

# Assignment-1

## 1. Create a HTML page with hyperlink. When user click on hyper link the page will open

```
<!DOCTYPE html>
<html>
<head>
  <title> practical Assignment1 </title>
</head>
<body>
  <h1> 1.1 </h>
  <h3> <p> Create a HTML page with hyperlink.
  <br>
  When user click on hyper link  the page will open </p></h3>
  <p> <small> Click on "Google" to open google.com </small> </p>
  <p><a href="https://www.google.com/"> <small> Google </small> </a></p>
</body>
</html>
```

## 2. Make following table in HTML:

```
<!DOCTYPE html>
<html>
<title> practical Assignment1 </title>
<body>
  <h1>1.2</h1>
  <h3>Make table in HTML > Time Table And Fare List </h3>
  <table border="1">
    <tr>
      <th rowspan='2' > Time table and fare list <br> Name of Train </th>
      <th rowspan='2'> place </th>
      <th rowspan='2'> Destination </th>
      <th colspan='2'> Time </th>
      <th rowspan="2">Fare</th></tr>
    <tr>
      <td ><b> Arrival </b></td>
      <td><b> Departure </b></td></tr>
  <tr>
    <td> Rajdhani Express </td>
    <td> Bombay </td>
    <td> Delhi </td>
    <td> 7.30</td>
```

```
<td> 8.45 </td>
<td> Rs 989.00 </td>
</tr>
<tr>
  <td> Madras Mail </td>
  <td> Bombay </td>
  <td> Madras </td>
  <td> 9.00 </td>
  <td> 10.15 </td>
  <td> Rs 450.00 </td>
</tr>
<tr>
  <td> Konya Express </td>
  <td> Bombay </td>
  <td> Banglore </td>
  <td> 11.30 </td>
  <td> 12.25 </td>
  <td> Rs 645.00 </td>
</tr>
<tr>
  <td> Konkan Express </td>
  <td> Bombay </td>
  <td> Manglore </td>
  <td> 13.30 </td>
  <td> 14.45 </td>
  <td> Rs 756.00 </td>
</tr>
<tr>
  <td> Deccan Express </td>
  <td> Bombay </td>
  <td> Pune </td>
  <td> 16.00</td>
  <td> 17.30 </td>
  <td> Rs 345.00 </td>
</tr>
</table>
</body>
</html>
```

**3. Create a 3\*3 table. Each cell have an image.**

```
<!DOCTYPE html>
<html>
  <title>Practical Assignment1</title>
  <body>
    <h1>1.3</h1>
    <h3>Create a 3*3 table with an image in each cell</h3>
```

```

<table border="1">
  <tr>
    <td>
      
    </td>
    <td>
      
    </td>
    <td>
      
    </td> </tr>
  <tr>
    <td>
      
    </td>
    <td>
      
    </td>
    <td>
      
    </td>
  </tr>
  <tr>
    <td>
      
    </td>
    <td>
      
    </td>
    <td>
      
    </td>
  </tr>
</table>
</body>
</html>

```

**4. Make a HTML form similar to <https://login.yahoo.com/account/create?specId=yidReg>.**

```

<html>
<head>
<style>
#mainfont{
  font-family:'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif;

```

```

}
#table{ text-align: left; }
</style>
<title> Practical Assignment 1 : Make a HTML form similar to Yahoo account login. </title>
<h4> 1.4 </h4>
</head><body><br>

<table align="center" >
<tr><td align="center">

</td></tr>
<tr><td align="center"> <br>
<h2 mainfont> Create a Yahoo account <h2>
<p style="font-size: 17px; font-style:normal; font-weight:normal; font-family:Calibri " > Access
all that Yahoo has to offer with a <br> single account. All fields are required.</p>
</td></tr>
<form name="Yahoologinform" id="yahoologin">
<tr><td>
<lable for="uname" > Full Name </lable>
</td></tr>
<tr><td>
<input type="text" id="name" size="40" placeholder="Full Name" name="name">
</td></tr><br>
<tr><td>New Yahoo email address</td></tr>
<tr><td>
<input type="text" id="mailid" size="40" placeholder="
@yahoocom"
name="mailid">
</td></tr>
<tr><td>Password</td></tr>
<tr><td><input type="password" id="pswd" placeholder="Enter Password"></td></tr>
<br><tr><td>Date of birthday</td></tr>
<tr><td><input type="date" id="birthday" name="birthday"></td></tr><br>
<tr><td align="center">
By continuing, you agree to our <span style="color:blue;font-weight:bold"> Terms </span> and
<br> <span style="color:blue;font-weight:bold"> Privacy Policy <span>
</td></tr><br>
<tr><td align="center">
<input type="submit" name="Continue" value="Continue" color="blue" >
</td></tr>
</table></body></html>

```

## 5. Make your own resume in HTML

```

<!DOCTYPE html>
<html>
<head>
<title>practical5 Resume</title>

```

```
</head>
<body>
  <div class="container">
    <header>
      <h4>1.5</h4>
      <h1>Payal</h1>
      <h3>An Analyst</h3>
      <p>Email: Pl@gmail.com | Phone: (+91) 88888 88888 | LinkedIn: linkedin.com/in/pl</p>
    </header>
    <section class="section">
      <h2>About Me</h2>
      <p>Adaptable, hardworking and always motivated to learn, with 7 + years of total
experience in
      business <br>analytics, accounts - sap, and a mortgage service with demonstrated
ability to train,
      manage and <br>motivate and lead team member to achieve objectives. I wish to build
career where I
      can optimize <br>my knowledge and skills and add value to the
      organization and into my life.</p>
    </section>
    <section class="section">
      <h2>Experience</h2>
      <div class="job">
        <h3>Senior Analyst CBO</h3>
        <p><strong>ABC Corp</strong> | January 2019 - Present</p>
        <ul>
          <li>Developed special reports using database as per client requirements on NAD</li>
          <li>Team level project progress management and annual/monthly report updates</li>
          <li>Data Verification and Reports Cross Verification</li>
        </ul>
      </div>
      <div class="job">
        <h3>Accountant </h3>
        <p><strong>XYZ ltd</strong> | June 2017 - December 2019</p>
        <ul>
          <li>SAP - Vendor creation and Verification</li>
          <li>Accounts payable - Payment Processing</li>
          <li>receipt Verification and Processing</li>
        </ul>
      </div>
      <div class="job">
        <h3>Mortgage service representative </h3>
        <p><strong>PQR ltd</strong> | June 2017 - December 2019</p>
        <ul>
          <li>Knowledge in mortgage system and required tools</li>
          <li>Knowledge in loan foreclosure-bankruptcy and Escrow</li>
          <li>Customer service-email, Email research and reporting</li>
```

```
</ul>
</div>
</section>
<section class="section">
  <h2>Education</h2>
  <div class="education">
    <h4> Pursuing PGDCSA from University of GI</h4>
  </div>
</section>
<section class="section">
  <h2>Skills</h2>
  <ul>
    <li>HTML, CSS, JavaScript</li>
    <li>C, python, MySQL</li>
    <li>MS office tools</li>
    <li>BI tools </li>
  </ul>
</section>
</div>
</body>
</html>
```

