Assignment 1: Implement a navigation bar using an unordered list with links to different sections of your HTML page. Use CSS to style the list as a horizontal menu and highlight the current page or section.

```
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Navigation Bar Example</title>

    <link rel="stylesheet" href="styles.css">

</head>

<body>

    <header>

        <nav>

            <ul>

                <li><a href="#home">Home</a></li>

                <li><a href="#about">About</a></li>

                <li><a href="#services">Services</a></li>

                <li><a href="#contact">Contact</a></li>

            </ul>

        </nav>

    </header>


    <section id="home">

        <h2>Home Section</h2>

        <p>Welcome to the Home section.</p>

    </section>
```

```html
<section id="about">

    <h2>About Section</h2>

    <p>Learn more about us in the About section.</p>

</section>


<section id="services">

    <h2>Services Section</h2>

    <p>Our services are listed here.</p>

</section>


<section id="contact">

    <h2>Contact Section</h2>

    <p>Contact us using the form below.</p>

</section>
</body>
</html>
```

```css
body {

    font-family: Arial, sans-serif;

    margin: 0;

    padding: 0;

}


header {
```

```css
        background-color: #333;

        color: #fff;

        padding: 10px 0;

}


nav ul {

        list-style-type: none;

        margin: 0;

        padding: 0;

        text-align: center;

}


nav ul li {

        display: inline;

}


nav ul li a {

        text-decoration: none;

        color: #fff;

        padding: 10px 20px;

        display: inline-block;

}


nav ul li a:hover {

        background-color: #555;
```

```
    }


nav ul li a.active {

      background-color: #4CAF50;

}



section {

      padding: 20px;

      margin: 20px 0;

      background-color: #f0f0f0;

      border: 1px solid #ccc;

}
```

Assignment 2: Create a simple HTML page that includes the use of headings, paragraphs, and at least two semantic tags like <article> or <section>. Add a table with data of your choice and a form with fields for a user's name, email, and a submit button.

```
<!DOCTYPE html>

<html lang="en">

<head>

      <meta charset="UTF-8">

      <meta name="viewport" content="width=device-width, initial-scale=1.0">

      <title>Assignment 2: Simple HTML Page</title>

      <style>

            body {

                  font-family: Arial, sans-serif;

                  line-height: 1.6;
```

```css
        padding: 20px;

}

section {

        margin-bottom: 20px;

}

table {

        width: 100%;

        border-collapse: collapse;

        margin-bottom: 20px;

}

table, th, td {

        border: 1px solid #ccc;

}

th, td {

        padding: 10px;

        text-align: left;

}

form {

        max-width: 400px;

        border: 1px solid #ccc;

        padding: 20px;

}

form label {

        display: block;

        margin-bottom: 10px;
```

```css
        }

        form input[type="text"], form input[type="email"] {

                width: calc(100% - 20px);

                padding: 10px;

                margin-bottom: 10px;

        }

        form input[type="submit"] {

                background-color: #4CAF50;

                color: white;

                padding: 10px 20px;

                border: none;

                cursor: pointer;

        }

        form input[type="submit"]:hover {

                background-color: #45a049;

        }
    </style>
</head>
<body>
    <header>
        <h1>Welcome to My Simple HTML Page</h1>
    </header>

    <section>
        <article>
```

```html
            <h2>About Me</h2>

            <p>I'm a web developer passionate about creating meaningful and useful
applications.</p>

        </article>

    </section>


    <section>

        <h2>My Data Table</h2>

        <table>

            <thead>

                <tr>

                    <th>Name</th>

                    <th>Age</th>

                    <th>City</th>

                </tr>

            </thead>

            <tbody>

                <tr>

                    <td>John Doe</td>

                    <td>30</td>

                    <td>New York</td>

                </tr>

                <tr>

                    <td>Jane Smith</td>

                    <td>25</td>

                    <td>Los Angeles</td>
```

```html
                </tr>

            </tbody>

        </table>

    </section>


    <section>

        <h2>Contact Me</h2>

        <form action="#" method="post">

            <label for="name">Your Name:</label>

            <input type="text" id="name" name="name" required>


            <label for="email">Your Email:</label>

            <input type="email" id="email" name="email" required>


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

        </form>

    </section>


    <footer>

        <p>&copy; 2024 My Simple HTML Page. All rights reserved.</p>

    </footer>

</body>

</html>
```

