

1. Build a simple webpage that displays text as shown in the below image.

```
1. <!DOCTYPE html>
2. <html lang="en">
3. <head>
4.     <meta charset="UTF-8">
5.     <meta name="viewport" content="width=device-width, initial-
      scale=1.0">
6.     <title>Text Formatting Example</title>
7.     <style>
8.         /* CSS for text formatting */
9.         .bold-text {
10.             font-weight: bold;
11.         }
12.
13.         .underlined-text {
14.             text-decoration: underline;
15.         }
16.
17.         .italic-text {
18.             font-style: italic;
19.         }
20.
21.         .highlighted-text {
22.             background-color: yellow;
23.         }
24.
25.         .subscript-text {
26.             vertical-align: sub;
27.         }
28.
29.         .superscript-text {
30.             vertical-align: super;
31.         }
32.
33.         .small-text {
34.             font-size: 12px;
35.         }
36.
37.         .marked-text {
38.             background-color: orange;
39.             color: white;
40.         }
41.     </style>
42. </head>
43. <body>
44.     <p class="bold-text">This is bold text.</p>
45.     <p class="underlined-text">This is underlined text.</p>
46.     <p class="italic-text">This is italic text.</p>
```

```

47. <p class="highlighted-text">This is highlighted text.</p>
48. <p>This is <span class="subscript-text">subscript</span> text.</p>
49. <p>This is <span class="superscript-text">superscript</span>
    text.</p>
50. <p class="small-text">This is small text.</p>
51. <p class="marked-text">This is marked text.</p>
52. </body>
53. </html>

```

2. Build a simple webpage that helps users navigate different web development-related websites. Note: On clicking the hyperlink the web pages should open in a new tab. Below is a reference image. Navigate Me: Take me to PW Skills to buy a course. Take me to MDN docs to know more about Web Development. Take me to PW Skills Lab to practice live coding.

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Web Development Resources</title>
</head>
<body>
  <h1>Navigate Me:</h1>
  <ul>
    <li><a href="https://www.pwskills.com" target="_blank">Take me to PW
Skills to buy a course.</a></li>
    <li><a href="https://developer.mozilla.org/en-US/docs/Web"
target="_blank">Take me to MDN docs to know more about Web
Development.</a></li>
    <li><a href="https://www.pwskills.com/lab" target="_blank">Take me to
PW Skills Lab to practice live coding.</a></li>
  </ul>
</body>
</html>

```

3. Build a simple blog web page with 3 pages home, web development, and web design. Each page must contain hyperlinks to other pages in the top, a heading of the page topic and a paragraph of information. For the home page you can add some information about yourself.

```

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

```

```

</head>
<body>
  <header>
    <h1>Welcome to My Blog</h1>
    <nav>
      <ul>
        <li><a href="web-development.html">Web Development</a></li>
        <li><a href="web-design.html">Web Design</a></li>
      </ul>
    </nav>
  </header>
  <main>
    <h2>About Me</h2>
    <p>Hello, I'm [Your Name]. I'm passionate about web development and design. This blog is where I share my insights and experiences in the field.</p>
  </main>
</body>
</html>

```

web-development.html (Web Development Page):

```

html
Copy code
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Web Development</title>
</head>
<body>
  <header>
    <h1>Web Development</h1>
    <nav>
      <ul>
        <li><a href="index.html">Home</a></li>
        <li><a href="web-design.html">Web Design</a></li>
      </ul>
    </nav>
  </header>
  <main>
    <h2>Web Development Overview</h2>
    <p>In this section, you'll find articles and tutorials about various web development topics, including HTML, CSS, JavaScript, and more.</p>
  </main>
</body>
</html>

```

web-design.html (Web Design Page):