**6. Create a HTML page with 3 frames. The page has top row with 100% width and 2 columns with 30% and 70% width. There is a hyperlink for each frame and a page should be open in a frame and second hyperlink should be in new tab/page**

```
<!DOCTYPE html>
<html>
<head>
  <title>practical 6 Three Frames Layout</title>
</head>
```

```
  <frameset rows="35%, 100%">
    <frame src="Pract 6.1.html" name="Top">
```

```
  <frameset cols="30%, 70%">
    <frame src="pract 6.2.html" name="Left">
    <frame src="pract 6.3.html" name="Right">
```

```
  </frameset>
```

```
</frameset>
```

```
</html>
```

### **Pract 6.1**

```
<!DOCTYPE html>
<html>
<head>
  <h1>Practical 6 top frame</h1>
</head>
```

```
<body style="text-align: center;">
  <h3>I represent top frame.</h3>
  <a href="pract 6.11.html" target="Top">Top Frame</a>
  <a href="https://timesofindia.indiatimes.com/" target="_blank">Times of India</a>
</body>
</html>
```

**pract 6.2**

```
<!DOCTYPE html>
<html>
<head>
  <h1>Practical 6 Left frame</h1>
</head>
<body style="text-align: center;">
  <h3>I represent Left frame.</h3>
  <a href="pract 6.22.html" target="Left">Left Frame</a>
  <a href="https://www.indiatoday.in/" target="_blank">India Today</a>
</body>
</html>
```

**pract 6.3**

```
<!DOCTYPE html>
<html>
<head>
  <h1>Practical 6 Right frame</h1>
</head>
<body style="text-align: center;">
  <h3>I represent Right frame.</h3>
  <a href="pract 6.33.html" target="Right">Right Frame</a>
  <a href="https://english.gujaratsamachar.com/" target="_blank">Gujarat Samachar</a>
</body>
</html>
```

**pract 6.11**

```
<!DOCTYPE html>
<html>
<head>
  <title>Top Frame</title>
</head>
<body>
  <a href="Pract 6.1.html" target="Top">Open in Top Frame</a>
  <a href="https://timesofindia.indiatimes.com/" target="_blank">Open in New Tab</a>
</body>
</html>
```

**pract 6.22**

```
<!DOCTYPE html>
<html>
<head>
  <title>Left Frame</title>
</head>
```

```
<body>
  <a href="Pract 6.2.html" target="Left">Open in Left Frame</a>
  <a href="https://www.indiatoday.in/" target="_blank">Open in New Tab</a>
</body>
</html>
```

**pract 6.33**

```
<!DOCTYPE html>
<html>
<head>
  <title>Right Frame</title>
</head>
<body>
  <a href="Pract 6.3.html" target="Right">Open in Left Frame</a>
  <a href="https://english.gujaratsamachar.com/" target="_blank">Open in New Tab</a>
</body>
</html>
```

**7. Use following tag****I. article II. section III. nav IV. menu V. div****VI. span VII. video VIII. audio IX. object X. embed XI. iframe**

```
<!DOCTYPE html>
<html>
  <h1>Practical 7 explains the given tags</h1>
  <body>
<article>
  <h1>Article Tag</h1>
  <p>This is the content of the article. It can include text, images, and other elements.</p>
</article>
<section>
  <h2>Section Tag</h2>
  <p>This is a section of content within the document. It is usually used to group related content together.</p>
</section>
<h2>Nav tag</h2>
<nav>
  <ul>
    <li><a href="C:\PGDCSA\ITWD\assignment 1\practical5.html">Resume</a></li>
    <li><a href="https://th.bing.com/th/id/OIP.S4roqLkO7soJ9PswKTr8lgHaE8?w=266&h=180&c=7&r=0&o=5&pid=1.7">My Photo</a></li>
    <li><a href="https://th.bing.com/th/id/OIP.rHnOP1kRITzYywl1uY_UNQHaEK?w=272&h=180&c=7&r=0&o=5&pid=1.7">My sports</a></li>
  </ul>
</nav>
<h2>Menu tag</h2>
```



```
<menu>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</menu>
<h2>Div tag</h2>
<div class="container">
  <h3>Heading</h3>
  <p>This is a paragraph within a div element. It is used to group content together.</p>
</div>
<h2>Span tag</h2>
<p>This is a <span style="color: red;">highlighted</span> word.</p>
<h2>Video tag</h2>
<video width="640" height="360" controls>
  <source src="https://youtu.be/sr2rXc9Qu4A" type="video/mp4">
  Your browser does not support the video tag.
</video>
<h2>Audio tag</h2>
<audio controls>
  <source src="audio.mp3" type="audio/mpeg">
  Your browser does not support the audio tag.
</audio>
<h2>Object tag</h2>
<object data="" width="300" height="200">
  <p>Your browser does not support the object tag.</p>
</object>
<h2>Embed tag</h2>
<embed src="data:image/png;base64, " width="600" height="400" type="application/x-
shockwave-flash">
<h2>Iframe tag</h2>
<iframe width="560" height="315"
src="https://www.youtube.com/embed/ZbZSe6N_BXs?si=Gkxohys1Ed0e14os" title="YouTube
video player" frameborder="0" allow="accelerometer; autoplay; clipboard-write; encrypted-
media; gyroscope; picture-in-picture; web-share"
referrerpolicy="strict-origin-when-cross-origin" allowfullscreen></iframe>
</body>
</html>
```

## 8. Create an external style sheet with background color is silver for Q2

```
<!DOCTYPE html>
<html>
  <head><title> practical Assignment1 </title>
  <link rel="stylesheet" href="stylesheet.css">
</head>
<body>
<h1>1.8</h1>
```

<h3>Make table in HTML > Time Table And Fare List </h3>

<h5> Create an external style sheet with background color is silver for Q2</h5><table border="1">

<tr>

<th rowspan='2' > Time table and fare list <br> Name of Train </th>

<th rowspan='2'> place </th>

<th rowspan='2'> Destination </th>

<th colspan='2'> Time </th>

<th rowspan="2">Fare</th></tr>

<tr>

<td ><b> Arrival </b></td>

<td><b> Departure </b></td></tr>

<tr>

<td> Rajdhani Express </td>

<td> Bombay </td>

<td> Delhi </td>

<td> 7.30</td>

<td> 8.45 </td>

<td> Rs 989.00 </td>

</tr>

<tr>

<td> Madras Mail </td>

<td> Bombay </td>

<td> Madras </td>

<td> 9.00 </td>

<td> 10.15 </td>

<td> Rs 450.00 </td>

</tr>

<tr>

<td> Konya Express </td>

<td> Bombay </td>

<td> Banglore </td>

<td> 11.30 </td>

<td> 12.25 </td>

<td> Rs 645.00 </td>

</tr>

<tr>

<td> Konkan Express </td>

<td> Bombay </td>

<td> Manglore </td>

<td> 13.30 </td>

<td> 14.45 </td>

<td> Rs 756.00 </td>

</tr>

<tr>

<td> Deccan Express </td>

<td> Bombay </td>

```
<td> Pune </td>
<td> 16.00</td>
<td> 17.30 </td>
<td> Rs 345.00 </td>
</tr>
</table>
</body>
</html>
```

