

1. BUILD A SIMPLE WEBPAGE THAT DISPLAY THE TEXT SHOWN IN BELOW IMAGE

Ans-****This text will be bolded**** **<!--This text will be bolded-->**

<i>Ttext will be italic**</i>** **<!--This text will be italic-->**

<mark>This text will be highlighted**</mark>** **<!--This text will be highlighted-->**

This is normal text**^{**This will be super scripted**}**This is normal again.

This is normal text**_{**This text will be subscripted**}**

Normal Text**<small>**Smal Text**</small>** **<!--this small the text-->**

****This text will be deleted**** **<!--this is used for delet-->**

2. BUILD A SIMPLE WEBPAGE THAT DISPLAY THE TABLE THAT TABLE SHOW BELOW-

SI No.	Name	Course	Email
1	Aarav Sharma	FSWD	aarav.sharma@gmail.com
2	Diya Patel	FSDS	diya.patel@gmail.com
3	Aryan Singh	DSA with JAVA	aryan.singh@gmail.com
4	Avni Gupta	FSWD	avni.gupta@gmail.com
5	Rohan Mehata	FSDS	rohan.mehta@gmail.com
6	Prisha Verma	DSA with JAVA	prisha.verma@gmail.com
7	Arnav Choudhary	FSWD	arnav.choudhary@gmail.com
8	Ishaan Patel	FSDS	ishaan.patel@gmail.com
9	Siya Singh	DSA with JAVA	siya.singh@gmail.com

Ans-code of these table is-

```
<table border="4" align="center" >
  <tr>
    <td align="center" width="50" height="50">SI No.</td>
    <td align="center" width="150" height="50">Name</td>
    <td align="center" width="150" height="50">course</td>
    <td align="center" width="250" height="50">Email</td>
  </tr>
  <tr>
    <td align="center" width="50" height="50">1</td>
    <td align="center" width="150" height="50">Aarav
Sharma</td>
    <td align="center" width="150" height="50">FSWD</td>
```

```

        <td align="center" width="250"
height="50">aarav.sharma@gmail.com</td>
    </tr>
    <tr>
        <td align="center" width="50" height="50">2</td>
        <td align="center" width="150" height="50">Diya Patel</td>
        <td align="center" width="150" height="50">FSDS</td>
        <td align="center" width="250"
height="50">diya.patel@gmail.com</td>
    </tr>
    <tr>
        <td align="center" width="50" height="50">3</td>
        <td align="center" width="150" height="50">Aryan Singh</td>
        <td align="center" width="150" height="50">DSA with
JAVA</td>
        <td align="center" width="250"
height="50">aryan.singh@gmail.com</td>
    </tr>
    <tr>
        <td align="center" width="50" height="50">4</td>
        <td align="center" width="150" height="50">Avni Gupta</td>
        <td align="center" width="150" height="50">FSWD</td>
        <td align="center" width="250"
height="50">avni.gupta@gmail.com</td>
    </tr>
    <tr>
        <td align="center" width="50" height="50">5</td>
        <td align="center" width="150" height="50">Rohan
Mehata</td>
        <td align="center" width="150" height="50">FSDS</td>
        <td align="center" width="250"
height="50">rohan.mehta@gmail.com</td>
    </tr>
    <tr>
        <td align="center" width="50" height="50">6</td>
        <td align="center" width="150" height="50">Prisha
Verma</td>
        <td align="center" width="150" height="50">DSA with
JAVA</td>
        <td align="center" width="250"
height="50">prisha.verma@gmail.com</td>
    </tr>
    <tr>
        <td align="center" width="50" height="50">7</td>
        <td align="center" width="150" height="50">Arnav
Choudhary</td>
        <td align="center" width="150" height="50">FSWD</td>
        <td align="center" width="250"
height="50">arnav.choudhary@gmail.com</td>
    </tr>
    <tr>
        <td align="center" width="50" height="50">8</td>
        <td align="center" width="150" height="50">Ishaan
Patel</td>
        <td align="center" width="150" height="50">FSDS</td>
        <td align="center" width="250"
height="50">ishaan.patel@gmail.com</td>
    </tr>

