phone number">
<span class="error" id="phoneError"></span>

<button type="submit">Submit</button>
</form>

<script>
function validateForm() {
  // Get form inputs
  const name = document.getElementById("name").value.trim();
  const email = document.getElementById("email").value.trim();
  const phone = document.getElementById("phone").value.trim();

  // Get error elements
  const nameError = document.getElementById("nameError");
  const emailError = document.getElementById("emailError");
  const phoneError = document.getElementById("phoneError");

  // Reset error messages
  nameError.textContent = "";
  emailError.textContent = "";
  phoneError.textContent = "";

  let isValid = true;

  // Validate Name
  if (name === "") {
    nameError.textContent = "Name cannot be empty.";
    isValid = false;
  }

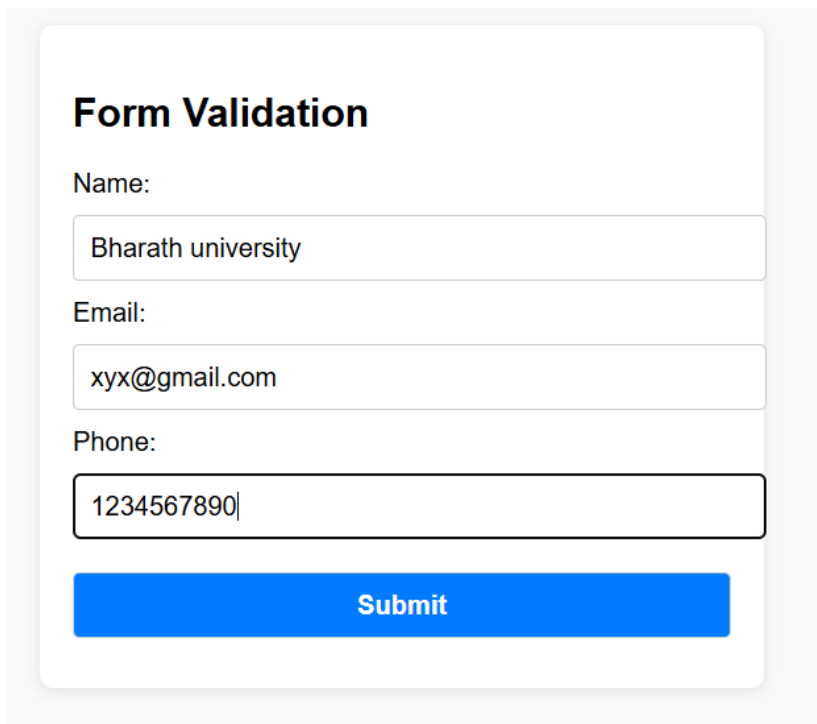
  // Validate Email
  const emailPattern = /^[a-zA-Z0-9._-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,}$/;
  if (email === "") {
    emailError.textContent = "Email cannot be empty.";
    isValid = false;
  } else if (!emailPattern.test(email)) {
    emailError.textContent = "Please enter a valid email address.";
    isValid = false;
  }

  // Validate Phone Number
  const phonePattern = /^\d{10}$/; // Matches a 10-digit phone number
  if (phone === "") {
    phoneError.textContent = "Phone number cannot be empty.";
    isValid = false;
  } else if (!phonePattern.test(phone)) {
    phoneError.textContent = "Please enter a valid 10-digit phone number.";
    isValid = false;
  }

  return isValid;
}
</script>
</body>
</html>

```

**Output:**



The screenshot shows a web form titled "Form Validation" on a light gray background. The form is a white rounded rectangle with a subtle drop shadow. It contains three input fields and a submit button. The "Name:" field contains "Bharath university". The "Email:" field contains "xyx@gmail.com". The "Phone:" field contains "1234567890". Below the fields is a blue "Submit" button.

**Form Validation**

Name:

Email:

Phone:

**Result:** Thus the program to Validate the HTML Form is executed successfully.

**Ex.No:8**

## **To Explore the application using AJAX**

**Date:18/10/24**

### **Aim:**

To Explore the application for Searching in real time with live searches, Getting the answer with auto complete using AJAX.

### **Algorithm:**

1. Start the program.
2. Create an XMLHttpRequest to retrieve data from an TXT file.
3. Create an XMLHttpRequest to retrieve data from an XML file.
4. Both XMLHttpRequest to retrieve data from an TXT , XML file are sending the request to server.
5. TXT, XML File are waiting the request After getting the request it will be started.
6. Stop the program.

### **Implementation:**

#### **a. Create an XMLHttpRequest to retrieve data from an TXT file.**

##### **Ajaxtext.html**