### 9. Apply internal style sheet for Q3.

```
<!DOCTYPE html>
<html>
  <head>
    <title>Practical Assignment1</title>
    <style>
      table {
        font-family: Cambria, Cochin, Georgia, Times, 'Times New Roman', serif;
        border-style: groove;
        width: 20%;
        border: 2;
        padding: 10px;
        border-spacing: 10px;
      }
    </style>
  </head>
  <body>
    <h1>1.9</h1>
    <h3>Apply internal style sheet for Q3</h3>
    <table border="1">
      <tr>
        <td>
          
        </td>
        <td>
          
        </td>
        <td>
          
        </td>
      </tr>
      <tr>
        <td>
          
        </td>
        <td>
          
        </td>
      </tr>
    </table>
```

```
</td>
<td>
  
</td>
</tr>
<tr>
  <td>
    
  </td>
  <td>
    
  </td>
  <td>
    
  </td>
</tr>
</table>
</body>
</html>
```

# Assignment-2

**Apply following effect using Css:**

**1) Write a HTML code with inline Css**

```
<!DOCTYPE html>
<html>
<head>
  <title>Write a HTML code with inline Css</title>
  <h3>2.1</h3>
</head>
<body style="background-color: hsla(193, 61%, 84%, 0.389); font-family:'Times New Roman',
Times, serif; margin: 20px;">
  <h1 style="color: #045e4a; text-align:left; padding:5px; font-style: oblique ; ">
    The Human made web 🏠
  </h1>
  <h5> Today's topic: Climate </h5>
  <p style="color: #0d0d0d; font-size: 16px; line-height: 2; padding: 10px;">
    India's climate is diverse due to its size, topography, and latitude.
  </p>
  
  <h2 style="color: #045e4a;">
    India's climate</h2>
  <ul style="list-style-type: square; padding-left: 1.5cm; margin: 10px;">
    <li style="color: #0d0d0d; margin-bottom: 5px;">
      <span style="font-weight: bold;">Winter:</span>
      December to early April</li>
    <li style="color: #0d0d0d; margin-bottom: 5px;">
      <span style="font-weight: bold;">Summer:</span>
      April to June, or April to July in northwest India</li>
    <li style="color: #0d0d0d; margin-bottom: 5px;">
      <span style="font-weight: bold;">Monsoon: </span>June to September</li>
    <li style="color: #0d0d0d; margin-bottom: 5px;"> <span style="font-weight: bold;">Post-
monsoon: </span>
      October to December</li>
  </ul>
</body>
</html>
```

**2) Write a HTML code with Internal Css**

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

```
<head>
  <title>Write a HTML code with Internal Css</title>
  <h3>2.2</h3>
  <style>
    body {
      background-color: hsla(193, 61%, 84%, 0.389);
      font-family:'Times New Roman', Times, serif;
      margin: 20px;
    }
    h1{
      color: #045e4a;
      text-align:left;
      padding:5px;
      font-style: oblique;
    }
    p{
      color: #0d0d0d;
      font-size: 16px;
      line-height: 2;
      padding: 10px;
    }
    img {
      left: auto;
      padding-left: 1cm
    }
    h2{
      color: #045e4a;
    }
    ul{
      list-style-type: square;
      padding-left:1.5cm;
      margin: 10px;
    }
    li{
      color: #0d0d0d;
      margin-bottom: 5px;
    }
  </style>
</head>
<body>
  <h1>
    The Human made web 🏠
  </h1>
  <h5> Today's topic: Climate </h5>
  <p>
    India's climate is diverse due to its size, topography, and latitude.
  </p>
```

```

<h2> India's climate</h2>
<ul >
  <li >
    <span style="font-weight: bold;">Winter:</span>
    December to early April</li>
  <li>
    <span style="font-weight: bold;">Summer:</span>
    April to June, or April to July in northwest India</li>
  <li >
    <span style="font-weight: bold;">Monsoon: </span>June to September</li>
  <li> <span style="font-weight: bold;">Post-monsoon: </span>
    October to December</li>
</ul>
</body>
</html>
```

### 3) Write a HTML code with External Css

- ? **Css – Color**
- ? **Css- background**
- ? **Css-Font**
- ? **Css-Text**
- ? **Css-Image**
- ? **Css-Link**
- ? **Css-Border**
- ? **Css-Margin**
- ? **Css-List**
- ? **Css-padding**
- ? **Css-Cursor**

#### practical3.css

```
body {
  background-color: hsla(193, 61%, 84%, 0.389);
  font-family: 'Times New Roman', Times, serif;
  margin: 20px;
}
h1 {
  color: #045e4a;
  text-align: left;
  padding: 5px;
  font-style: oblique;
}
p {
  color: #0d0d0d;
  font-size: 16px;
  line-height: 2;
```

```
padding: 10px;
}
img {
  left: auto;
  padding-left: 1cm
}
h2{
  color: #045e4a;
}
ul{
  list-style-type: square;
  padding-left: 1.5cm;
  margin: 10px;
}
li{
  color: #0d0d0d;
  margin-bottom: 5px;
}
web
{ font: size 30px;}

web:hover
{font-size:60px;}
```

### practical3.html

```
<!DOCTYPE html>
<html>
<head>
  <title>Write a HTML code with External Css</title>
  <h3>2.3</h3>
  <link rel="stylesheet" href="C:\PGDCSA\ITWD\assignment 2\practical3.css">
</head>
<body>
  <h1>
    The Human made web <web>🏠 </web>
  </h1>
  <h5> Today's topic: Climate </h5>
  <p>
    India's climate is diverse due to its size, topography, and latitude.
  </p>
  
  <h2> India's climate</h2>
  <ul >
    <li >
      <span style="font-weight: bold;">Winter:</span>
    </li>
  </ul>
```



```
    December to early April</li>
<li>
    <span style="font-weight: bold;">Summer:</span>
    April to June, or April to July in northwest India</li>
<li >
    <span style="font-weight: bold;">Monsoon: </span>June to September</li>
<li> <span style="font-weight: bold;">Post-monsoon: </span>
    October to December</li>
</ul>
</body>
</html>
```

### JavaScript:

#### 4) Print hello word using internal JavaScript

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Print hello word using internal JavaScript </title>
    <h4>2.4</h4>
    <style>
        body {
            font-family: Verdana, Geneva, Tahoma, sans-serif;
            text-align: center;
            margin-top: 60px;
        }
        h4 {
            text-align: left;
        }
        p {
            font-family: 'Lucida Sans', 'Lucida Sans Regular', 'Lucida Grande', 'Lucida Sans Unicode',
Geneva, Verdana, sans-serif;
            font-size: large;
        }
    </style>
    <script>
function displayMessage()
{
    document.getElementById("message1").innerText =
    "Have a nice day :) ";
    document.getElementById("message2").innerText =
    "Hi there!! ";
}
window.onload = displayMessage;
```

```
</script>
</head>
<body>
  <h1>Hello! <br> </h1><br>
  <p id="message2"></p><br>
  <p id="message1"></p>
</body>
</html>
```

## 5) Apply all the arithmetic Operation using JavaScript

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

<h4>2.5</h4>
<title>Apply all the arithmetic Operation using JavaScript </title>
</head>
<body>
  <h2>Arithmetic Operations in JavaScript</h2>
  <form id="Form">
    <label for="num1">Number 1:</label>
    <input type="number" id="num1" required>
    <br><br>
    <label for="num2">Number 2:</label>
    <input type="number" id="num2" required>
    <br><br>
    <button type="button" onclick="performOperations()">Calculate</button>
  </form>
  <div class="result" id="result"></div>
  <script>
    function performOperations() {
      var num1 = parseFloat(document.getElementById('num1').value);
      var num2 = parseFloat(document.getElementById('num2').value);
      if (isNaN(num1) || isNaN(num2)) {
        alert('Please enter valid numbers.');
```

```
<p>Division: ${num1} / ${num2} = ${quotient}</p>
<p>Modulus: ${num1} % ${num2} = ${remainder}</p>`
}
</script>
</body>
</html>
```