```

```

        <tr>
            <td align="center" width="50" height="50">9</td>
            <td align="center" width="150" height="50">Siya Singh</td>
            <td align="center" width="150" height="50">DSA with
JAVA</td>
            <td align="center" width="250"
height="50">siya.singh@gmail.com</td>
        </tr>
    </table>

```

3. Build a simple webpage that display the table:-

Product	Flavours & Quantity	
Dairy		
Ice Creams	Vanilla	500g
	Chocolate	250g
	Butter Scotch	1kg
Beverages		
Soda	Cola	0.5 L
	Orange	1 L
	Lime	2 L

Ans:- <!DOCTYPE html>

```

<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Assignment 3</title>
</head>
<body>
    <table border="4" align="center">
        <tr>
            <td align="center" width="150" height="50">Product</td>
            <td align="center" width="300" height="50" colspan="2">Flavour
and Quantity</td>
        </tr>
        <tr>
            <td align="left" width="50" height="50" colspan="3">Dairy</td>
        </tr>
        <tr>
            <td align="center" width="50" height="50" rowspan="3">Ice
Cream</td>
            <td align="center" width="50" height="50">Vanila</td>
            <td align="center" width="50" height="50">500g</td>
        </tr>
    </table>

```

```

        <tr>
            <td align="center" width="50" height="50">Chocolate</td>
            <td align="center" width="50" height="50">250g</td>

        </tr>
        <tr>
            <td align="center" width="50" height="50">Butter Scotch</td>
            <td align="center" width="50" height="50">1 kg</td>

        </tr>
        <tr>
            <td align="left" width="50" height="50"
colspan="3">Beverages</td>

        </tr>
        <tr>
            <td align="center" width="50" height="50" rowspan="3">Soda</td>
            <td align="center" width="50" height="50">cola</td>
            <td align="center" width="50" height="50">0.5L</td>
        </tr>
        <tr>
            <td align="center" width="50" height="50">Orange</td>
            <td align="center" width="50" height="50">1 L</td>

        </tr>
        <tr>
            <td align="center" width="50" height="50">Lime</td>
            <td align="center" width="50" height="50">2 L</td>

    </table>

</body>
</html>

```

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

Home page:-

Ans-`<!DOCTYPE html>`

```

<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Home</title>
</head>
<body>
    <header>
        <nav>
            <ul>
                <li>
                    <a href="assignment 4.html">Home</a>
                </li>
                <li><a href="web development.html">Web-
development</a></li>
                <li><a href="web design.html">Web-design</a></li>
            </ul>
        </nav>
    </header>

```

```

        </ul>
    </nav>
</header>
<main>
    <h1>Home Page</h1>
    <p>
        MY Name is souvik Das. I am from purba burdwan district. My
village name is Amarargarh.post is Amarargarh.I am pursuing BE
        from University Institute of Technology.MY passing year is
2022-26.
    </p>
</main>
</body>
</html>

```

web-Development page :-

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Web development</title>
</head>
<body>
    <header>
        <nav>
            <ul>
                <li>
                    <a href="assignment 4.html">Home</a>
                </li>
                <li><a href="web development.html">Web-
development</a></li>
                <li><a href="web design.html">Web-design</a></li>
            </ul>
        </nav>
    </header>
    <main>
        <h1>Web-Development</h1>
        <p>
            Sure, so, my name is Joe and I am 27 years old.

```

For the past 5 years, I've been working as a business analyst at Company X and Y.

I have some background in data analysis, with a degree from University XY. What really got me into the field, though, is the internship I did at Company Z.

Throughout my career, I've noticed that I've always been good with numbers and handling data.

For example, when I was working at Company X, I led a project for migrating all operations data to a new data warehousing system to cut

down on costs. The new solution was a much better fit for our business, which eventually led to savings of up to \$200,000 annually.

Moving forward, I hope to expand my experience across different industries. Particularly fintech, which is why I'm interested in your company.."