```
<!DOCTYPE html>
<html>
<body>
<div id="demo">
<h2>The XMLHttpRequest Object</h2>
<button type="button" onclick="loadDoc()">Change Content</button>
</div>
<script>
function loadDoc() {
const xhttp = new XMLHttpRequest(); xhttp.onload = function() {
document.getElementById("demo").innerHTML = this.responseText;
}
xhttp.open("GET", "ajax_info.txt"); xhttp.send();
}
</script>
</body>
</html>
```

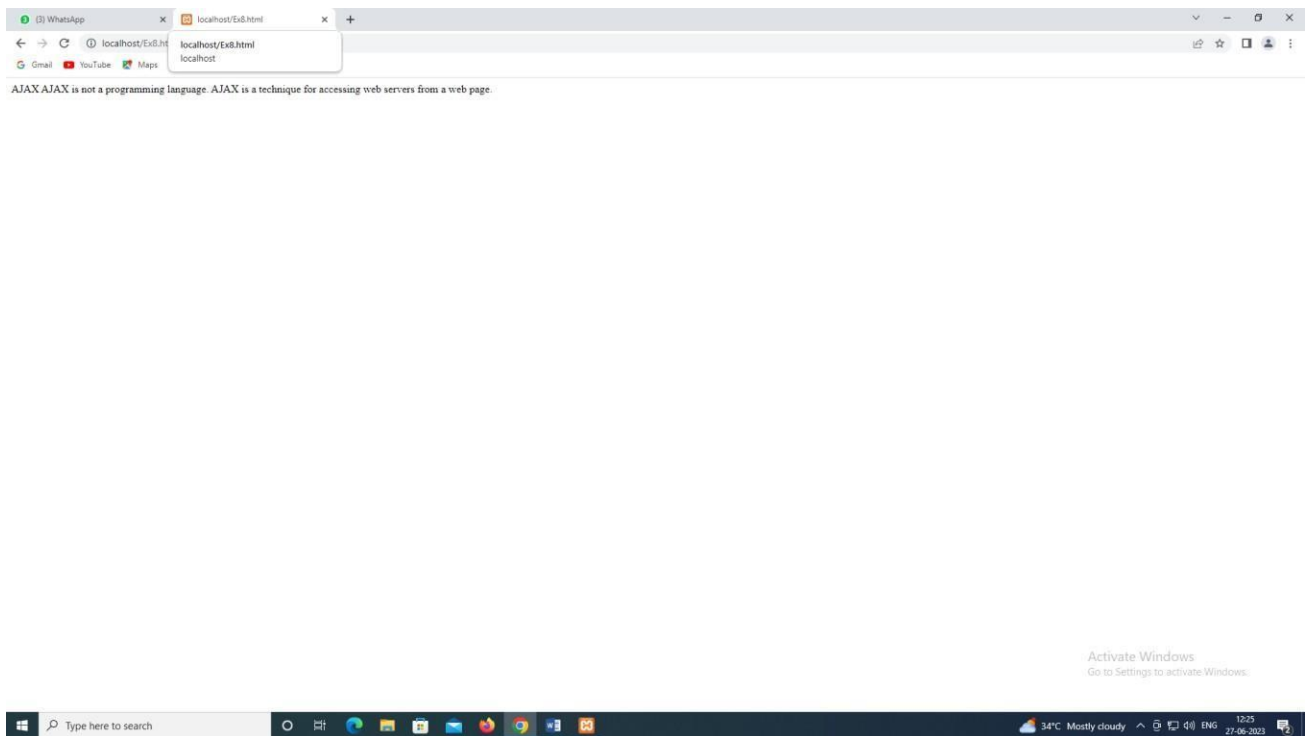
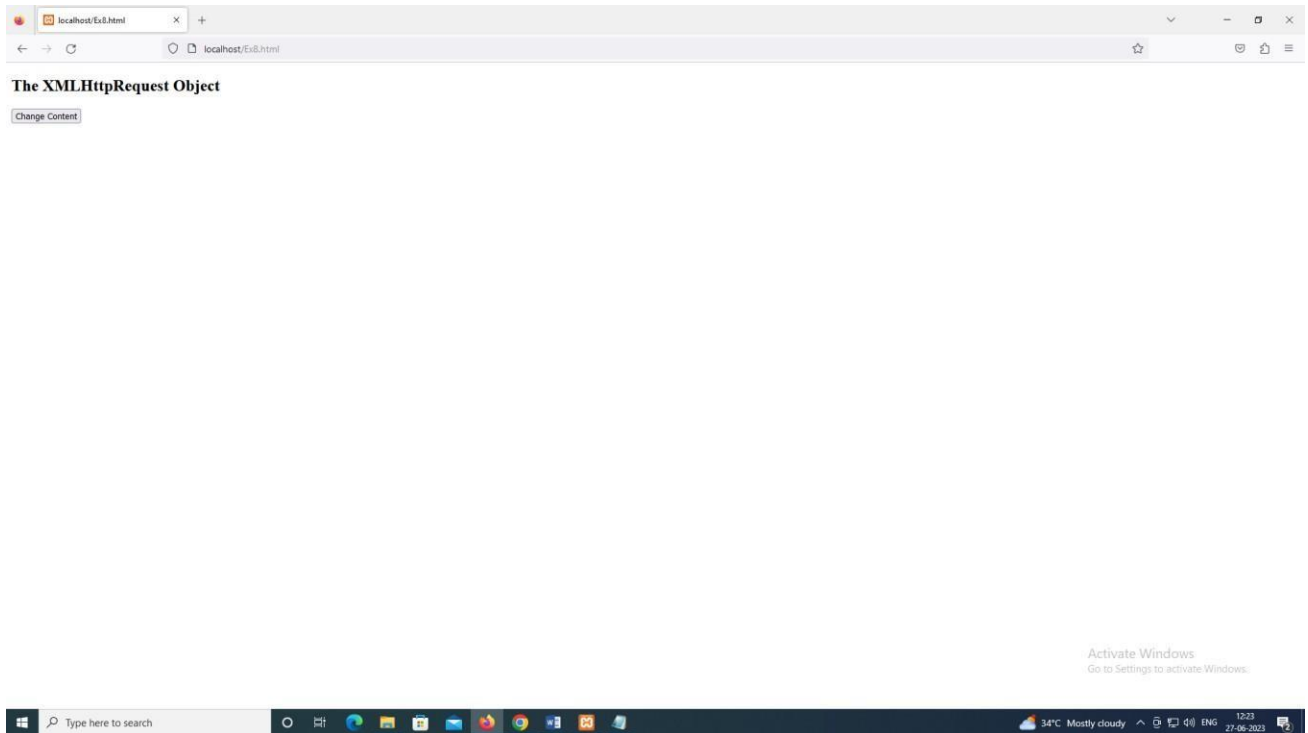
##### **Ajax\_infor.txt**

### **AJAX**

AJAX is not a programming language.

AJAX is a technique for accessing web servers from a web page.

AJAX stands for Asynchronous JavaScript And XML.



## **h. Create an XMLHttpRequest to retrieve data from an XML file.**

### **Ajax.php.html**