## 6) Accept number from the user and find number is even or odd, display result using alert box

```
<!DOCTYPE html>
<html>
<head>
<h4>2.6</h4>
<title>Accept number from the user and find number is even or odd, display result
using alert box </title>
</head>
<body>
<h2>Check if a number is even or odd</h2>
<form id="evenOddForm">
  <label for="number">Enter a Number:</label>
  <input type="number" id="number" required>
  <br><br>
  <button type="button" onclick="checkEvenOdd()">Check</button>
</form>

<script>
function checkEvenOdd()
{
  var num = parseInt(document.getElementById('number').value);

  if (isNaN(num)) {
    alert('Please enter a valid number.');
```

```
    return;}

  if (num % 2 === 0) {
    alert(num + ' is an even number.');
```

```
  else
  {
    alert(num + ' is an odd number.');
```

```
  }
}
```

```
</script>
```

```
</body>
```

```
</html>
```

**7) Using while loop print all even number between 1 -25.**

```
<!DOCTYPE html>
<html>
<head>
<h4>2.7</h4>
<title>Using while loop print all even number between 1 - 25</title>
</head>
<body>
  <h2>Even Numbers Between 1 and 25:</h2>
  <div id="evennum"></div>

  <script>
    var num = 1;
    var result = " ";

    while (num <= 25)
    {
      if (num % 2 === 0)
      {
        result += num + " ";
      }
      num++;
    }

    document.getElementById('evennum').innerText = result;
  </script>
</body>
</html>
```

**8) Using for loop print multiplication table.**

```
<!DOCTYPE html>
<html>
<head>
<h4>2.8</h4>
<title>Using for loop print multiplication table. </title>
</head>
<body>
  <h2>Multiplication Table:</h2>
  <form>
    <label for="number">Enter a number:</label>
    <input type="number" id="number" required>
    <button type="button" onclick="printTable()">Print Table</button>
  </form>
  <div id="multi_table"></div>
```

```
<script>
function printTable()
{
    var num = parseInt(document.getElementById('number').value);
    var result = "";

    for (var i = 1; i <= 10; i++)
    {
        result += num + " x " + i + " = " + (num * i) + "<br>";
    }

    document.getElementById('multi_table').innerHTML = result;
}
</script>
</body>
</html>
```

### 9) Using do while loop find number divisible by 3 between 1-50

```
<!DOCTYPE html>
<html>
<head>
<h4>2.9</h4>
<title>Using do while loop find number divisible by 3 between 1-50 </title>
</head>
<body>
<h2>Numbers Divisible by 3 Between 1 and 50:</h2>
<div id="result"></div>
<script>
var num = 1;
var result = "";
do {
    if (num % 3 === 0)
    {result += num + " ";}
    num++;
}
while (num <= 50);
document.getElementById('result').innerText = result;
</script>
</body>
</html>
```

### 10) Implement all the dialog Box: Apply all dialogue box 1. Alert 2. Prompt 3. Confirm

```
<!DOCTYPE html>
```

```
<html>
<head>
<h4>2.10</h4>
<title> Implement all the dialog Box: Apply all dialogue box 1. Alert 2. Prompt 3. Confirm</title>
</head>
<body>
  <h2>JavaScript Dialog Boxes</h2>
  <button onclick="showAlert()">Alert</button>
  <button onclick="showPrompt()">Prompt</button>
  <button onclick="showConfirm()">Confirm</button>
  <div id="result"></div>

  <script>
    function showAlert() {
      alert("click the next button");}
    function showPrompt() {
      var userResponse = prompt("Enter a name you want to display:");
      if (userResponse != null)
        {document.getElementById('result').innerText = "Hello, " + userResponse + "!";}
      else {
        document.getElementById('result').innerText = "You didn't enter anything!";
      }
    }
    function showConfirm() {
      var userConfirmed = confirm("do you want to confirm your display name?");
      if (userConfirmed) {
        document.getElementById('result').innerText = "Action confirmed!";}
      else {
        document.getElementById('result').innerText = "Action cancelled!";
      }
    }
  </script>
</body>
</html>
```

# Assignment-3

**Practical Assignment (write a JavaScript of the following.)**

**1) Simple calculator with 3 Textboxes.**

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

<title>Simple calculator with 3 Textboxes.</title>
<style>
  .textbox {
    margin: 3px;
    padding: 6px;
  }
  .button {
    padding: 3px;
    margin-top: 6px;
  }
</style>
</head>
<body>
<h6>3.1</h6>
<h2>Simple Calculator</h2>
<input type="text" id="num1" class="textbox" placeholder="Type a number">

<select id="operator" class="textbox">
  <option value="add">+</option>
  <option value="subtract">-</option>
  <option value="multiply">*</option>
  <option value="divide">/</option>
</select>
<input type="text" id="num2" class="textbox" placeholder="Type a number">
<button onclick="calculate()" class="button">Calculate</button>
<h3>Result: <span id="result"></span></h3>

<script>
function calculate() {
  let num1 = parseFloat(document.getElementById('num1').value);
  let num2 = parseFloat(document.getElementById('num2').value);
  let operator = document.getElementById('operator').value;
  let result;

  if (operator == "add") {
```

```
        result = num1 + num2;
    } else if (operator == "subtract") {
        result = num1 - num2;
    } else if (operator == "multiply") {
        result = num1 * num2;
    } else if (operator == "divide") {
        result = num1 / num2;
    }

    document.getElementById('result').innerText = result;

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

## 2) Leap Year

```
<!DOCTYPE html>
<html>
<head>
  <title>Leap Year Checker</title>
  <style>
    .textbox {
      margin: 3px;
      padding: 9px;
    }
    .button {
      padding: 3px;
      margin-top: 6px;
    }
  </style>
</head>
<body>
  <h6>3.2</h6>
  <h2>Leap Year Checker</h2>
  <input type="text" id="year" class="textbox" placeholder="Enter a year">
  <button onclick="checkLeapYear()" class="button">Check</button>
  <h3 id="result"></h3>
  <script>
    function checkLeapYear() {
      let year = parseInt(document.getElementById('year').value);
      let result;
      if ((year % 4 === 0 && year % 100 !== 0) || (year % 400 === 0)) {
        result = year + " is a leap year.";
      } else {
        result = year + " is not a leap year.";
      }
    }
  </script>
```



```
        document.getElementById('result').innerText = result;
    }
</script>
</body>
</html>
```

### 3) Odd, Even , Positive ,Negative

```
<!DOCTYPE html>
<html>
<head>
    <title>Odd, Even , Positive ,Negative</title>
    <style>
        .textbox {
            margin: 3px;
            padding: 9px;
        }
        .button {
            padding: 3px;
            margin-top: 6px;
        }
    </style>
</head>
<body>
    <h6>3.3</h6>
    <h2>Odd | Even | Positive | Negative - Checker</h2>
    <input type="text" id="number" class="textbox" placeholder="Enter a number">
    <button onclick="checkNumber()" class="button">Check</button>
    <h3 id="result"></h3>

    <script>
        function checkNumber() {
            let number = parseFloat(document.getElementById('number').value);
            let result = "";

            if (isNaN(number)) {
                result = "Please enter a valid number.";
            } else {
                if (number % 2 === 0) {
                    result += number + " is even. ";
                } else {
                    result += number + " is odd. ";
                }
            }

            if (number > 0) {
                result += number + " is positive.";
            } else if (number < 0) {
```

```
        result += number + " is negative.";
    } else {
        result += number + " is zero.";
    }
}

document.getElementById('result').innerText = result;
}
</script>
</body>
</html>
```