```
</p>
</main>

</body>
</html>
```

web-Design page:-

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>Web design</title>
</head>
<body>
  <header>
    <nav>
      <ul>
        <li>
          <a href="assignment 4.html">Home</a>
        </li>
        <li><a href="web development.html">Web-
development</a></li>
        <li><a href="web design.html">Web-design</a></li>
      </ul>
    </nav>
  </header>
  <main>
    <h1>Web-Design</h1>
    <p>
      "I have just over a year of experience as a junior software
engineer with First Technology. In my short time there, I've already
contributed to over a dozen projects and assisted with managing one
project for one of the firm's long-time clients.

      "Prior to this role, I completed a two-year internship with Mobile
First, where I honed my mobile app development skills. Ideally, I would
like to continue to specialize in mobile software engineering, an area
where I know your firm excels."
    </p>
  </main>

</body>
</html>
```

5. Built a simple webpage that help user navigate different web development related website.

Note: on clicking the hyperlink the webpage should open new tab

NAVIGATE ME:

Take me to pw skills to buy a course.

Take me to MDN docs to more about web development.

Take me pw skills lab to practice live coding.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Document</title>
</head>
<body>
    <nav>
        <ul>
            <li>
                Take me to <a href="pw skill.html">pw skill</a>to
buy a course
            </li>
            <li>
                Take me to <a href="MND docs.html">MND docs</a> to
more about web development
            </li>
            <li>
                Take me <a href="pw skill lab.html">pw skill
lab</a>to practice live coding
            </li>
        </ul>
    </nav>
</body>
</html>
```

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>PW SKILL</title>
</head>
<body>
    <h1>This website offers a fullstack webdevelopment course that
teaches you how to creat whole webpage from start to finish</h1>
</body>
</html>
```

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
```

```

<title>MND DOCS</title>
</head>
<body>
  <p>This is a great resource for learning web development. it
  provides information about open web technology</p>

</body>
</html>

```

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>PW SKILL LAB</title>
</head>
<body>
  <p>PW SKILL LAB IS A GOOD CODE EDITOR</p>

</body>
</html>

```

6. Create an ordered list of HTML Tags. Each list item must include tag name and some information about tag.

Ans-Here is an ordered list (ol) of HTML tags with their tag names

1. <html>: This is the root element of an HTML document. It represents the entire HTML document </html>
2. <head>: This element contains meta-information about the HTML document such as title, link to style sheet and script </head>
3. <body>: This element represents the content of the HTML document, including text, images, link and other elements </body>
4. <h1> to <h6>: These tags represent different levels of heading, <h1> being highest and <h6> being lowest. Headings are used to structure the content and provide hierarchical organisation.
5. <p>: This tag represents a paragraph of text. It is commonly used to group and format blocks of text within the document.
6. <a>: This tag defines a hyperlink, which allows users to navigate to other web pages. It is used in combination with the 'href' attribute to specify the destination URL.
7. : This tag is used to embed an image in the HTML document. It requires the 'src' attribute

7. Create an unordered list of 5 programming quotes, using the tag

Ans-

```

  <li>"talk the cheap, show me code"</li>
  <li>"programming is the art of telling another human what one wants the
computer          to do" </li>
  <li>"give a man a programming problem and he will frustrate him for a day</li>
  <li>"the best error message is one that never shows up</li>
  <li>"program must be written for people to read"</li>
</ul>

```


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

Ans-<dl>

<dt>Front-end</dt>

<dd>

HTML (Hypertext Markup Language): The standard markup language used for creating web pages and structuring their content.

</dd>

<dd>

CSS (Cascading Style Sheets): A stylesheet language used for describing the look and formatting of a document written in HTML.

</dd>

<dd>

JavaScript: A programming language that enables interactivity and dynamic behavior on web pages, making them more responsive and user-friendly.

</dd>

<dt>Back-end</dt>

<dd>

Server: The hardware or software infrastructure responsible for handling requests, processing data, and serving responses to clients.

</dd>

<dd>

Programming Languages (e.g., Python, Java, Ruby, etc.): Used to write the server-side logic and handle business logic and data manipulation.

</dd>

<dd>

Web Frameworks (e.g., Node.js, Django, Ruby on Rails, etc.): Pre-built libraries and tools that provide a structured way to develop web applications.

</dd>

<dd>

APIs (Application Programming Interfaces): A set of protocols and tools for building software applications, enabling communication between different software systems.

</dd>

<dd>

Databases (e.g., MySQL, MongoDB, PostgreSQL, etc.): Systems used to store and manage large amounts of data for web applications.

</dd>

<dt>DevOps</dt>

<dd>

Version Control (e.g., Git, SVN): Tools used to manage changes to source code and collaborate with other developers.