```
<!DOCTYPE html>
<html>
<body>
<h2>Retrieve data from XML file</h2>
<p><b>Status:</b><span id="A1"></span></p>
<p><b>Status text:</b><span id="A2"></span></p>
<p><b>Response:</b><span id="A3"></span></p>
<button onclick="loadDoc('book.xml')">Get XML data</button>
<script>
function loadDoc(url) {
  var xhttp = new XMLHttpRequest();
  xhttp.onreadystatechange = function() {
    if (xhttp.readyState == 4 && xhttp.status == 200) {
      document.getElementById('A1').innerHTML = xhttp.status;
      document.getElementById('A2').innerHTML = xhttp.statusText;
      document.getElementById('A3').innerHTML = xhttp.responseText;
    }
  };
  xhttp.open("GET", url, true);
  xhttp.send();
}
</script>
</body>
</html>
```

### **Book.xml**

```
<?xml version="1.0" encoding="UTF-8"?> <?xmlstylesheet type="text/xsl" href="example.xsl"?>
<library_details>
<library>
<Bookname>Web Technology</Bookname>
<Author>Robet Roy</Author>
<Publisher>Technical</Publisher>
<Edition>7th</Edition>
<Price>650</Price>
</library>
<library>
<Bookname>Software Engineering</Bookname>
<Author>Ugrasen Suman</Author>
<Publisher>Technical</Publisher>
<Edition>8th</Edition>
<Price>450</Price>
</library>
```

