

Web technology experiments

1. Write a program to create a simple HTML page with headings, paragraphs, and lists

```
<!DOCTYPE html>
<html>
<head>
  <title>Simple HTML Page</title>
</head>
<body>

  <!-- Heading Section -->
  <h1>Welcome to My HTML Page</h1>
  <h2>About This Page</h2>

  <!-- Paragraph Section -->
  <p>
    This is a simple example of an HTML page created using basic elements like
    headings, paragraphs, and lists. HTML is the standard language for creating web pages.
  </p>

  <p>
    You can add multiple sections to your page using different heading levels
    and organize information using lists.
  </p>

  <!-- Unordered List -->
  <h3>Features of This Page</h3>
  <ul>
    <li>Uses headings</li>
    <li>Includes paragraphs</li>
    <li>Demonstrates lists</li>
  </ul>

  <!-- Ordered List -->
  <h3>Steps to Create a Web Page</h3>
  <ol>
    <li>Open a text editor (Notepad, VS Code, etc.)</li>
    <li>Write HTML code</li>
    <li>Save the file with .html extension</li>
    <li>Open it in a web browser</li>
  </ol>

</body>
</html>
```

2. Write a program to design an HTML form

```
<!DOCTYPE html>
<html>
<head>
  <title>Simple HTML Form</title>
</head>
<body>

<h1>Registration Form</h1>

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

<label for="name">Full Name:</label><br>
<input type="text" id="name" name="name"><br><br>

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

<label for="age">Age:</label><br>
<input type="number" id="age" name="age"><br><br>

<p>Gender:</p>
<input type="radio" name="gender" value="Male">Male<br>
<input type="radio" name="gender" value="Female">Female<br>
<input type="radio" name="gender" value="Other">Other<br><br>

<p>Select Your Hobbies:</p>
<input type="checkbox" value="Reading">Reading<br>

</form>
</body>
</html>
```

3. Write a program to display an image

```
<!DOCTYPE html>
<html>
<head>
  <title>Display Image Example</title>
</head>
<body>

<h1>Image Display Example</h1>


</body>
</html>
```

4. Style text, headings, paragraphs, and links using CSS

```
<!DOCTYPE html>
<html>
<head>
<title>Styled HTML Page</title>

<style>
body {
  font-family: Arial, sans-serif;
  background-color: #f2f2f2;
  margin: 20px;
}
h1 {
  color: #2a4d8f;
  text-align: center;
}
h2 {
  color: #333;
  border-bottom: 2px solid #2a4d8f;
  padding-bottom: 5px;
}
p {
  font-size: 18px;
  color: #555;
  line-height: 1.6;
}
a {
  color: #0066cc;
  text-decoration: none;
  font-weight: bold;
}
a:hover {
  color: #ff6600;
  text-decoration: underline;
}
</style>

</head>
<body>
<h1>Welcome to My Style Page</h1>
</body>
</html>
```

5. Create a webpage layout using Flexbox

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

```
<head>
<title>Flexbox Webpage Layout</title>

<style>
body {
    margin: 0;
    font-family: Arial, sans-serif;
}
header {
    background-color: #2a4d8f;
    color: white;
    padding: 20px;
    text-align: center;
}
.container {
    display: flex;
}
.sidebar {
    width: 25%;
    background-color: #f0f0f0;
    padding: 20px;
}
.content {
    flex: 1;
    padding: 20px;
    background-color: #fff;
}
footer {
    background-color: #333;
    color: white;
    padding: 15px;
    text-align: center;
}
</style>

</head>
<body>

<header>
<h1>My Flexbox Webpage Layout</h1>
</header>

<div class="container">
<div class="sidebar">
<h2>Navigation</h2>
<ul>
<li>Home</li>
<li>About</li>
<li>Services</li>
<li>Contact</li>
</ul>
</div>
```

```
<div class="content">
<h2>Main Content</h2>
<p>This area displays the main content of the webpage.</p>
</div>

</div>

<footer>
<p>© 2025 My Website</p>
</footer>

</body>
</html>
```

6. Create a simple XML document

```
<?xml version="1.0" encoding="UTF-8"?>

<library>
  <book>
    <title>Introduction to HTML</title>
    <author>John Smith</author>
    <year>2020</year>
  </book>

  <book>
    <title>Learning XML Basics</title>
    <author>Mary Johnson</author>
    <year>2018</year>
  </book>

  <book>
    <title>Web Development Guide</title>
    <author>David Clark</author>
    <year>2022</year>
  </book>
</library>
```