</dd>

<dd>

Deployment Tools (e.g., Docker, Kubernetes): Technologies that facilitate the packaging, deployment, and scaling of web applications.

Cloud Platforms (e.g., AWS, Google Cloud, Microsoft Azure): Infrastructure and services that enable hosting and managing web applications in the cloud.

Monitoring and Logging Tools (e.g., New Relic, ELK Stack): Software used to monitor the performance, track errors, and gather logs from web applications.

9. Create an ordered list of the most common text formatting tags in HTML. Within each list item, use an unordered list to list the specific use cases and best practices for that tag.

Ans-

- tag:**

 - Use cases:**

 - To indicate strong importance or emphasis on text.
 - To highlight keywords or important phrases.
 - Best practices:**

 - Avoid using **** for purely visual styling; use CSS for that.
 - Reserve **** for semantically important text.
- tag:**

 - Use cases:**

 - To indicate emphasis on text.
 - To highlight book titles, foreign words, or idiomatic phrases.
 - Best practices:**

 - Avoid using **** for purely visual styling; use CSS for that.
 - Reserve **** for semantically important text.

```
</ul>
</li>
<li>
  <u> tag:
  <ul>
    <li>Use cases:
    <ul>
      <li>To underline text.</li>
      <li>To indicate hyperlinks (in combination with <a> tag).</li>
    </ul>
    </li>
    <li>Best practices:
    <ul>
      <li>Use CSS for visual styling instead of relying solely on <u> tag.</li>
      <li>Avoid using <u> for non-hyperlink text.</li>
    </ul>
    </li>
  </ul>
</li>
<li>
  <del> tag:
  <ul>
    <li>Use cases:
    <ul>
      <li>To strike through deleted or no longer valid text.</li>
      <li>To indicate changes in a document.</li>
    </ul>
    </li>
    <li>Best practices:
    <ul>
      <li>Pair <del> with <ins> to show additions and deletions.</li>
      <li>Use CSS for visual styling of the strike-through effect.</li>
    </ul>
    </li>
  </ul>
</li>
<li>
  <ins> tag:
  <ul>
    <li>Use cases:
    <ul>
      <li>To underline inserted or newly added text.</li>
      <li>To indicate changes in a document.</li>
    </ul>
    </li>
    <li>Best practices:
    <ul>
      <li>Pair <ins> with <del> to show additions and deletions.</li>
      <li>Use CSS for visual styling of the underline effect.</li>
    </ul>
    </li>
  </ul>
</li>
<li>
  <sup> tag:
```

- Use cases:
 - To display superscript text (e.g., mathematical exponents, footnotes).
 - To indicate dates (e.g., "st", "nd", "rd", "th").
 - Best practices:
 - Avoid using `<sup>` for purely visual styling; use CSS for that.
 - Reserve `<sup>` for semantically important text.
- `<sub>` tag:
 - Use cases:
 - To display subscript text (e.g., chemical formulas, mathematical subscripts).
 - To indicate dates (e.g., "st", "nd", "rd", "th").
 - Best practices:
 - Avoid using `<sub>` for purely visual styling; use CSS for that.
 - Reserve `<sub>` for semantically important text.
- `<code>` tag:
 - Use cases:
 - To represent computer code or program output.
 - To distinguish code from regular text.
 - Best practices:
 - Use `<code>` within `<pre>` or `<samp>` tags for multiline code blocks.
 - For inline code snippets, use `<code>` without additional block-level tags.
- `<blockquote>` tag:
 - Use cases:

```

        <ul>
          <li>To indicate a longer quotation or citation.</li>
          <li>To offset a section of text from the main content.</li>
        </ul>
      </li>
      <li>Best practices:
        <ul>
          <li>Use CSS for visual styling of blockquotes.</li>
          <li>Include the appropriate citation or source within the <blockquote>.</li>
        </ul>
      </li>
    </ul>
  </li>
  <li>
    <abbr> tag:
    <ul>
      <li>Use cases:
        <ul>
          <li>To define an abbreviation or acronym.</li>
          <li>To provide an expanded explanation or meaning on hover.</li>
        </ul>
      </li>
      <li>Best practices:
        <ul>
          <li>Use the title attribute to provide the expanded explanation.</li>
          <li>Avoid overusing <abbr>; only use it when the abbreviation is
significant.</li>
        </ul>
      </li>
    </ul>
  </li>
</ol>

