Lab Component(PLC141)

1. Create a web page using HTML to create your biodata that includes personal details (Name, date of birth, Address, contact number, email id), Qualification (10th and 12th marks/grades, with school/college information), List of achievements (Create a link to at least 1 achievement), insert your photo(image).

```
<!DOCTYPE html>
<html>
<head>
  <title>My Biodata</title>
</head>
<body>
  <h1>Personal Details</h1>
  <p><strong>Name:</strong> John Doe</p>
  <p><strong>Date of Birth:</strong> January 1, 1990</p>
  <p><strong>Address:</strong> 123 Main Street, City, State, ZIP</p>
  <p><strong>Contact Number:</strong> 123-456-7890</p>
  <p><strong>Email ID:</strong> john.doe@example.com</p>

  <h2>Qualification</h2>
  <table>
    <tr>
      <th>Exam</th>
      <th>Marks/Grades</th>
      <th>School/College</th>
    </tr>
    <tr>
      <td>10th</td>
      <td>95%</td>
      <td>XYZ School</td>
    </tr>
    <tr>
      <td>12th</td>
      <td>92%</td>
      <td>ABC College</td>
    </tr>
  </table>

  <h3>List of Achievements</h3>
  <ul>
    <li><a href="https://www.example.com/achievement">Achievement 1</a></li>
  </ul>

  <h4>Photo</h4>
  <img src="your_photo.jpg" alt="Your Photo" width="200" height="200">

</body>
</html>
```

Make sure to replace "John Doe" with your own name, and update the personal details, qualifications, achievements, and photo according to your information.

Save the code in an HTML file, and you can open it in a web browser to see your biodata webpage. Remember to include your photo file (e.g., `your_photo.jpg`) in the same directory as the HTML file or provide the correct file path in the `src` attribute of the `img` tag.

2. Develop web page for a typical wedding event using List tag. Apply HTML include
a.Heading
b.Image
c.Paragraph
d.Ordered list for Groceries, Vegetables of type numbers and alphabets with description
e Unordered list for Fruits, Stationery Items, Flowers of shape circle, square and diamond with description

```
<!DOCTYPE html>
<html>
<head>
  <title>Wedding Event</title>
</head>
<body>
  <h1>Wedding Event</h1>

  <h2>Image</h2>
  <img src="wedding_image.jpg" alt="Wedding Image" width="400" height="300">

  <h3>About the Event</h3>
  <p>
    India is diverse in all forms, especially in marriages it mirrors a lot of religion-based as well as cultural variations. When it comes to weddings, it is more of a festive approach in India. Yet, the colorful and vibrant South Indian and North Indian weddings reflect a lot of diversity.
  </p>


〈h4>Grocery List - Vegetables</h1>

  <ol>
    <li>1. Carrots: Crunchy and nutritious root vegetables</li>
    <li>2. Spinach: Leafy greens packed with vitamins</li>
    <li>3. Tomatoes: Juicy and versatile fruits often used as vegetables</li>
    <li>a. Broccoli: Nutrient-rich green vegetable with a distinct taste</li>
    <li>b. Cabbage: Leafy vegetable commonly used in salads and stir-fries</li>
    <li>c. Eggplant: Purple vegetable known for its smooth texture</li>
  </ol>



  <h4>Fruits</h4>
  <ul style="list-style-type: circle;">
    <li>Apples - Provides essential vitamins</li>
    <li>Oranges - Rich in Vitamin C</li>
    <li>Grapes - Sweet and refreshing</li>
  </ul>
```

```
  <h4>Stationery Items</h4>
  <ul style="list-style-type: square;">
    <li>Pens - For writing and taking notes</li>
    <li>Notebooks - To jot down important information</li>
    <li>Paper Clips - To keep documents organized</li>
  </ul>

  <h4>Flowers</h4>
  <ul style="list-style-type: diamond;">
    <li>Roses - Symbolize love and beauty</li>
    <li>Tulips - Represent elegance and grace</li>
    <li>Lilies - Signify purity and innocence</li>
  </ul>

</body>
</html>
```

In this example, I've used the `<ol>` tag for the ordered list of groceries, including both numbers and alphabets. For the unordered lists of fruits, stationery items, and flowers, I've used different styles for the list items: circle, square, and diamond shapes, respectively.