Assignment 3: Apply the CSS box model to ensure that your page content has appropriate margins and padding. Create a layout using div tags and style them to arrange content in a multi-column format using

floats or flexbox.

```html
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Assignment 3: Multi-column Layout with Flexbox</title>

    <link rel="stylesheet" href="styles.css">

    <style>

        body {

            font-family: Arial, sans-serif;

            line-height: 1.6;

            margin: 0;

            padding: 20px;

            background-color: #f0f0f0;

        }

        .container {

            max-width: 1200px;

            margin: 0 auto;

            display: flex;

            flex-wrap: wrap;

            justify-content: space-between;

        }

        .column {

            width: calc(33.33% - 20px); /* 33.33% width with 20px margin between columns */
```

```css
        margin-bottom: 20px;

        background-color: #fff;

        padding: 20px;

        box-shadow: 0 0 10px rgba(0,0,0,0.1);

        border-radius: 5px;

    }

    .column h2 {

        font-size: 1.5em;

        margin-bottom: 10px;

    }

    .column p {

        line-height: 1.8;

    }

    </style>

</head>

<body>

    <header>

        <h1>Welcome to My Multi-column Layout</h1>

    </header>


    <div class="container">

        <div class="column">

            <h2>Column 1</h2>

            <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam vel ultricies sem. Proin lobortis tellus vitae libero mollis, id dictum tortor fermentum.</p>

        </div>
```

```html
        <div class="column">

            <h2>Column 2</h2>

            <p>Integer sagittis tellus nec mi luctus, id feugiat odio tincidunt. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia curae.</p>

            <p>Suspendisse potenti. Proin nec ex ac libero viverra malesuada. Vivamus a sem vel odio congue dapibus.</p>

        </div>

        <div class="column">

            <h2>Column 3</h2>

            <p>Aliquam erat volutpat. Donec feugiat nibh et urna eleifend, a fermentum risus faucibus. Morbi sit amet semper nisi.</p>

            <p>Quisque posuere sapien et metus rutrum, eu congue nunc venenatis. Curabitur eleifend justo id lorem viverra malesuada.</p>

        </div>

    </div>


    <footer>

        <p>&copy; 2024 My Multi-column Layout. All rights reserved.</p>

    </footer>

</body>

</html>
```

Assignment 4: Enhance the page by adding CSS3 animations to the menu and form elements. Also, use media queries to make the page responsive, ensuring it looks good on both desktop and mobile screen sizes.

```html
<!DOCTYPE html>

<html lang="en">
```

```html
<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Assignment 4: Responsive Layout with Animations</title>

    <link rel="stylesheet" href="styles.css">

    <style>

        body {

            font-family: Arial, sans-serif;

            line-height: 1.6;

            margin: 0;

            padding: 20px;

            background-color: #f0f0f0;

        }

        .container {

            max-width: 1200px;

            margin: 0 auto;

            display: flex;

            flex-wrap: wrap;

            justify-content: space-between;

        }

        .column {

            width: calc(33.33% - 20px); /* 33.33% width with 20px margin between columns */

            margin-bottom: 20px;

            background-color: #fff;

            padding: 20px;
```

```css
        box-shadow: 0 0 10px rgba(0,0,0,0.1);

        border-radius: 5px;

        transition: transform 0.3s ease-in-out, box-shadow 0.3s ease-in-out;

}

.column:hover {

        transform: translateY(-5px);

        box-shadow: 0 5px 15px rgba(0,0,0,0.2);

}

.column h2 {

        font-size: 1.5em;

        margin-bottom: 10px;

}

.column p {

        line-height: 1.8;

}

form {

        max-width: 400px;

        border: 1px solid #ccc;

        padding: 20px;

        border-radius: 5px;

        transition: transform 0.3s ease-in-out, box-shadow 0.3s ease-in-out;

}

form:hover {

        transform: translateY(-5px);

        box-shadow: 0 5px 15px rgba(0,0,0,0.2);
```

```css
}

form label {

    display: block;

    margin-bottom: 10px;

    font-weight: bold;

    color: #333;

}

form input[type="text"], form input[type="email"] {

    width: calc(100% - 20px);

    padding: 10px;

    margin-bottom: 10px;

    border: 1px solid #ccc;

    border-radius: 3px;

    transition: border-color 0.3s ease-in-out;

}

form input[type="text"]:focus, form input[type="email"]:focus {

    border-color: #4CAF50;

    outline: none;

}

form input[type="submit"] {

    background-color: #4CAF50;

    color: white;

    padding: 10px 20px;

    border: none;

    cursor: pointer;
```

```css
            border-radius: 3px;

            transition: background-color 0.3s ease-in-out;

        }

        form input[type="submit"]:hover {

            background-color: #45a049;

        }

        @media screen and (max-width: 900px) {

            .column {

                width: calc(50% - 20px); /* 50% width with 20px margin between columns */

            }

        }

        @media screen and (max-width: 600px) {

            .column {

                width: 100%; /* Full width on smaller screens */

            }

        }

    </style>

</head>

<body>

    <header>

        <h1>Welcome to My Responsive Layout</h1>

    </header>


    <div class="container">

        <div class="column">
```

```
<h2>Column 1</h2>

<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam vel ultricies sem.
Proin lobortis tellus vitae libero mollis, id dictum tortor fermentum.</p>

</div>

<div class="column">

<h2>Column 2</h2>

<p>Integer sagittis tellus nec mi luctus, id feugiat odio tincidunt. Vestibulum ante ipsum
primis in faucibus orci luctus et ultrices posuere cubilia curae.</p>

<p>Suspendisse potenti. Proin nec ex ac libero viverra malesuada. Vivamus a sem vel
odio congue dapibus.</p>

</div>

<div class="column">

<h2>Column 3</h2>

<p>Aliquam erat volutpat. Donec feugiat nibh et urna eleifend, a fermentum risus
faucibus. Morbi sit amet semper nisi.</p>

<p>Quisque posuere sapien et metus rutrum, eu congue nunc venenatis. Curabitur
eleifend justo id lorem viverra malesuada.</p>

</div>

</div>


<section>

<h2>Contact Me</h2>

<form action="#" method="post">

<label for="name">Your Name:</label>

<input type="text" id="name" name="name" required>


<label for="email">Your Email:</label>
```

```html
                    <input type="email" id="email" name="email" required>


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

            </form>

        </section>



        <footer>

            <p>&copy; 2024 My Responsive Layout. All rights reserved.</p>

        </footer>

</body>

</html>
```