```

10. Creat an ordered list of full stack web development tech stack HTML,CSS AND JS.for each tech stack,creat a table that lies the tech stack name ,its primary use cases,and some key features and benefit

```

Ans-<ol>
<li>
HTML:
<table>
  <thead>
    <tr>
      <th>Name</th>
      <th>Primary Use Cases</th>
      <th>Key Features and Benefits</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>HTML</td>
      <td>Structuring web content</td>
      <td>Defines the structure and layout of web documents</td>
    </tr>
  </tbody>
</table>

```

```

</tr>
<tr>
  <td></td>
  <td>Creating semantic markup</td>
  <td>Provides accessibility and SEO benefits</td>
</tr>
<tr>
  <td></td>
  <td>Organizing and formatting text and multimedia</td>
  <td>Supports various elements and attributes</td>
</tr>
</tbody>
</table>
</li>
<li>
  CSS:
  <table>
    <thead>
      <tr>
        <th>Name</th>
        <th>Primary Use Cases</th>
        <th>Key Features and Benefits</th>
      </tr>
    </thead>
    <tbody>
      <tr>
        <td>CSS</td>
        <td>Styling and visual presentation of web pages</td>
        <td>Controls the layout and appearance of HTML elements</td>
      </tr>
      <tr>
        <td></td>
        <td>Responsive design</td>
        <td>Supports media queries for different screen sizes</td>
      </tr>
      <tr>
        <td></td>
        <td>Animation and transitions</td>
        <td>Enables smooth animations and interactive effects</td>
      </tr>
    </tbody>
  </table>
</li>
<li>
  JavaScript:
  <table>
    <thead>
      <tr>
        <th>Name</th>
        <th>Primary Use Cases</th>
        <th>Key Features and Benefits</th>
      </tr>
    </thead>
    <tbody>
      <tr>

```

```

        <td>JavaScript</td>
        <td>Client-side and server-side scripting</td>
        <td>Enables interactivity and dynamic behavior on web pages</td>
    </tr>
    <tr>
        <td></td>
        <td>Web application development</td>
        <td>Supports frameworks like React, Angular, and Vue.js</td>
    </tr>
    <tr>
        <td></td>
        <td>DOM manipulation and event handling</td>
        <td>Allows modification of HTML and CSS based on user actions</td>
    </tr>
</tbody>
</table>
</li>
</ol>

```

SECOND ASSIGNMENT:

1. Write a simple program in HTML that display the heading "I am happy to learn web development" on the web browser.

Ans-<!DOCTYPE html>
<html>
<head>
<title>My Web Page</title>
</head>
<body>
<h1>I am happy to learn web development</h1>
</body>
</html>

2. Write a simple program in HTML the webpage must contain the heading "comments" and below the heading add some information about comments. the webpage must be rendered on the web browser

Ans-<!DOCTYPE html>
<html>
<head>
<title>My Web Page</title>
</head>
<body>
<h1>Comments</h1>
<p>

Comments in HTML are used to add notes or descriptions to the code. They are ignored by the browser and are only visible in the HTML source code.

Comments can be useful for providing explanations, making notes, or temporarily disabling a portion of the code.

To create a comment, you can use the <!-- comment --> syntax. Anything between the opening <!-- and closing --> tags is considered a comment.

```

    </p>
</body>
</html>

```

3. Write a short note on tags, element and attribute along with relevant example.

Ans-A))Tags: Tags are the building blocks of HTML. They define the structure and content of a web page. Tags are enclosed within angle brackets (<>). There are two types of tags: opening tags and closing tags. The opening tag indicates the beginning of an element, while the closing tag indicates the end of an element. For example:

```
<h1>This is a heading</h1>
```

In the above example, <h1> is the opening tag, and </h1> is the closing tag. The content "This is a heading" is placed between the opening and closing tags and is referred to as the element.

B))Elements: Elements are created by enclosing content within tags. An element consists of the opening tag, the content, and the closing tag. Elements can be nested inside other elements to create a hierarchical structure. For example:

```
html
```

Copy code

```
<p>This is a <strong>paragraph</strong> with bold text.</p>
```

In the above example, <p> is the opening tag of the paragraph element, </p> is the closing tag, and "This is a" and "with bold text." are the content. The tag is nested inside the paragraph element to make the word "paragraph" bold.