```
<library>
<library>
<Bookname>Computer Networks</Bookname>
<Author>Forouzan</Author>
<Publisher>Technical</Publisher>
<Edition>7th</Edition>
<Price>500</Price>
</library>
<library>
</library_details>
```



Activate Windows  
Go to Settings to activate Windows.



Activate Windows  
Go to Settings to activate Windows.





## c. Create a javascript in Ajax to send and retrieve the request and response

### Ajax\_get.html

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="utf-8">
<title>JavaScript Ajax POST</title>
<script>
function postComment() {
    // Creating the XMLHttpRequest object
    var request = new XMLHttpRequest();

    // Instantiating the request object
    request.open("POST", "confirmation.php", true);

    // Defining event listener for readystatechange event
    request.onreadystatechange = function() {
        // Check if the request is complete and was successful
        if(this.readyState === 4 && this.status === 200) {
            // Inserting the response from server into an HTML element
            document.getElementById("result").innerHTML = this.responseText;
        }
    };
    // Retrieving the form data
    var myForm = document.getElementById("myForm");
    var formData = new FormData(myForm);

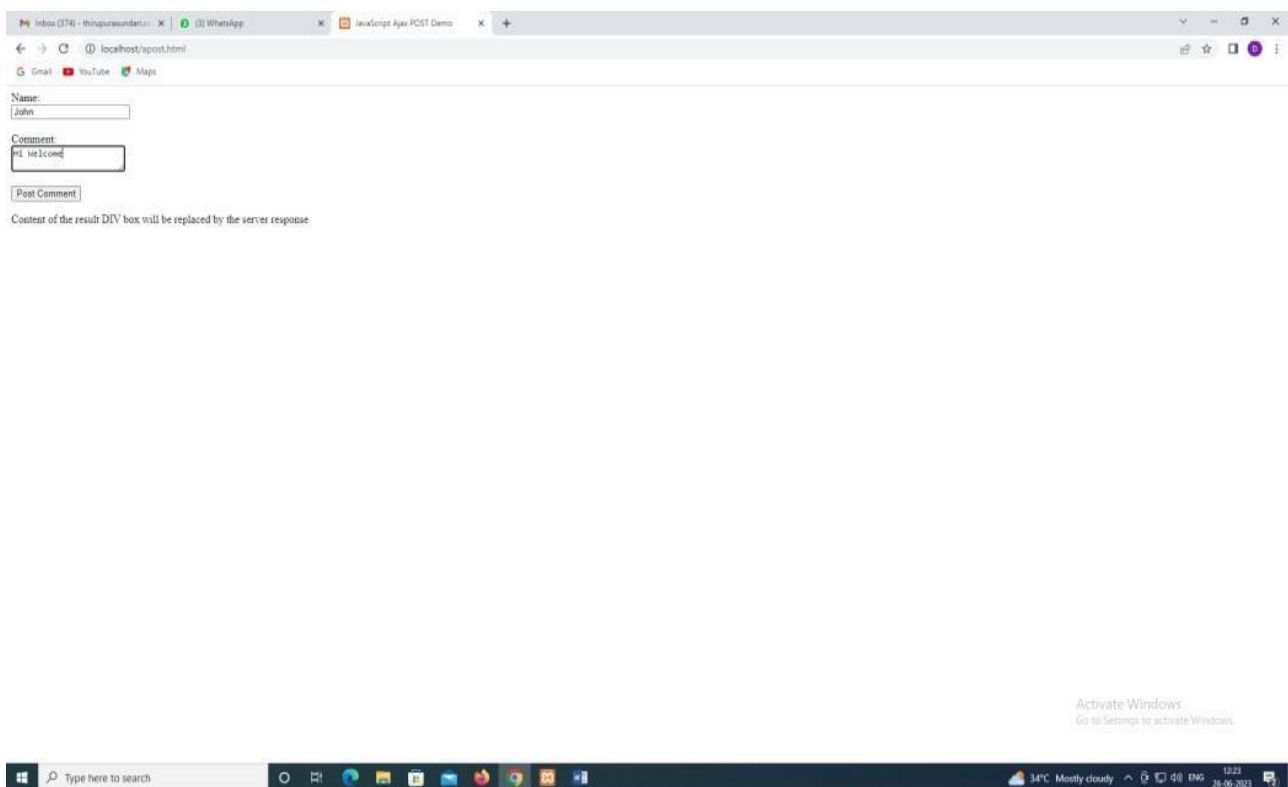
    // Sending the request to the server request.send(formData);
}
</script>
</head>
<body>
    <form id="myForm">
        <label>Name:</label>
        <div><input type="text" name="name"></div>
        <br>
        <label>Comment:</label>
        <div><textarea name="comment"></textarea></div>
        <p><button type="button" onclick="postComment()">Post Comment</button></p>
    </form>
    <div id="result">
        <p>Content of the result DIV box will be replaced by the server response</p>
    </div>
</body>
</html>
```