Remember to replace the image source `"wedding_image.jpg"` with the correct file path or image URL for your wedding event image. Save the code in an HTML file and open it in a web browser to view the web page.

3. Apply CSS border property create the following table. Give proper caption for the table and do the following
a. Left Align the text, border spacing of 5px and cell padding of 15px
b. Use row span and Column span

```
<!DOCTYPE html>
<html>
<head>
  <title>Table Example</title>
  <style>
    table {
      border-collapse: separate;
      border-spacing: 5px;
      caption-side: top;
      padding: 15px;
    }

    th, td {
      border: 1px solid black;
      padding: 15px;
      text-align: left;
    }
  </style>
```

```
</head>
<body>
  <table>
    <caption>My Table</caption>
    <tr>
      <th>First Name</th>
      <th>Last Name</th>
      <th>Age</th>
    </tr>
    <tr>
      <td>Priya</td>
      <td>Arjun</td>
      <td>Sam</td>
    </tr>
    <tr>
      <td>Sharma</td>
      <td>Singh</td>
      <td>Watson</td>
    </tr>
    <tr>
      <td>24</td>
      <td>32</td>
      <td>41</td>
    </tr>
  </table>
</body>
</html>
```

My Table

First Name	Last Name	Age
Priya	Arjun	Sam
Sharma	Singh	Watson
24	32	41

```
<!DOCTYPE html>
<html>
<head>
  <title>Table Example</title>
  <style>
    table {
```

```
    border-collapse: separate;
    border-spacing: 5px;
    caption-side: top;
    padding: 15px;
   }

   th, td {
    border: 1px solid black;
    padding: 5px;
    text-align: left;
   }
  </style>
</head>
<body>
  <table>
   <caption>My Table</caption>
   <tr>
    <th>First Name</th>
    <th>Last Name</th>
    <th>Age</th>
   </tr>
   <tr>
    <td rowspan="2">Priya and arjun</td>
    <td>sharma</td>
    <td>24</td>
   </tr>
   <tr>
    <td colspan="2">Singh and 32</td>
   </tr>
   <tr>
    <td>Sam</td>
    <td>Watson</td>
    <td>41</td>
   </tr>
  </table>
</body>
</html>
```

My Table

First Name	Last Name	Age
Priya and arjun	sharma	24
	Singh and 32	
Sam	watson	41

4. Create a web page to create a form using CSS that includes tables and user interface components such as text boxes, text areas, buttons, check boxes and combo box. Create a

