1. Write a simple program in HTML that displays the heading “I am happy to Learn Web Development” on the web browser.

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>Document</title>

</head>

<body>

<p>I am happy to Learn Web Development.</p>

</body>

</html>

1. 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 as below image.

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>Comments</title>

</head>

<body>

<h1>Comments</h1>

<p>Adding comments in HTML can help you write and organize the backend of your webpage. They’re so useful that it’s considered a best practice to use them. You can add comments to explain your code, which will make it easier to edit in the future or to work with other developers. You can also use comments to simplify your debugging efforts by “commenting out” lines of code without deleting them. In HTML, a comment is a section of text that is not processed by the web browser. Comments are enclosed in <!-- --> tags. These tags tell the browser that the text inside them is a comment and should not be rendered on the front end. With the comments tag, you can leave notes to remind yourself where you left off in the build process. You could explain the intended functionality of a section of code for another developer or your future self. Or, you might assign someone a task or point out an error for them with a comment.In short, commenting in HTML helps you work smarter when building or debugging a website. </p>

</body>

</html>

1. Write a short note on tags, elements, and attributes along with relevant examples.

Ans:- Tags: Tags are used to define the structure and semantics of elements within a markup language. They are enclosed within angle brackets (< >) and appear as pairs: an opening tag and a closing tag. The content between the opening and closing tags represents the element's content. Some common tags in HTML include:

<h1> and </h1>: These tags define a level 1 heading.

<p> and </p>: These tags define a paragraph.

<a> and </a>: These tags define a hyperlink.

Elements: Elements are made up of tags and the content between them. They represent specific components or sections of a webpage. Each element has a specific purpose and meaning in the context of the markup language being used. For example, the <h1> element represents a level 1 heading, while the <p> element represents a paragraph.

Attributes: Attributes provide additional information about an element. They are specified within the opening tag of an element and consist of a name-value pair. Attributes help define characteristics or behaviors for an element. class: Specifies one or more CSS classes to apply to an element.

1. List out any 3 tags we learned in this module and give a brief explanation about the tags.

Ans:- <h1> (Heading 1): This tag is used to define the highest level of heading in HTML. It represents the most important heading on a webpage. The text within the <h1> tags is typically displayed in a larger, bolder font compared to other headings. Example -

<h1>This is heading</h1>

<p> (Paragraph): The <p> tag is used to define a paragraph of text. It is commonly used to structure and present textual content on a webpage. The browser automatically adds vertical spacing before and after the paragraph to visually separate it from other elements. Example -

<p>This is paragraph</p>

<a> (Anchor): The <a> tag is used to create hyperlinks, allowing users to navigate to other web pages or specific sections within a page. It requires an href attribute, which specifies the URL destination of the link. Example -

<a href=”<https://www.google.com>”>Google</a>

1. What is emmet? List some of the advantages emmet offers.

Ans:- Emmet is a powerful tool and abbreviation syntax for web developers, originally developed for HTML and CSS, but now supports various other web-related languages. It enhances the speed and efficiency of writing HTML and CSS code by providing a shorthand syntax for quickly generating code snippets. Here are some advantages of using Emmet:

Increased Productivity

Abbreviation-Based Syntax

Dynamic Placeholder

Support Nesting and Repetition

Support for Multiple Editors and IDEs

1. Using emmet create another webpage similar to questions 1 and 2.

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>Qwe\_6</title>

</head>

<body>

<!-- p{I'm happy to learn web development}h1{Comments}p{Adding comments in HTML can help you write and organize the backend of your webpage. They’re so useful that it’s considered a best practice to use them. You can add comments to explain your code, which will make it easier to edit in the future or to work with other developers. You can also use comments to simplify your debugging efforts by “commenting out” lines of code without deleting them. In HTML, a comment is a section of text that is not processed by the web browser. Comments are enclosed in tags. These tags tell the browser that the text inside them is a comment and should not be rendered on the front end. With the comments tag, you can leave notes to remind yourself where you left off in the build process. You could explain the intended functionality of a section of code for another developer or your future self. Or, you might assign someone a task or point out an error for them with a comment.In short, commenting in HTML helps you work smarter when building or debugging a website.} -->

<p>I'm happy to learn web development</p>

<h1>Comments</h1>

<p>Adding comments in HTML can help you write and organize the backend of your webpage. They’re so useful that it’s considered a best practice to use them. You can add comments to explain your code, which will make it easier to edit in the future or to work with other developers. You can also use comments to simplify your debugging efforts by “commenting out” lines of code without deleting them. In HTML, a comment is a section of text that is not processed by the web browser. Comments are enclosed in <!-- --> tags. These tags tell the browser that the text inside them is a comment and should not be rendered on the front end. With the comments tag, you can leave notes to remind yourself where you left off in the build process. You could explain the intended functionality of a section of code for another developer or your future self. Or, you might assign someone a task or point out an error for them with a comment.In short, commenting in HTML helps you work smarter when building or debugging a website.</p>

</body>

</html>

1. Explain in brief about the nesting operators in emmet.

Ans:- In Emmet, nesting operators are used to create hierarchical structures and define the relationship between elements. These operators allow you to quickly generate nested elements in HTML or CSS with just a few characters. Here are the most commonly used nesting operators in Emmet:

> (Child operator): The > operator is used to indicate that one element is the direct child of another element. It creates a parent-child relationship between elements. For example, div>ul>li will expand to a <div> element containing a nested <ul> element, which in turn contains a nested <li> element.