C))Attributes: Attributes provide additional information about an HTML element. They are specified within the opening tag of an element and consist of a name-value pair. The attribute name is followed by an equals sign (=) and the attribute value enclosed in quotes (" or '). For example:

```

```

In the above example, the src attribute specifies the source URL of the image, and the alt attribute provides alternative text for the image. The attribute name is src and alt, and the attribute values are "image.jpg" and "A beautiful image", respectively.

4.What is emmet?List some advantages emmet offers?

Ans-

orkflow. It allows developers to write HTML and CSS code using abbreviations, which are then expanded into complete code snippets. Emmet significantly speeds up the process of writing code and increases productivity. Here are some advantages of using Emmet:

- **Faster coding:** Emmet enables developers to write code using shorthand abbreviations. With a few keystrokes, you can generate complex HTML and CSS structures, reducing the amount of manual typing and saving time.
- **Abbreviations expansion:** Emmet can expand abbreviations into complete HTML and CSS code snippets. For example, typing `ul>li*3>a` and then using

the Emmet expansion command will generate an unordered list with three list items containing anchor tags.

- **Nested elements:** Emmet simplifies the process of creating nested elements. By using the > symbol, you can easily nest elements within parent elements, without having to write repetitive code.
- **Powerful numbering and repetition:** Emmet provides the ability to generate repeated elements with incremental numbers. This is particularly useful when creating lists, tables, or sets of similar elements.
- **CSS-like syntax for HTML:** Emmet allows you to use a CSS-like syntax for writing HTML, making it more intuitive and familiar for developers who are already comfortable with CSS.
- **Customization:** Emmet is highly customizable, allowing developers to configure and extend its functionality according to their specific needs. You can define your own custom snippets and abbreviations to enhance your coding workflow.
- **Integration with popular code editors:** Emmet is integrated into many popular code editors, including Visual Studio Code, Sublime Text, and Atom. This makes it readily available and accessible within your preferred development environment.

Overall, Emmet streamlines the coding process, improves productivity, and reduces the amount of manual typing required when writing HTML and CSS code. Its ease of use and versatility have made it a valuable tool for web developers.

Regenerate response

Emmet is a popular and powerful toolkit for web developers that enhances HTML and CSS workflow. It allows developers to write HTML and CSS code using abbreviations, which are then expanded into complete code snippets. Emmet significantly speeds up the process of writing code and increases productivity. Here are some advantages of using Emmet:

- **Faster coding:** Emmet enables developers to write code using shorthand abbreviations. With a few keystrokes, you can generate complex HTML and CSS structures, reducing the amount of manual typing and saving time.
- **Abbreviations expansion:** Emmet can expand abbreviations into complete HTML and CSS code snippets. For example, typing `ul>li*3>a` and then using the Emmet expansion command will generate an unordered list with three list items containing anchor tags.
- **Nested elements:** Emmet simplifies the process of creating nested elements. By using the > symbol, you can easily nest elements within parent elements, without having to write repetitive code.
- **Powerful numbering and repetition:** Emmet provides the ability to generate repeated elements with incremental numbers. This is particularly useful when creating lists, tables, or sets of similar elements.

- **CSS-like syntax for HTML:** Emmet allows you to use a CSS-like syntax for writing HTML, making it more intuitive and familiar for developers who are already comfortable with CSS.
- **Customization:** Emmet is highly customizable, allowing developers to configure and extend its functionality according to their specific needs. You can define your own custom snippets and abbreviations to enhance your coding workflow.
- **Integration with popular code editors:** Emmet is integrated into many popular code editors, including Visual Studio Code, Sublime Text, and Atom. This makes it readily available and accessible within your preferred development environment.

Overall, Emmet streamlines the coding process, improves productivity, and reduces the amount of manual typing required when writing HTML and CSS code. Its ease of use and versatility have made it a valuable tool for web developers.

Regenerate response

5.Explain in brief about the nesting operators in emmet

Ans- In Emmet, nesting operators are used to indicate the hierarchical structure and nesting relationships of HTML or XML elements. They allow you to quickly generate nested code structures without explicitly typing out each element and its parent-child relationships.