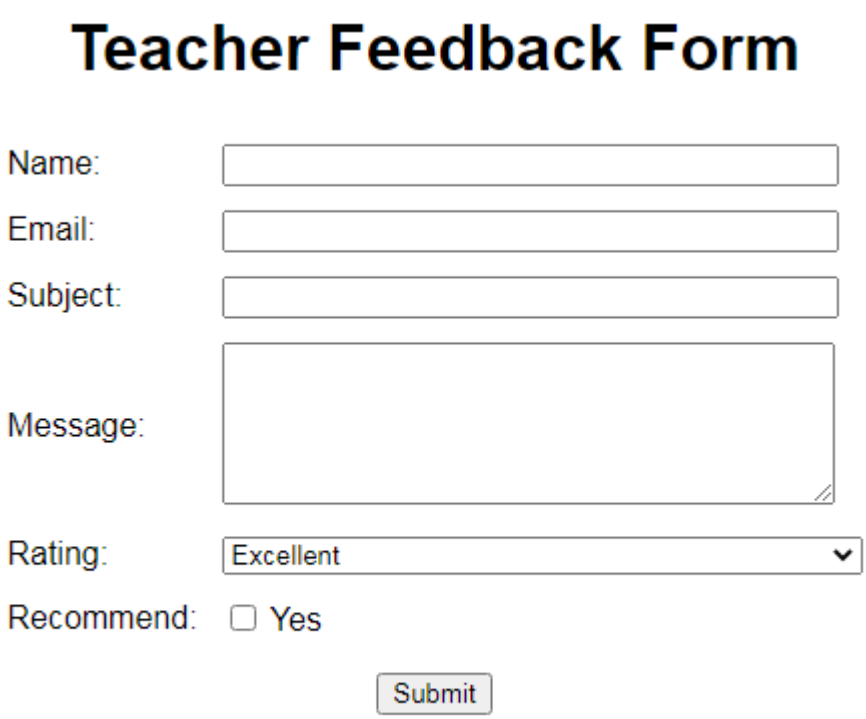
feedback form to
enable students to give their feedback regarding the teacher

```
<!DOCTYPE html>
<html>
<head>
<title>Teacher Feedback Form</title>
<style>
body {
font-family: Arial, sans-serif;
margin: 20px;
}

h1 {
text-align: center;
}

table {
margin: 0 auto;
}

td {
padding: 5px;
}

input[type="text"],
textarea {
width: 300px;
}

select {
width: 320px;
}

.submit-btn {
margin-top: 10px;
text-align: center;
}
</style>
</head>
<body>
<h1>Teacher Feedback Form</h1>

<form>
```

```
<table>
<tr>
<td>Name:</td>
<td><input type="text" name="name"></td>
</tr>
<tr>
<td>Email:</td>
<td><input type="text" name="email"></td>
</tr>
<tr>
<td>Subject:</td>
<td><input type="text" name="subject"></td>
</tr>
<tr>
<td>Message:</td>
<td><textarea name="message" rows="5"></textarea></td>
</tr>
<tr>
<td>Rating:</td>
<td>
<select name="rating">
<option value="5">Excellent</option>
<option value="4">Very Good</option>
<option value="3">Good</option>
<option value="2">Fair</option>
<option value="1">Poor</option>
</select>
</td>
</tr>
<tr>
<td>Recommend:</td>
<td>
<input type="checkbox" name="recommend" value="yes"> Yes
</td>
</tr>
</table>

<div class="submit-btn">
<input type="submit" value="Submit">
</div>
</form>
</body>
</html>
```

Note:

Output:



Explanation:
- The `<form>` element is used to wrap the entire feedback form.
- The `<table>` element is used to create a table structure to organize the form elements.
- Each form element (e.g., text boxes, text area, select) is placed within a `<tr>` and `<td>` element.
- CSS styles are used to format the page layout, align the text, set the width of input fields and select box, and create a cantered submit button.
- The form includes common input types such as `text`, `text area`, `select`, and `checkbox`.
- Users can enter their name, email, subject, and feedback message. They can also rate the teacher's performance and indicate whether they would recommend the teacher or not.
- The form has a submit button that can be clicked to submit the feedback.

You can save the above HTML code to a file with a .html extension (e.g., feedback.html), and then open it in a web browser to see and test the feedback form.

5. Write an HTML page that contains a selection box with a list of 5 countries. When the user selects a country; its capital should be printed next in the list. Add CSS to customize the properties of the font of the capital (color, bold and font size).

```
<!DOCTYPE html>
<html>
<head>
  <title>Country Capitals</title>
  <style>
    /* CSS to customize the font properties */
    #capital {
      color: blue;
      font-weight: bold;
      font-size: 20px;
    }
  </style>
</head>
<body>
  <h1>Select a Country</h1>
  <select id="countrySelect" onchange="showCapital()">
    <option value="">-- Select a Country --</option>
    <option value="USA">United States</option>
    <option value="INDIA">BHARATHA</option>
    <option value="France">France</option>
    <option value="Germany">Germany</option>
    <option value="Australia">Australia</option>
  </select>
  <p>Capital: <span id="capital"></span></p>

  <script>
    function showCapital() {
      // Get the selected country from the select element
      var selectElement = document.getElementById("countrySelect");
      var selectedCountry = selectElement.options[selectElement.selectedIndex].value;

      // Set the capital based on the selected country
      var capitalElement = document.getElementById("capital");
      switch (selectedCountry) {
        case "USA":
          capitalElement.innerText = "Washington, D.C.";
          break;
        case "INDIA":
          capitalElement.innerText = "Newdelhi";
          break;
        case "France":
          capitalElement.innerText = "Paris";
          break;
        case "Germany":
          capitalElement.innerText = "Berlin";
          break;
```

```
      case "Australia":
        capitalElement.innerText = "Canberra";
        break;
      default:
        capitalElement.innerText = "";
        break;
    }
  }
 </script>
</body>
</html>
```