+ (Sibling operator): The + operator is used to indicate that one element is a sibling of another element. It creates elements that are at the same hierarchical level. For example, div+p will expand to a <div> element followed by a <p> element.

^ (Climb-up operator): The ^ operator is used to climb up one level in the hierarchy. It allows you to move up to a parent element from a nested context. For example, div>ul>li^p will expand to a <div> element containing a nested <ul> element with a nested <li> element, and then it climbs up to the <div> level and adds a <p> element as a sibling.

1. Build a simple webpage using any 2 emmet abbreviations and above the elements mention the emmet abbreviation using HTML comments.

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>Qwe\_6</title>

</head>

<body>

<!-- p{I'm happy to learn web development}h1{Comments}p{Adding comments in HTML can help you write and organize the backend of your webpage. They’re so useful that it’s considered a best practice to use them. You can add comments to explain your code, which will make it easier to edit in the future or to work with other developers. You can also use comments to simplify your debugging efforts by “commenting out” lines of code without deleting them. In HTML, a comment is a section of text that is not processed by the web browser. Comments are enclosed in tags. These tags tell the browser that the text inside them is a comment and should not be rendered on the front end. With the comments tag, you can leave notes to remind yourself where you left off in the build process. You could explain the intended functionality of a section of code for another developer or your future self. Or, you might assign someone a task or point out an error for them with a comment.In short, commenting in HTML helps you work smarter when building or debugging a website.} -->

<p>I'm happy to learn web development</p>

<h1>Comments</h1>

<p>Adding comments in HTML can help you write and organize the backend of your webpage. They’re so useful that it’s considered a best practice to use them. You can add comments to explain your code, which will make it easier to edit in the future or to work with other developers. You can also use comments to simplify your debugging efforts by “commenting out” lines of code without deleting them. In HTML, a comment is a section of text that is not processed by the web browser. Comments are enclosed in <!-- --> tags. These tags tell the browser that the text inside them is a comment and should not be rendered on the front end. With the comments tag, you can leave notes to remind yourself where you left off in the build process. You could explain the intended functionality of a section of code for another developer or your future self. Or, you might assign someone a task or point out an error for them with a comment.In short, commenting in HTML helps you work smarter when building or debugging a website.</p>

</body>

</html>

1. What are self-closing tags? Write a brief note on meta tags.

Ans:- Self-closing tags, also known as empty or void tags, are HTML tags that do not have a closing tag. Instead, they include a forward slash (/) at the end of the opening tag to indicate that the tag is self-contained. These tags are used to insert elements that don't require any content or have content that is not applicable.

Some common examples of self-closing tags in HTML include:

<br>: Represents a line break or carriage return.

<img>: Defines an image to be displayed on the webpage.

<input>: Creates an input field for user input.

<meta>: Defines metadata about the HTML document.

Meta tags are HTML elements that provide metadata or additional information about an HTML document. They are placed within the <head> section of an HTML document and are not visible to website visitors. Instead, they provide instructions or information to browsers, search engines, and other web services.

Some commonly used meta tags include:

<meta charset="UTF-8">: Specifies the character encoding for the document, typically set to UTF-8.

<meta name="description" content="Description of the webpage">: Provides a brief description of the webpage's content.

<meta name="keywords" content="keyword1, keyword2, keyword3">: Specifies relevant keywords related to the webpage's content.

<meta name="viewport" content="width=device-width, initial-scale=1.0">: Defines the viewport properties for responsive web design.

1. What are global attributes? List any 5 global attributes.

Ans:- Global attributes are HTML attributes that can be used on any HTML element. These attributes provide common functionality and behavior that can be applied universally across different elements. Here are five commonly used global attributes:

class: Specifies one or more CSS classes to apply to an element, allowing for styling and targeting of specific elements using CSS.

id: Specifies a unique identifier for an element, which can be used for JavaScript interactions or for linking to specific sections within a webpage.

style: Allows inline CSS styling to be applied directly to an element, specifying visual presentation such as colors, fonts, and layout.

title: Provides additional information or a tooltip text that is displayed when the user hovers over the element.

data-\***:** Allows custom data attributes to be added to an element for storing extra information that can be accessed by JavaScript or CSS. The asterisk (\*) can be replaced with any name to create a custom data attribute.