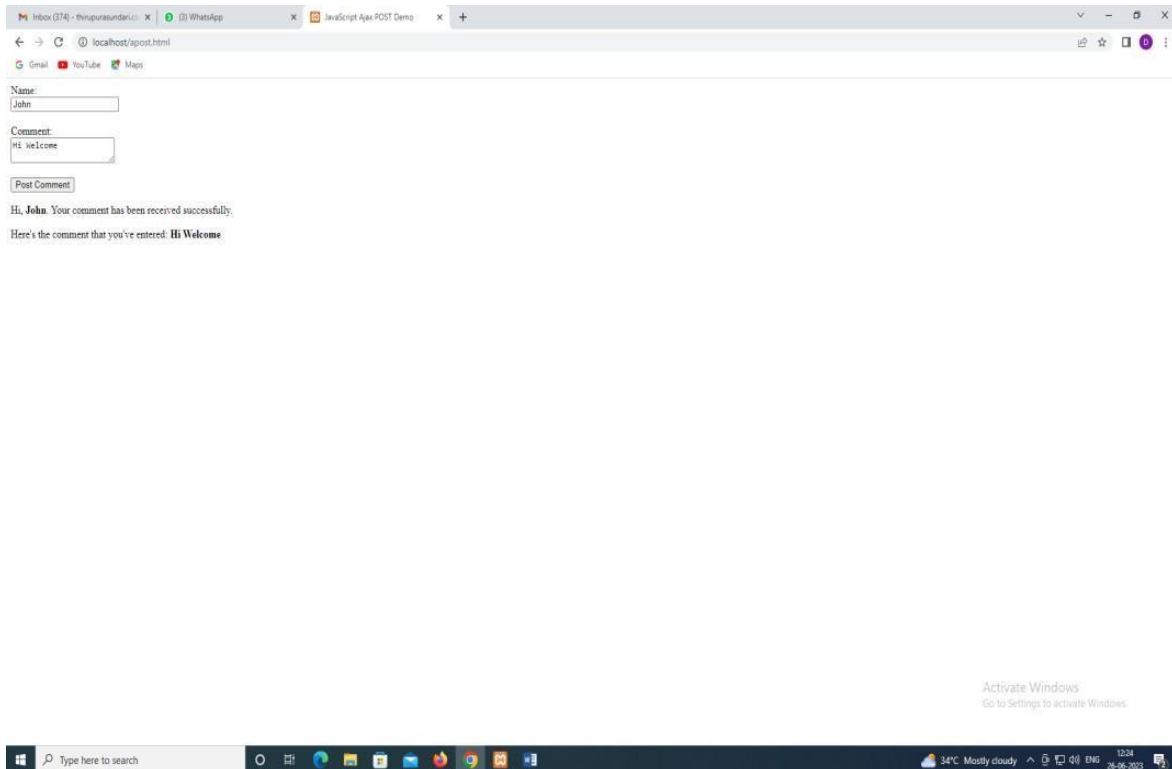
## confirmation.php

```
<?php
if($_SERVER["REQUEST_METHOD"] == "POST") {
    $name = htmlspecialchars(trim($_POST["name"]));
    $comment = htmlspecialchars(trim($_POST["comment"]));

    // Check if form fields values are empty
    if(!empty($name) && !empty($comment)) {
        echo "<p>Hi, <b>$name</b>. Your comment has been received successfully.<p>";
        echo "<p>Here's the comment that you've entered: <b>$comment</b></p>";
    } else {
        echo "<p>Please fill all the fields in the form!</p>";
    }
} else {
    echo "<p>Something went wrong. Please try again.</p>";
}
?>
```

## Output:





## Result:

Thus the XMLHttpRequest to retrieve data from an TXT file & XML file is executed & verified successfully.