#### 4) Maximum, Minimum number

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Maximum, Minimum number</title>
<style>
    .textbox {
        margin: 3px;
        padding: 9px;
    }
    .button {
        padding: 3px;
        margin-top: 6px;
    }
</style>
</head>
<body>
    <h6>3.4</h6>
    <h2>Find Maximum and Minimum Number</h2>
    <div id="inputs-container">
        <div class="input-group">
            <label for="number1">Enter a number:</label>
            <input type="number" id="number1" class="number-input">
        </div>
    </div>
    <button onclick="addInput()">Add Another Number</button>
    <button onclick="findMaxMin()">Find Max & Min</button>
    <div id="result"></div>

    <script>
        function addInput() {
            const container = document.getElementById('inputs-container');
            const newInputGroup = document.createElement('div');
            newInputGroup.className = 'input-group';
```

```

    newInputGroup.innerHTML = `
      <label>Enter a number:</label>
      <input type="number" class="number-input">
    `;
    container.appendChild(newInputGroup);
  }

  function findMaxMin() {
    const inputs = document.querySelectorAll('.number-input');
    const numbers = Array.from(inputs).map(input => Number(input.value)).filter(value =>
!isNaN(value));

    if (numbers.length > 0) {
      const max = Math.max(...numbers);
      const min = Math.min(...numbers);
      document.getElementById('result').innerHTML = ` Maximum number:
${max}<br>Minimum number: ${min}`;
    } else {
      document.getElementById('result').innerHTML = 'No valid numbers were entered.';
    }
  }
</script>
</body>
</html>

```

**5) Get Mark of 3 subjects and give result like if total marks are between 0 – 50 then fail ,50 –100 then pass ,100-150 then first class**

```

<!DOCTYPE html>
<html>
<head>
  <title>Get Mark of 3 subjects and give result like if total marks are between 0 – 50 then fail,50 –
100 then pass ,100-150 then first class</title>
  <style>
    body{ margin: 29px;}
    .textbox {

      margin:4px;
      padding: 6px;
    }
    .button {
      padding: 3px;
      margin-top: 6px;
    }
  </style>
</head>
<body>

```

```
<h6>3.5</h6>
<h2>Result Checker</h2>
<input type="number" id="subject1" class="textbox" placeholder="Subject 1" max='50'
min='0'>
<input type="number" id="subject2" class="textbox" placeholder="Subject 2"max='50'
min='0'>
<input type="number" id="subject3" class="textbox" placeholder="Subject 3"max='50'
min='0'>
<button onclick="checkResult()" class="button">Check Result</button>
<h3 id="result"></h3>

<script>
function checkResult() {
    let marks1 = parseFloat(document.getElementById('subject1').value);
    let marks2 = parseFloat(document.getElementById('subject2').value);
    let marks3 = parseFloat(document.getElementById('subject3').value);
    let totalMarks = marks1 + marks2 + marks3;
    let result;

    if (isNaN(marks1) || isNaN(marks2) || isNaN(marks3)) {
        result = "Enter marks of all the subjects:";
    } else {
        if (totalMarks <= 50) {
            result = "Fail";
        } else if (totalMarks <= 100 |totalMarks >=51 ) {
            result = "Pass";
        } else if (totalMarks <= 150|totalMarks >=101 ) {
            result = "First Class";
        } else {
            result = "Invalid total marks.";
        }

        result = "Total Marks: " + totalMarks + " - " + result;
    }

    document.getElementById('result').innerText = result;
}
</script>
</body>
</html>
```

## 6) Enter Color name and according to it textbox color will change

```
<!DOCTYPE html>
<html>
<head>
<title>Enter Color name and according to it textbox color will change</title>
```

```
<style>
  .textbox {
    width: 150px;
    margin: 6px;
    padding: 9px;
    border-radius: 20px;

  }
  .button {
    padding: 5px;
    margin-top: 5px;
  }
</style>
</head>
<h6>3.6</h6>
<body>
  <h2>Color Changer</h2>
  <input type="text" id="colorInput" class="textbox" placeholder="Enter a color name">
  <button onclick="changeColor()" class="button">Change Color</button>

  <script>
    function changeColor() {
      let colorName = document.getElementById('colorInput').value;
      document.getElementById('colorInput').style.backgroundColor = colorName;
    }
  </script>
</body>
</html>
```

**7) Enter student no according to no display message “Good”, ”Try best in next exam”, ”Need to improve” (Select case)**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Enter student no according to no display message “Good”, ”Try best in next exam”, ”Need to improve” (Select case)</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      margin: 20px;
    }
    .input-group {
      margin-bottom: 30px;
      width: 500px;
    }
  </style>
```

```
</head>
<body>
<h2> 3.7 </h2>
  <h2>Student's Grade</h2>
  <div class="input-group">
    <label for="studentNo">Enter student's Grade (1-10):</label>
    <input type="Number" id="studentNo"placeholder="Enter student's grade">
  </div>
  <button onclick="displayMessage()">Get Message</button>
  <div id="message"></div>

  <script>
    function displayMessage() {
      var studentNo = Number(document.getElementById('studentNo').value);
      var message = "";

      switch (true) {
        case (studentNo >= 1 && studentNo <= 3):
          message = "Try best in next exam";
          break;
        case (studentNo >= 4 && studentNo <= 6):
          message = "Need to improve";
          break;
        case (studentNo >= 7 && studentNo <= 10):
          message = "Good";
          break;
        default:
          message = "Invalid student's grade";
      }

      document.getElementById('message').innerText = message;
    }
  </script>
</body>
</html>
```

### 8) Print Table

```
<!DOCTYPE html>
<html>
<head>
<title>Print Table</title>
  <style>
    .input-group {
      margin-bottom: 10px;
    }
  </style>
```

```
</head>
<body>
  <h6>3.8</h6>
  <h2>Multiplication Table</h2>
  <div class="input-group">
    <label for="number">Enter a number:</label>
    <input type="text" id="number">
  </div>
  <button onclick="printTable()">Generate a Table</button>
  <div id="result"></div>

  <script>
    function printTable() {
      var num = Number(document.getElementById('number').value);
      var resultDiv = document.getElementById('result');
      var tableHTML = "<h3>Multiplication Table for " + num + "</h3>";

      tableHTML += "<table border='1' cellpadding='6' cellspacing='1'>";
      for (var i = 1; i <= 10; i++) {
        tableHTML += "<tr><td>" + num + " x " + i + "</td><td>" + (num * i) + "</td></tr>";
      }
      tableHTML += "</table>";

      resultDiv.innerHTML = tableHTML;
    }
  </script>
</body>
</html>
```