```

html
Copy code
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Web Design</title>
</head>
<body>
  <header>
    <h1>Web Design</h1>
    <nav>
      <ul>
        <li><a href="index.html">Home</a></li>
        <li><a href="web-development.html">Web Development</a></li>
      </ul>
    </nav>
  </header>
  <main>
    <h2>Web Design Tips and Tricks</h2>
    <p>Explore the world of web design with articles and guides covering topics like responsive design, UI/UX, and graphic design for the web.</p>
  </main>
</body>
</html>

```

4. Create an ordered list of HTML tags. Each list item must include the tag name and some information about the tag.

Ans= 1. ``<html>``:

- Defines the root element of an HTML document.
- Contains all other HTML elements on the page.

2. ``<head>``:

- Contains meta-information about the HTML document.
- Typically includes the ``<title>``, ``<meta>``, ``<link>``, and ``<script>`` tags.

3. ``<title>``:

- Sets the title of the HTML document, displayed in the browser's title bar or tab.

4. ``<meta>``:

- Provides metadata about the HTML document, such as character encoding and viewport settings.

5. ``<link>``:

- Specifies external resources like stylesheets (CSS) or icons.
- Used to link to external files.

6. ``<style>``:

- Defines inline CSS styles or includes CSS code within the document.

7. ``<script>``:

- Embeds JavaScript code in the HTML document or links to an external JavaScript file.

8. ``<body>``:

- Contains the visible content of the web page, including text, images, and other media.

9. ``<h1>``, ``<h2>``, ``<h3>``, ``<h4>``, ``<h5>``, ``<h6>``:

- Headings of various levels, with ``<h1>`` being the highest (most important) and ``<h6>`` the lowest.
- Used to structure and format text content.

10. ``<p>``:

- Represents a paragraph of text.

11. ``<a>``:

- Defines a hyperlink.
- Used to link to other web pages or resources.

12. ``:

- Embeds an image on the web page.
- Requires a `src` attribute to specify the image file.

13. `

`:

- Creates an unordered (bulleted) list.
- Contains one or more `- ` (list item) elements.

14. `

`:

- Creates an ordered (numbered) list.
- Contains one or more `- ` elements.

15. `- `:

- Represents a list item within `
` or `
` lists.

16. `

- Defines a table.
- Contains one or more `|` (table row) elements.
| |

17. `|`:
| |

- Represents a table row within a `
- Contains one or more ` ` or ` ` elements. | |

18. ` `: |

- Represents a table cell within a `|`.
| |
- Contains the actual data in a table.

19. ` `: |

- Represents a table header cell within a `|`.
| |

- Typically used to label columns or rows in a table.

20. `<form>`:

- Creates a form to collect user input.
- Can contain various form elements like `<input>`, `<textarea>`, and `<button>`.

5. Create a description list of full stack web development tech stack, using the `<dl>` tag. Each term should be a tech stack name and each description should be a brief explanation of what the tech stack is used for.

Ans= Certainly! Here's a description list of full stack web development tech stack using the `<dl>` tag:

`<dl>`

`<dt>HTML/CSS</dt>`

`<dd>HTML (Hypertext Markup Language) is used for creating the structure of web pages, while CSS (Cascading Style Sheets) is used for styling and layout.</dd>`

`<dt>JavaScript</dt>`

`<dd>JavaScript is a versatile scripting language that adds interactivity and dynamic behaviour to web pages, making them responsive and interactive. </dd>`

`<dt>Node.js</dt>`

`<dd>Node.js is a JavaScript runtime that allows developers to build server-side applications, enabling full-stack development with JavaScript. </dd>`

`<dt>Express.js</dt>`

`<dd>Express.js is a lightweight Node.js framework used for building web applications and APIs, simplifying server-side development. </dd>`

`<dt>React</dt>`

`<dd>React is a popular JavaScript library for building user interfaces, known for its component-based architecture and reusability. </dd>`

<dt>Angular</dt>

<dd>Angular is a comprehensive JavaScript framework for building dynamic web applications with a strong focus on modularity and structure. </dd>

<dt>Vue.js</dt>

<dd>Vue.js is a progressive JavaScript framework for building user interfaces, offering flexibility and ease of integration into existing projects. </dd>

<dt>SQL/NoSQL</dt>

<dd>SQL databases (e.g., MySQL, PostgreSQL) are used for structured data, while NoSQL databases (e.g., MongoDB, Redis) are suitable for unstructured or semi-structured data storage. </dd>

<dt>RESTful APIs</dt>

<dd>REST (Representational State Transfer) is an architectural style for designing networked applications, often used for creating APIs that communicate between the frontend and backend. </dd>

<dt>GraphQL</dt>

<dd>GraphQL is a query language and runtime for APIs, allowing clients to request specific data, reducing over-fetching, and under-fetching of data. </dd>

<dt>Docker</dt>

<dd>Docker is a containerization platform that simplifies the deployment and scaling of web applications, making them portable and easy to manage. </dd>

<dt>Git/GitHub</dt>

<dd>Git is a version control system, and GitHub is a web-based platform for hosting and collaborating on code repositories, essential for team-based development. </dd>

</dl>

...

6. Create an ordered list of the full stack web development tech stack HTML, CSS, and JS. For each tech stack, create a table that lists the tech stack name, its primary use cases, and some key features or benefits. Below is a reference image.

Ans= ``

```
<li>
  <h2>HTML</h2>
  <table>
    <tr>
      <th>Primary Use Cases</th>
      <th>Key Features/Benefits</th>
    </tr>
    <tr>
      <td>Creating webpage structure</td>
      <td>Defines content structure</td>
    </tr>
    <!-- Add more rows as needed -->
  </table>
</li>

<li>
  <h2>CSS</h2>
  <table>
    <tr>
      <th>Primary Use Cases</th>
      <th>Key Features/Benefits</th>
    </tr>
    <tr>
      <td>Styling webpages</td>
      <td>Controls layout and design</td>
    </tr>
    <!-- Add more rows as needed -->
  </table>
</li>

<li>
  <h2>JavaScript</h2>
  <table>
    <tr>
      <th>Primary Use Cases</th>
      <th>Key Features/Benefits</th>
    </tr>
    <tr>
      <td>Adding interactivity</td>
      <td>Dynamically updates content</td>
    </tr>
    <!-- Add more rows as needed -->
  </table>
</li>

</ol>
```