The most commonly used nesting operator in Emmet is the `>` (child operator). It specifies that the element on the right is a direct child of the element on the left. For example, `div>p` would expand to:

```
<div>
  <p></p>
</div>
```

Another nesting operator is the `+` (sibling operator). It indicates that the element on the right is a sibling of the element on the left. For example, `div+p` would expand to:

```
<div></div>
<p></p>
```

Emmet also provides the `^` (climbing up operator) to move up the hierarchy. It is used to indicate that the element on the right is a sibling of an ancestor element. For example, `div>ul>li^p` would expand to:

```
<div>
  <ul>
    <li></li>
  </ul>
</div>
<p></p>
```

Additionally, you can use parentheses `()` to group elements together. This is useful when you want to apply an operator to a group of elements. For example, `ul>(li>a)+(li>a)` would expand to:

```

<ul>
  <li>
    <a></a>
  </li>
  <li>
    <a></a>
  </li>
</ul>

```

6. Build a simple webpage using any 2 emmet abbreviation and the above element mention the emmet abbreviation using HTML comment

Ans-`<!-- Abbreviation: header>h1{Hello, Emmet!} -->`

```

<header>
  <h1>Hello, Emmet!</h1>
</header>

```

`<!-- Abbreviation: section#main>h2{Welcome}+p{This is a simple webpage built with Emmet.} -->`

```

<section id="main">
  <h2>Welcome</h2>
  <p>This is a simple webpage built with Emmet.</p>
</section>

```

- 1))The first abbreviation `header>h1{Hello, Emmet!}` creates a `<header>` element with an `<h1>` heading inside, displaying the text "Hello, Emmet!".
- 2))The second abbreviation `section#main>h2{Welcome}+p{This is a simple webpage built with Emmet.}` generates a `<section>` element with the `id` attribute set to "main". Inside the section, it creates an `<h2>` heading with the text "Welcome" and a `<p>` paragraph with the text "This is a simple webpage built with Emmet."

9. What are self closing tags?write a brief note on meta tags?

Ans-Self-closing tags, also known as void elements, are HTML tags that do not have a closing tag. They are used to represent elements that do not contain any content or have no need for closing tags because they don't have any nested elements. Instead, they are written as a single tag with a trailing slash at the end. For example, `
` and `` are self-closing tags.

Now, let's talk about meta tags. Meta tags are HTML elements that provide metadata or additional information about a webpage. They are placed within the `<head>` section of an HTML document and are not visible to website visitors but are used by browsers, search engines, and other web services. Here are a few commonly used meta tags and their purposes:

- `<meta charset="UTF-8">`: Specifies the character encoding for the HTML document. It ensures that the browser interprets and displays the text correctly.
- `<meta name="viewport" content="width=device-width, initial-scale=1.0">`: Defines the viewport settings for responsive web design. It helps ensure that the webpage is properly displayed on different devices and screen sizes.
- `<meta name="description" content="Brief description of the webpage">`: Provides a concise summary or description of the webpage's content. Search engines may use this description in search results.
- `<meta name="keywords" content="keyword1, keyword2, keyword3">`: Specifies a list of keywords or phrases that are relevant to the webpage's content. It helps search engines understand the topic or theme of the page.
- `<meta name="author" content="Author Name">`: Specifies the author's name or organization responsible for creating the webpage.

10. What are the global attributes? List any 5 global attributes?

Ans-Global attributes are attributes that can be used with any HTML element. They provide common functionalities and behaviors that can be applied universally across different elements.

Here are five examples of global attributes:

- **class**: Specifies one or more CSS classes to apply to an element. It is commonly used for styling and selecting elements with CSS or JavaScript.
- **id**: Defines a unique identifier for an element. It is typically used to target specific elements for styling or scripting purposes.
- **style**: Allows inline CSS styles to be applied directly to an element. It is used to customize the appearance of individual elements.
- **title**: Provides additional information or a tooltip text for an element. When the user hovers over the element, the specified text is displayed as a tooltip.
- **data-***: This is a group of attributes that starts with "data-" and can have any custom name after the dash. It allows you to store custom data or information associated with an element. It is commonly used for JavaScript purposes, such as storing additional data or configuration options.