Output:

6. Design a web page that contains your biodata and personal data. Apply CSS to include a. Button features b. Images c. Text d. Pagination e. At least 2 columns of detailed information.

```
<!DOCTYPE html>
<html>
<head>
 <title>My Biodata</title>
 <style>
  /* Button Styles */
  .button {
   display: inline-block;
   padding: 10px 20px;
   background-color: #4CAF50;
   color: #fff;
   text-decoration: none;
   border: none;
   border-radius: 4px;
   font-size: 16px;
   cursor: pointer;
  }

  /* Image Styles */
  .profile-img {
   width: 200px;
   height: 200px;
   border-radius: 50%;
  }

  /* Text Styles */
```

```
    p {
      font-size: 18px;
      line-height: 1.5;
    }

    /* Pagination Styles */
    .pagination {
      display: inline-block;
    }

    .pagination a {
      color: black;
      float: left;
      padding: 8px 16px;
      text-decoration: none;
      transition: background-color .3s;
      border: 1px solid #ddd;
      margin: 0 4px;
    }

    .pagination a.active {
      background-color: #4CAF50;
      color: white;
      border: 1px solid #4CAF50;
    }

    /* Table Styles */
    table {
      border-collapse: collapse;
      width: 100%;
    }

    th, td {
      padding: 8px;
      text-align: left;
      border-bottom: 1px solid #ddd;
    }

    th {
      background-color: #f2f2f2;
    }
  </style>
</head>
<body>
  <h1>My Biodata</h1>

  <img class="profile-img" src="desktop/raju.jpg" alt="Rajus Profile Picture">

  <h2>Personal Information</h2>
  <p>Name: Raju</p>
  <p>Age: 30</p>
  <p>Location: Bangalore</p>
```

```
  <p>Email: rajubangalore@gmail.com</p>

  <h2>Detailed Information</h2>
  <table>
    <tr>
      <th>Category</th>
      <th>Details</th>
    </tr>
    <tr>
      <td>Education</td>
      <td>Bachelor's Degree in Computer Science</td>
    </tr>
    <tr>
      <td>Experience</td>
      <td>5 years of professional experience</td>
    </tr>
    <tr>
      <td>Skills</td>
      <td>HTML, CSS, JavaScript, Python, etc.</td>
    </tr>
  </table>

  <div class="pagination">
    <a href="#" class="active">1</a>
    <a href="#">2</a>
    <a href="#">3</a>
  </div>

  <a href="#" class="button">Download CV</a>
</body>
</html>
```

My Biodata

Rajus Profile Picture

Personal Information

Name: Raju

Age: 30

Location: Bangalore

Email: rajubangalore@gmail.com

Detailed Information

Category	Details
Education	Bachelor's Degree in Computer Science
Experience	5 years of professional experience
Skills	HTML, CSS, JavaScript, Python, etc.