## 9) Reverse number , Reverse string , Palindrome

```
<!DOCTYPE html>
<html>
<head>
  <title>Reverse number , Reverse string , Palindrome</title>
  <style>
    .textbox {
      width: 150px;
      margin: 3px;
      padding: 6px;
    }
    .button {
      padding: 3px;
      margin-top: 6px;
    }
  </style>
```

```

</head>
<body>
  <h6>3.9</h6>
  <h2>Number and String Operations</h2>
  <input type="text" id="number" class="textbox" placeholder="Enter a number">
  <button onclick="ReverseNumber()" class="button">Reverse Number</button>
  <h3 id="numberResult"></h3>
  <br>
  <input type="text" id="string" class="textbox" placeholder="Enter a string">
  <button onclick="ReverseString()" class="button">Reverse String</button>
  <button onclick="CheckPalindrome()" class="button">Check Palindrome</button>
  <h3 id="stringResult"></h3>
  <script>
    function ReverseNumber() {
      let number = document.getElementById('number').value;
      let ReversedNumber = number.split('').reverse().join('');
      document.getElementById('numberResult').innerText = "Reversed Number: " +
ReversedNumber;
    }
    function ReverseString() {
      let str = document.getElementById('string').value;
      let ReversedString = str.split('').reverse().join('');
      document.getElementById('stringResult').innerText = "Reversed String: " + ReversedString;
    }
    function CheckPalindrome() {
      let str = document.getElementById('string').value;
      let ReversedString = str.split('').reverse().join('');
      if (str === ReversedString) {
        document.getElementById('stringResult').innerText = str + " is a palindrome.";
      } else {
        document.getElementById('stringResult').innerText = str + " is not a palindrome.";
      }
    }
  </script>
</body>
</html>

```

### 10) Factorial of number.

```

<!DOCTYPE html>
<html >
<head>

<title>Factorial of number.</title>
<style>
  .input-group {
    margin-bottom: 10px;

```



```
    }
  </style>
</head>
<body>
  <h6>3.10</h6>
  <h2>Calculate Factorial of a Number</h2>
  <div class="input-group">
    <label for="number">Enter a number:</label>
    <input type="number" id="number" min="0">
  </div>
  <button onclick="calculateFactorial()">Calculate Factorial</button>
  <div id="result"></div>

  <script>
    function calculateFactorial() {
      var num = Number(document.getElementById('number').value);
      var result = factorial(num);
      document.getElementById('result').innerText = "Factorial of " + num + " is " + result;
    }

    function factorial(n) {
      if (n === 0 || n === 1) return 1;
      return n * factorial(n - 1);
    }
  </script>
</body>
</html>
```

### 11) Addition of series like 1234 then answer $1+2+3+4 = 10$

```
<!DOCTYPE html>
<html>
<head>
  <title>Addition of series like 1234 then answer  $1+2+3+4 = 10$ </title>
  <style>
    .textbox {
      width: 150px;
      margin: 5px;
      padding: 10px;
    }
    .button {
      padding: 10px;
      margin-top: 10px;
    }
  </style>
</head>
<body>
```

```
<h6>3.11</h6>
<h2>Sum of numbers in the digit</h2>
<input type="text" id="number" class="textbox" placeholder="Enter a number">
<button onclick="CalculateDigitSum()" class="button">Calculate Sum</button>
<h3 id="result"></h3>

<script>
  function CalculateDigitSum() {
    let number = document.getElementById('number').value;
    let digits = number.split("");
    let sum = 0;
    let expression = "";

    for (var i = 0; i < digits.length; i++) {
      sum += parseInt(digits[i]);
      expression += digits[i];
      if (i < digits.length - 1) {
        expression += " + ";
      }
    }
    document.getElementById('result').innerText = expression + " = " + sum;
  }
</script>
</body>
</html>
```

**12) To display Good morning, Good afternoon, Good evening depending upon the system time.**

```
<!DOCTYPE html>
<html>
<head>
  <title>To display Good morning, Good afternoon, Good evening depending upon the system
time.</title>
  <style>
    .button {
      padding: 7px;
      margin-top: 7px;
      border-radius: 20px;
    }
  </style>
</head>
<body>
  <h6>3.12</h6>
  <h2>Greetings Of The Day!</h2>
  <button onclick="DisplayGreeting()" class="button">View Greeting</button>
  <h3 id="greeting"></h3>
```

```
<script>
  function DisplayGreeting() {
    let now = new Date();
    let hours = now.getHours();
    let greeting;

    if (hours < 12) {
      greeting = "Good morning!";
    } else if (hours < 18) {
      greeting = "Good afternoon!";
    } else {
      greeting = "Good evening!";
    }

    document.getElementById('greeting').innerText = greeting;
  }
</script>
</body>
</html>
```

### 13) To display today's date in the status bar of the browser.

```
<!DOCTYPE html>
<html>
<head>
  <title>To display today's date in the status bar of the browser.</title>
  <style>

    #dateDisplay {
      font-size: 20px;
      margin-top: 10px;
      color: rgb(36, 58, 2);
    }
  </style>
</head>
<body>
  <h6>3.13</h6>
  <h2>Today's Date:</h2>
  <div id="dateDisplay"></div>

  <script>
    function DisplayDate() {
      let now = new Date();
      let dateString = now.toDateString();
      document.getElementById('dateDisplay').innerText = "Today is " + dateString;
    }
  </script>
```

```
    DisplayDate();  
</script>  
</body>  
</html>
```

**14) Take 2 textboxes and 2 radio buttons one radio button name is Square and second one name is Cube. First text box accept the value from user whenever you click on square appropriate result will be display in second textbox.**

```
<!DOCTYPE html>  
<html>  
<head>  
    <title>Take 2 textboxes and 2 radio buttons one radio button name is Square and second one  
    name is Cube. First text box accept the value from user whenever you click on square appropriate  
    result will be display in second textbox.</title>  
    <style>  
        .textbox {  
            width: 150px;  
            margin: 5px;  
            padding: 10px;  
            border-radius: 10px;  
  
        }  
        .button {  
            padding: 10px;  
            margin-left: 5px;  
            border-radius: 10px;  
        }  
    </style>  
</head>  
<body>  
    <h6>3.14</h6>  
    <h3>Calculator Square & Cube </h3>  
    <input type="text" id="inputValue" class="textbox" placeholder="Enter a number">  
    <br>  
    <input type="radio" id="square" name="operation" value="square"> <label  
for="square">Square</label>  
    <input type="radio" id="cube" name="operation" value="cube"> <label  
for="cube">Cube</label>  
    <br>  
    <button onclick="Calculate()" class="button">Calculate</button>  
    <br>  
    <input type="text" id="result" class="textbox" placeholder="Result" readonly>  
    <script>  
        function Calculate() {  
            let value = parseFloat(document.getElementById('inputValue').value);  
            let result = 0;
```

```
    if (document.getElementById('square').checked) {
        result = value * value;
    } else if (document.getElementById('cube').checked) {
        result = value * value * value;
    }
    document.getElementById('result').value = result;
}
</script>
</body>
</html>
```

### 15) Display digital clock on button and on status bar.

```
<!DOCTYPE html>
<html>
<head>
    <title>Display digital clock on button and on status bar.</title>
    <style>
        .button {
            margin: 20px;
            padding: 30px;
            font-size: 28px;
            border-radius: 10px;
        }
        #clock {
            font-size: 15px;
        }
    </style>
</head>
<body>
    <h6>3.15</h6>
    <h2>Digital Clock </h2>
    <button class="button" id="clockButton">Show Time</button>
    <div id="clock"></div>
    <script>
        function updateClock() {
            let now = new Date();
            let hours = now.getHours().toString().padStart(2, '0');
            let minutes = now.getMinutes().toString().padStart(2, '0');
            let seconds = now.getSeconds().toString().padStart(2, '0');
            let timeString = hours + ":" + minutes + ":" + seconds;
            document.getElementById('clockButton').innerText = timeString;
            document.getElementById('clock').innerText = "Current Time: " + timeString;
        }
        if (window.status !== undefined) {
            window.status = timeString;
        }
    </script>
```

```
    setInterval(updateClock, 1000);
    updateClock();
</script>
</body>
</html>
```