Assignment 5: Take the static HTML page from Day 1 and integrate Bootstrap. Refactor the navigation bar, table, and form to use Bootstrap components. Ensure the page is responsive using Bootstrap's grid system.

```html
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Assignment 5: Integrating Bootstrap</title>

    <!-- Bootstrap CSS -->

    <link href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css"
rel="stylesheet">

    <style>

        body {

            padding-top: 20px; /* Padding for the top of the page */
```

```css
            font-family: Arial, sans-serif;

        }

        footer {

            margin-top: 20px; /* Margin for the top of the footer */

            text-align: center;

            padding: 10px;

            background-color: #f8f9fa;

            border-top: 1px solid #dee2e6;

        }

    </style>

</head>

<body>

    <nav class="navbar navbar-expand-lg navbar-dark bg-dark">

        <a class="navbar-brand" href="#">Assignment 5</a>

        <button class="navbar-toggler" type="button" data-toggle="collapse"
data-target="#navbarSupportedContent"

            aria-controls="navbarSupportedContent" aria-expanded="false" aria-label="Toggle
navigation">

            <span class="navbar-toggler-icon"></span>

        </button>


        <div class="collapse navbar-collapse" id="navbarSupportedContent">

            <ul class="navbar-nav mr-auto">

                <li class="nav-item">

                    <a class="nav-link" href="#home">Home</a>

                </li>
```

```html
                    <li class="nav-item">

                        <a class="nav-link" href="#about">About</a>

                    </li>

                    <li class="nav-item">

                        <a class="nav-link" href="#services">Services</a>

                    </li>

                    <li class="nav-item">

                        <a class="nav-link" href="#contact">Contact</a>

                    </li>

                </ul>

            </div>

        </nav>


        <div class="container mt-4">

            <div class="row">

                <div class="col-md-4">

                    <div class="card">

                        <div class="card-body">

                            <h2 class="card-title">Column 1</h2>

                            <p class="card-text">Lorem ipsum dolor sit amet, consectetur adipiscing
elit. Nullam vel ultricies sem.</p>

                        </div>

                    </div>

                </div>

                <div class="col-md-4">

                    <div class="card">
```

```html
                    <div class="card-body">

                        <h2 class="card-title">Column 2</h2>

                        <p class="card-text">Integer sagittis tellus nec mi luctus, id feugiat odio
tincidunt.</p>

                        <p class="card-text">Suspendisse potenti. Proin nec ex ac libero viverra
malesuada.</p>

                    </div>

                </div>

            </div>

            <div class="col-md-4">

                <div class="card">

                    <div class="card-body">

                        <h2 class="card-title">Column 3</h2>

                        <p class="card-text">Aliquam erat volutpat. Donec feugiat nibh et urna
eleifend, a fermentum risus faucibus.</p>

                        <p class="card-text">Quisque posuere sapien et metus rutrum, eu
congue nunc venenatis.</p>

                    </div>

                </div>

            </div>

        </div>


        <div class="row mt-4">

            <div class="col-md-6">

                <h2>Contact Me</h2>

                <form action="#" method="post">

                    <div class="form-group">
```

```html
                    <label for="name">Your Name:</label>
                    <input type="text" class="form-control" id="name" name="name"
required>
                </div>
                <div class="form-group">
                    <label for="email">Your Email:</label>
                    <input type="email" class="form-control" id="email" name="email"
required>
                </div>
                <button type="submit" class="btn btn-primary">Submit</button>
            </form>
        </div>

        <div class="col-md-6">
            <h2>My Data Table</h2>
            <table class="table">
                <thead class="thead-dark">
                    <tr>
                        <th>Name</th>
                        <th>Age</th>
                        <th>City</th>
                    </tr>
                </thead>
                <tbody>
                    <tr>
                        <td>John Doe</td>
```

```html
                        <td>30</td>

                        <td>New York</td>

                    </tr>

                    <tr>

                        <td>Jane Smith</td>

                        <td>25</td>

                        <td>Los Angeles</td>

                    </tr>

                </tbody>

            </table>

        </div>

    </div>

</div>


    <footer>

        <p>&copy; 2024 Assignment 5. All rights reserved.</p>

    </footer>


    <!-- Bootstrap JS and dependencies -->

    <script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>

    <script
src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.bundle.min.js"></script>

</body>

</html>
```