1 2 3 Download CV

7. Write a JavaScript to design a simple calculator to perform the following operations: sum, product, difference and quotient.

```
<!DOCTYPE html>
<html>
<head>
  <title>Simple Calculator</title>
  <script>
    // Function to perform the addition operation
    function add() {
      var num1 = parseFloat(document.getElementById("num1").value);
      var num2 = parseFloat(document.getElementById("num2").value);
      var result = num1 + num2;
      document.getElementById("result").value = result;
    }

    // Function to perform the subtraction operation
    function subtract() {
      var num1 = parseFloat(document.getElementById("num1").value);
      var num2 = parseFloat(document.getElementById("num2").value);
      var result = num1 - num2;
      document.getElementById("result").value = result;
    }

    // Function to perform the multiplication operation
    function multiply() {
      var num1 = parseFloat(document.getElementById("num1").value);
      var num2 = parseFloat(document.getElementById("num2").value);
      var result = num1 * num2;
      document.getElementById("result").value = result;
    }

    // Function to perform the division operation
    function divide() {
      var num1 = parseFloat(document.getElementById("num1").value);
      var num2 = parseFloat(document.getElementById("num2").value);
      var result = num1 / num2;
      if (isNaN(result)) {
        document.getElementById("result").value = "Cannot divide by zero";
      } else {
        document.getElementById("result").value = result;
      }
    }
  </script>
</head>
<body>
  <h1>Simple Calculator</h1>

  <label for="num1">Number 1:</label>
```

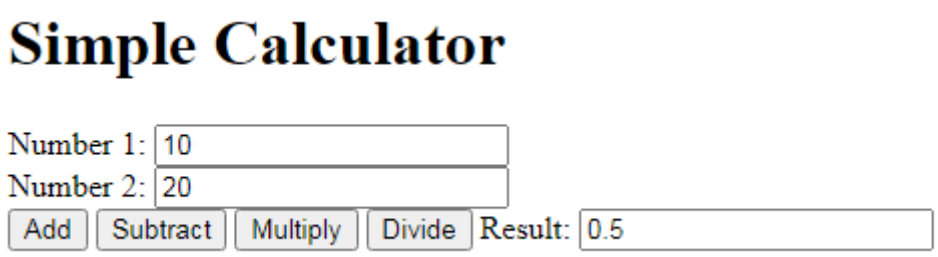
```
  <input type="number" id="num1"><br>

  <label for="num2">Number 2:</label>
  <input type="number" id="num2"><br>

  <button onclick="add()">Add</button>
  <button onclick="subtract()">Subtract</button>
  <button onclick="multiply()">Multiply</button>
  <button onclick="divide()">Divide</button>

  <label for="result">Result:</label>
  <input type="text" id="result" readonly>
</body>
</html>
```

This HTML program creates a simple calculator interface with two input fields for numbers, buttons for each operation (addition, subtraction, multiplication, and division), and an input field to display the result.

The JavaScript functions (`add()`, `subtract()`, `multiply()`, and `divide()`) are triggered when the respective operation buttons are clicked. These functions retrieve the values from the input fields, perform the corresponding calculation, and display the result in the result input field.

You can save this code in an HTML file (e.g., `calculator.html`) and open it in a web browser to use the calculator interface.

Output:



8. Write JS code to compute factorial of a given number and display the same in the alert box.

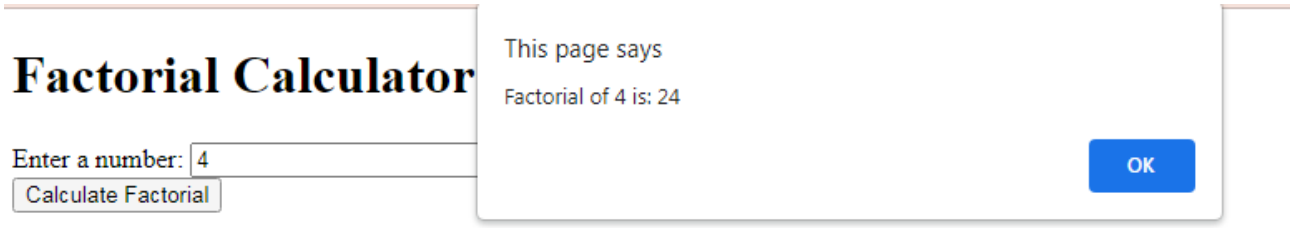
```
<! DOCTYPE html>
<html>
<head>
  <title>Factorial Calculator</title>
  <script>
    // Function to compute the factorial of a number
    function calculateFactorial() {
      var num = parseInt(document.getElementById("number").value);
      var factorial = 1;
```

```
    if (num >= 0) {
      for (var i = 1; i <= num; i++) {
        factorial *= i;
      }
      alert("Factorial of " + num + " is: " + factorial);
    } else {
      alert("Please enter a non-negative number!");
    }
  }
 </script>
</head>
<body>
 <h1>Factorial Calculator</h1>

 <label for="number">Enter a number:</label>
 <input type="number" id="number"><br>

 <button onclick="calculateFactorial()">Calculate Factorial</button>
</body>
</html>
```