Ex.No:9

## To develop a Simple Android Application that uses GUI components, Font and Colors.

Date:25/12/24

### Aim:

To develop a Simple Android Application that uses GUI components, Font and Colors.

### Algorithm:

1. Open Android Studio and then click on **File -> New -> New project** Select our project in the project explorer.
2. Then select the **Minimum SDK** as shown below and click **Next**.
3. Then select the **Empty Activity** and click **Next**
4. Finally click **Finish**.
5. It will take some time to build and load the project
6. Click on **app -> res -> layout -> activity\_main.xml**
7. Save the program and Run the program.
8. Output can be viewed in the android emulator.

### Implementation:

#### Activity\_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <TextView
        android:id="@+id/textView"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_margin="30dp"
        android:gravity="center"
        android:text="Hello World!"
        android:textSize="25sp"
        android:textStyle="bold" />

    <Button
        android:id="@+id/button1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_margin="20dp"
        android:gravity="center"
        android:text="Change font size"
        android:textSize="25sp" />

    <Button
        android:id="@+id/button2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_margin="20dp"
        android:gravity="center"
        android:text="Change color"
        android:textSize="25sp" />
</LinearLayout>
```

## MainActivity.java:

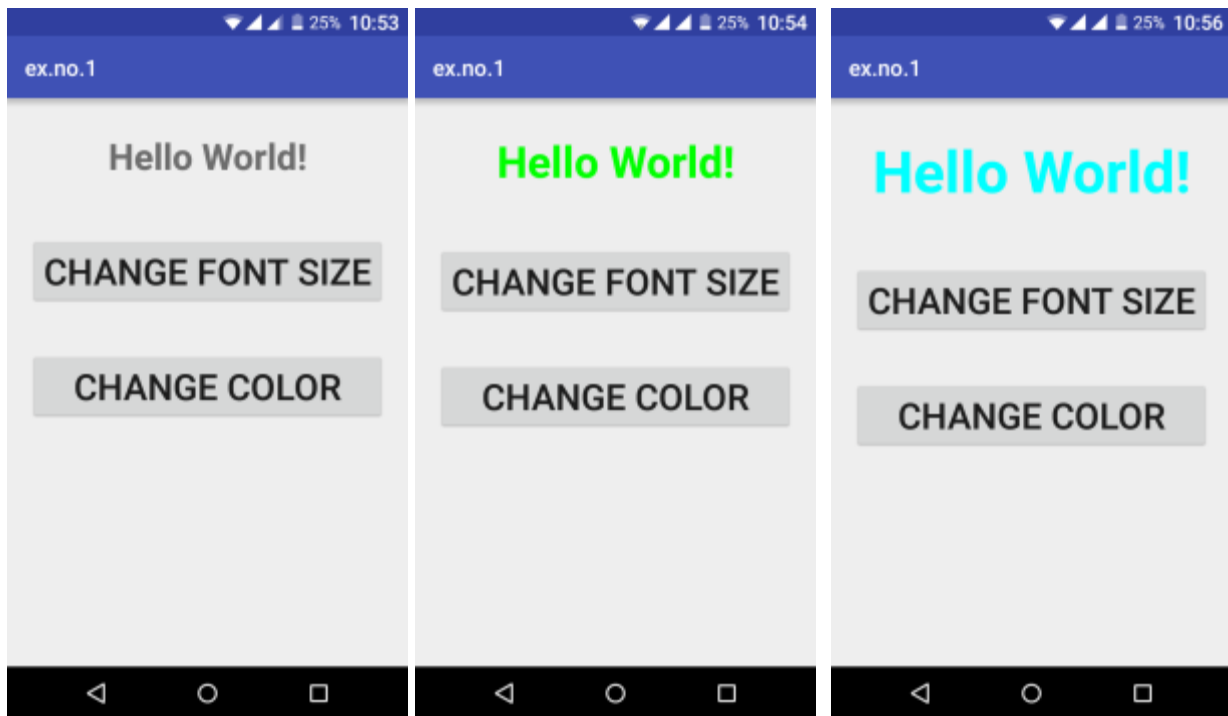
```
package com.example.exnol;