**16) Write JavaScript code having two (number) textbox and one ADD button that display addition of two number in third –result text box, Apply proper validation**

```
<!DOCTYPE html>
<html>
<head>
  <title>Write JavaScript code having two (number) textbox and one ADD button that display
  addition of two number in third –result text box, Apply proper validation</title>
  <style>
    .textbox {
      width: 150px;
      margin: 8px;
      padding: 9px;
      border-radius: 9px;

    }
    .button {
      padding: 9px;
      margin-top: 9px;
    }
  </style>
</head>
<body>
  <h6>3.16</h6>
  <h2>Calculate Addition </h2>
  <input type="text" id="number1" class="textbox" placeholder="Enter first number">
  <input type="text" id="number2" class="textbox" placeholder="Enter second number">
  <br>
  <button onclick="AddNumbers()" class="button">ADD</button>
  <br>
  <input type="text" id="result" class="textbox" placeholder="Result" readonly>
  <br>
  <span id="error" style="color: red;"></span>
  <script>
    function AddNumbers() {
      let num1 = document.getElementById('number1').value;
      let num2 = document.getElementById('number2').value;
      let error = document.getElementById('error');
      let resultBox = document.getElementById('result');
      error.innerText = "";
      resultBox.value = "";
    }
  </script>
```

```
        if (!Num(num1) || !Num(num2)) {
            error.innerText = "Please enter valid numbers!";
            return;
        }
        var sum = parseFloat(num1) + parseFloat(num2);
        resultBox.value = sum;
    }
    function Num(value) {
        return value.trim() !== "";
    }
</script>
</body>
</html>
```

### 17) Form with all the validations

```
<!DOCTYPE html>
<html>
<head>
    <title>Form with all the validations</title>
    <style>
        .textbox {
            width: 150px;
            margin: 9px;
            padding: 10px;
            border-radius: 5px;
        }
        .button {
            padding: 10px;
            margin-top: 10px;
            border-radius: 5px;
        }
        .error {
            color: rgb(223, 176, 38);
            font-size: 0.8em;
        }
    </style>
</head>
<body>
    <h6>3.17</h6>
    <h2>Login Page</h2>
    <form id="registrationForm" onsubmit="return validateForm()">
        <label for="name">User Name:</label>
        <input type="text" id="name" class="textbox" placeholder="Enter your name">
        <span id="nameError" class="error"></span>
        <br>
        <label for="email">Email:</label>
```

```
<input type="text" id="email" class="textbox" placeholder="Enter your email">
<span id="emailError" class="error"></span>
<br>
<label for="contact">Contact Number:</label>
<input type="text" id="contact" class="textbox" placeholder="Enter your contact number">
<span id="contactError" class="error"></span>
<br>
<label for="password">Password:</label>
<input type="password" id="password" class="textbox" placeholder="Enter your
password">
<span id="passwordError" class="error"></span>
<br>

<br>
<button type="submit" class="button">Register</button>
</form>

<script>
function validateForm() {
    let isValid = true;

    // Name validation
    let name = document.getElementById('name').value;
    let nameError = document.getElementById('nameError');
    if (name.trim() === "") {
        nameError.innerText = "Name is required.";
        isValid = false;
    } else {
        nameError.innerText = "";
    }

    // Email validation
    let email = document.getElementById('email').value;
    let emailError = document.getElementById('emailError');
    let emailPattern = /^[a-zA-Z0-9._-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,6}$/;
    if (email.trim() === "") {
        emailError.innerText = "Email is required.";
        isValid = false;
    } else if (!emailPattern.test(email)) {
        emailError.innerText = "Please enter a valid email address.";
        isValid = false;
    } else {
        emailError.innerText = "";
    }

    // Password validation
    let password = document.getElementById('password').value;
```



```
let passwordError = document.getElementById('passwordError');
if (password.trim() === "") {
    passwordError.innerText = "Password is required.";
    isValid = false;
} else if (password.length < 6) {
    passwordError.innerText = "Password must be at least 6 characters long.";
    isValid = false;
} else {
    passwordError.innerText = "";
}

// Contact number validation
let contact = document.getElementById('contact').value;
let contactError = document.getElementById('contactError');
let contactPattern = /^[0-9]{10}$/;
if (contact.trim() === "") {
    contactError.innerText = "Contact number is required.";
    isValid = false;
} else if (!contactPattern.test(contact)) {
    contactError.innerText = "Please enter a valid 10-digit contact number.";
    isValid = false;
} else {
    contactError.innerText = "";
}

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

**18) Takes one number from user using prompt and display its square on screen and square root.**

```
<!DOCTYPE html>
<html>
<head>
    <title>Takes one number from user using prompt and display its square on screen and square
    root.</title>
    <style>
        .button {
            border-radius: 30px;
        }
    </style>
</head>
<body>
```

```
<h6>3.18</h6>
<h2>Calculate Square and Square Root</h2>
<div> To enter a number click on the below box</div>
<br>
<button onclick="calculateSquareAndRoot()">Click me!</button>
<h3 id="squareResult"></h3>
<h3 id="sqrtResult"></h3>
<script>
  function calculateSquareAndRoot() {
    let number = prompt("Please enter a number:");
    let squareResult = document.getElementById('squareResult');
    let sqrtResult = document.getElementById('sqrtResult');

    if (number !== null && !isNaN(number) && number.trim() !== "") {
      number = parseFloat(number);
      let square = number * number;
      let squareRoot = Math.sqrt(number);
      squareResult.innerText = "Square: " + square;
      sqrtResult.innerText = "Square Root: " + squareRoot;
    } else {
      squareResult.innerText = "Please enter a valid number.";
      sqrtResult.innerText = "";
    }
  }
</script>
</body>
</html>
```

### 19) Takes input Fahrenheit temperature from user and convert it into Celsius

```
<!DOCTYPE html>
<html>
<head>
  <title>Takes input Fahrenheit temperature from user and convert it into Celsius</title>
  <style>
    .textbox {
      width: 220px;
      margin: 8px;
      padding: 9px;
      border-radius: 10px;
    }
    .button {
      border-radius: 10px;
      padding: 10px;
      margin-top: 10px;
    }
  </style>
</head>
<body>
  <div>
    <input type="text" class="textbox" value="Enter Fahrenheit temperature" />
    <button class="button" value="Convert" />
  </div>
</body>
</html>
```

```
</style>
</head>
<body>
  <h6>3.19</h6>
  <h2>Temperature Converter:Fahrenheit to Celsius </h2>
  <input type="text" id="fahrenheit" class="textbox" placeholder="Enter temperature in
Fahrenheit">
  <button onclick="convertToFahrenheit()" class="button">Convert</button>
  <h3 id="result"></h3>
  <script>
    function convertToFahrenheit() {
      let fahrenheit = document.getElementById('fahrenheit').value;
      let result = document.getElementById('result');
      if (!isNaN(fahrenheit) && fahrenheit.trim() !== "") {
        var celsius = (parseFloat(fahrenheit) - 32) * 5 / 9;
        result.innerText = fahrenheit + "°F is equals to " + celsius.toFixed(2) + "°C";
      } else {
        result.innerText = "Please enter a valid number.";
      }
    }
  </script>
</body>
</html>
```

## 20) change user input into uppercase and lower case using two button Uppercase & Lower Case