This HTML program creates an interface with an input field to enter a number and a button to calculate its factorial. The `calculateFactorial()` function is triggered when the button is clicked. It retrieves the value from the input field, calculates the factorial using a loop, and displays the result in an alert box.

You can save this code in an HTML file (e.g., `factorial.html`) and open it in a web browser. Enter a number in the input field and click the "Calculate Factorial" button to see the factorial displayed in an alert box.

Output:



9. Design a web page to enter purchase details with respect to a grocery store. 1. Items purchased 2. Quantity 3. Item Code 4. Item Price On click of the submit button display the details in table format. Display the total price paid.

```
<!DOCTYPE html>
<html>
<head>
  <title>Grocery Purchase Details</title>
  <style>
    table {
      width: 100%;
      border-collapse: collapse;
    }
    th, td {
      padding: 8px;
      text-align: left;
      border-bottom: 1px solid #ddd;
    }
    th {
      background-color: #f2f2f2;
    }
    .total {
      font-weight: bold;
    }
  </style>
</head>
<body>
  <h1>Grocery Purchase Details</h1>
  <form id="purchaseForm">
    <label for="item">Item:</label>
    <input type="text" id="item" required>
    <br>
    <label for="quantity">Quantity:</label>
    <input type="number" id="quantity" min="1" required>
    <br>
    <label for="code">Item Code:</label>
    <input type="text" id="code" required>
    <br>
    <label for="price">Item Price:</label>
    <input type="number" id="price" min="0" step="0.01" required>
    <br>
    <button type="button" onclick="addPurchase()">Add Purchase</button>
  </form>
  <br>
  <table id="purchaseTable">
    <thead>
      <tr>
        <th>Item</th>
        <th>Quantity</th>
        <th>Item Code</th>
        <th>Item Price</th>
      </tr>
```

```
    </thead>
    <tbody id="purchaseBody"></tbody>
  </table>
  <br>
  <p class="total">Total Price Paid: <span id="totalPrice">0.00</span></p>

  <script>
    function addPurchase() {
      var item = document.getElementById("item").value;
      var quantity = document.getElementById("quantity").value;
      var code = document.getElementById("code").value;
      var price = document.getElementById("price").value;

      var tableBody = document.getElementById("purchaseBody");
      var newRow = tableBody.insertRow();

      var cell1 = newRow.insertCell(0);
      cell1.innerHTML = item;

      var cell2 = newRow.insertCell(1);
      cell2.innerHTML = quantity;

      var cell3 = newRow.insertCell(2);
      cell3.innerHTML = code;

      var cell4 = newRow.insertCell(3);
      cell4.innerHTML = price;

      updateTotalPrice(parseFloat(price));
      document.getElementById("purchaseForm").reset();
    }

    function updateTotalPrice(price) {
      var totalPrice = document.getElementById("totalPrice");
      var currentPrice = parseFloat(totalPrice.innerHTML);
      totalPrice.innerHTML = (currentPrice + price).toFixed(2);
    }
  </script>
</body>
</html>
```

Grocery Purchase Details

Item:
Quantity:
Item Code:
Item Price:
Add Purchase

Item	Quantity	Item Code	Item Price
1	2	12	120

Total Price Paid: 120.00

10. Design a web page to include text boxes for entering 2 numbers and buttons (factorial, prime, Fibonacci, Natural Numbers). Display alert box and change the background of the text box when the user focuses onto the text box. Also, Display the name of the button when the user moves over the buttons. When the button is clicked, perform the required computation and print the result in the web page. Create 3 programs for front end, styling and back end.