import android.graphics.Color;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity
{
    int ch=1;
    float font=30;
    @Override
    protected void onCreate(Bundle savedInstanceState)
    {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        final TextView t= (TextView) findViewById(R.id.textView);
        Button b1= (Button) findViewById(R.id.button1);
        b1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                t.setTextSize(font);
                font = font + 5;
                if (font == 50)
                    font = 30;
            }
        });
        Button b2= (Button) findViewById(R.id.button2);
        b2.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                switch (ch) {
                    case 1:
                        t.setTextColor(Color.RED);
                        break;
                    case 2:
                        t.setTextColor(Color.GREEN);
                        break;
                    case 3:
                        t.setTextColor(Color.BLUE);
                        break;
                    case 4:
                        t.setTextColor(Color.CYAN);
                        break;
                    case 5:
                        t.setTextColor(Color.YELLOW);
                        break;
                    case 6:
                        t.setTextColor(Color.MAGENTA);
                        break;
                }
                ch++;
                if (ch == 7)
                    ch = 1;
            }
        });
    }
}
```

```
});  
  
}  
}
```

### Output:



### Result:

Thus the program to develop a Simple Android Application that uses GUI components, Font and Colors.

**Ex.No:10**

**write an application that draws graphical primitives on the screen**

**Date:1/11/24**

**Aim:**

write an application that draws graphical primitives on the screen.

**Algorithm:**

1. Open Android Studio and then click on **File -> New -> New project.**
2. Then select the **Minimum SDK** as shown below and click **Next**
3. Then select the **Empty Activity** and click **Next.**
4. It will take some time to build and load the project
5. Click on **app -> res -> layout -> activity\_main.xml.**
6. Screen layout can be viewed by clicking graphics layout tab.
7. Override On Create() function
8. Save the program and Run the program.
9. Output can be viewed in the android emulator.

**Implementation:**

**Activity\_main.xml:**

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <ImageView
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:id="@+id/imageView" />
</RelativeLayout>
```

**MainActivity.java:**

```
package com.example.exno4;
import android.app.Activity;
import android.graphics.Bitmap;
import android.graphics.Canvas;
import android.graphics.Color;
import android.graphics.Paint;
import android.graphics.drawable.BitmapDrawable;
import android.os.Bundle;
import android.widget.ImageView;

public class MainActivity extends Activity
{
    @Override
    public void onCreate(Bundle savedInstanceState)
    {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
}
```

```

//Creating a Bitmap
Bitmap bg = Bitmap.createBitmap(720, 1280, Bitmap.Config.ARGB_8888);

//Setting the Bitmap as background for the ImageView
ImageView i = (ImageView) findViewById(R.id.imageView);
i.setBackgroundDrawable(new BitmapDrawable(bg));

//Creating the Canvas Object
Canvas canvas = new Canvas(bg);

//Creating the Paint Object and set its color & TextSize
Paint paint = new Paint();
paint.setColor(Color.BLUE);
paint.setTextSize(50);

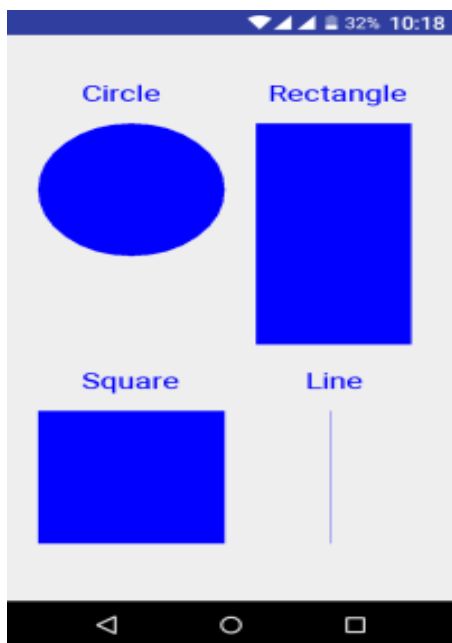
//To draw a Rectangle
canvas.drawText("Rectangle", 420, 150, paint);
canvas.drawRect(400, 200, 650, 700, paint);

//To draw a Circle
canvas.drawText("Circle", 120, 150, paint);
canvas.drawCircle(200, 350, 150, paint);

//To draw a Square
canvas.drawText("Square", 120, 800, paint);
canvas.drawRect(50, 850, 350, 1150, paint);
//To draw a Line
canvas.drawText("Line", 480, 800, paint);
canvas.drawLine(520, 850, 520, 1150, paint);
}
}

```

### Output:



**Result:** Thus an android program to create application that draws graphical primitives on the screen is executed successfully.