```
<!DOCTYPE html>
<html>
<head>
  <title>change user input into uppercase and lower case using two button Uppercase & Lower
Case</title>
  <style>
    .textbox {
      width: 220px;
      margin: 8px;
      padding: 9px;
      border-radius: 10px;
    }
    .button {
      border-radius: 10px;
      padding: 9px;
      margin-left: 10px;
    }
  </style>
</head>
```

```
<body>
  <h6>3.20</h6>
  <h2>Inverse case</h2>
  <input type="text" id="userInput" class="textbox" placeholder="Enter text">
  <br>
  <button onclick="convertToUpper()" class="button">Uppercase</button>
  <button onclick="convertToLower()" class="button">Lowercase</button>
  <h3 id="result"></h3>

  <script>
    function convertToUpper() {
      let inputText = document.getElementById('userInput').value;
      document.getElementById('result').innerText = inputText.toUpperCase();
    }

    function convertToLower() {
      let inputText = document.getElementById('userInput').value;
      document.getElementById('result').innerText = inputText.toLowerCase();
    }
  </script>
</body>
</html>
```

**21) Display welcome message using alert when page loaded and display message bye when page unloaded/closed.**

```
<!DOCTYPE html>
<html>
<head>
  <title>Display welcome message using alert when page loaded and display message bye
  when page unloaded/closed.</title>
</head>
<body>
  <h6>3.21</h6>
  <script>
    window.onload = function() {
      alert("Welcome to the page!");
    };
    window.onunload = function() {
      return "Bye! Are you sure you want to leave?";
    };
  </script>
</body>
</html>
```

**22) Count number of occurrence of particular character**

```
<!DOCTYPE html>
<html>
<head>
  <title>Count number of occurrence of particular character</title>
  <style>
    .input-group {
      margin-bottom: 10px;
      margin-left: 3px;
    }
    .button {
      border-radius: 20px;
      padding: 9px;
      margin-left: 10px;
    }
  </style>
</head>
<body>
  <h6>3.22</h6>
  <h2>Count Character Occurrence</h2>
  <div class="input-group">
    <label for="inputString">Enter a string:</label>
    <input type="text" id="inputString">
  </div>
  <div class="input-group">
    <label for="character">Enter a character:</label>
    <input type="text" id="character" maxlength="1">
  </div>
  <button onclick="countCharacter()">Count Occurrence</button>
  <br>
  <div id="result"></div>

  <script>
    function countCharacter() {
      var str = document.getElementById('inputString').value;
      var char = document.getElementById('character').value;
      var count = 0;

      if (char.length !== 1) {
        document.getElementById('result').innerText = "Please enter a single character.";
        return;
      }

      for (var i = 0; i < str.length; i++) {
        if (str.charAt(i) === char) {
          count++;
        }
      }
    }
  </script>
</body>
</html>
```

```
    }  
  }  
  document.getElementById('result').innerText = ` Character '${char}' occurs ${count} times  
in the string.`;  
}  
</script>  
</body>  
</html>
```

### 23) Email validation, check whether email address is valid or not

```
<!DOCTYPE html>  
<html>  
<head>  
  <title>Email validation, check whether email address is valid or not</title>  
  <style>  
    .textbox {  
      width: 220px;  
      margin: 8px;  
      padding: 9px;  
      border-radius: 10px;  
    }  
    .button {  
      border-radius: 10px;  
      padding: 9px;  
      margin-left: 10px;  
    }  
    .error {  
      color: orange;  
    }  
    .success {  
      color: green;  
    }  
  </style>  
</head>  
<body>  
  <h6>3.23</h6>  
  <h2>Email Varification</h2>  
  <input type="text" id="email" class="textbox" placeholder="Enter your email address">  
  <button onclick="validateEmail()" class="button">Validate</button>  
  <h3 id="result"></h3>  
  
  <script>  
    function validateEmail() {  
      let email = document.getElementById('email').value;  
      let result = document.getElementById('result');  
      let emailPattern = /^[a-zA-Z0-9._-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,6}$/;
```

```
        if (emailPattern.test(email)) {
            result.innerText = "Valid email address.";
            result.className = "success";
        } else {
            result.innerText = "Invalid email address.";
            result.className = "error";
        }
    }
}
</script>
</body>
</html>
```

#### 24) Print 11,22,33,44 upto (1 to N) Like $1^1 = 1$ $2^2 = 4$ .

```
<!DOCTYPE html>
<html>
<head>
    <title>Print 11,22,33,44 upto (1 to N) Like  $1^1 = 1$   $2^2 = 4$ .</title>
    <style>
        .textbox {
            width: 220px;
            margin: 8px;
            padding: 9px;
            border-radius: 10px;
            margin-left: 1px;
        }
        .button {
            border-radius: 10px;
            padding: 9px;
            margin-left: 10px;
        }
        body {
            margin: 30px;
        }
    </style>
</head>
<body>
    <h6>3.24</h6>
    <h2>Power Series Calculator</h2>
    <input type="text" id="number" class="textbox" placeholder="Enter a number (N)">
    <button onclick="printPowerSeries()" class="button">Print Series</button>
    <div id="result"></div>
    <br>
    <script>
        function printPowerSeries() {
```

```
let n = parseInt(document.getElementById('number').value);
let result = document.getElementById('result');
result.innerHTML = ""; // Clear previous results
if (isNaN(n) || n <= 0) {
    result.innerText = "Please enter a valid positive integer.";
    return;
}
for (let i = 1; i <= n; i++) {
    result.innerHTML += i + "^" + i + " = " + Math.pow(i,i) + "<br>";
}
}
</script>
```

</body>

</html>

## 25) Print various pyramids.

```
<!DOCTYPE html>
<html>
<head>
    <title>Print various pyramids.</title>
    <style>
        .button-group {
            padding: 9px;
            margin-left: 10px;
        }
        body {
            font-family: Arial, sans-serif;
            margin: 20px;
        }
    </style>
</head>
<body>
    <h6>3.25</h6>
    <h2>Pyramid Display</h2>
    <div class="button-group">
        <button onclick="showAsteriskPyramid()">Asterisk Pyramid</button>
        <button onclick="showNumberPyramid()">Number Pyramid</button>
    </div>
    <div id="pyramid"></div>
    <script>
        function showAsteriskPyramid() {
            var rows = 5;
            var pyramid = "";
            for (var i = 1; i <= rows; i++) {
                pyramid += " ".repeat(rows - i) + "*".repeat(2 * i - 1) + "<br>";
```



```
    }
    document.getElementById('pyramid').innerHTML = "<pre>" + pyramid + "</pre>";
}
function showNumberPyramid() {
    var rows = 5; // You can adjust the number of rows
    var pyramid = "";
    for (var i = 1; i <= rows; i++) {
        for (var j = 1; j <= rows - i; j++) {
            pyramid += " ";
        }
        for (var k = 1; k <= i; k++) {
            pyramid += k + " ";
        }
        pyramid += "<br>";
    }
    document.getElementById('pyramid').innerHTML = "<pre>" + pyramid + "</pre>";
}
</script>
</body>
</html>
```