Term-1
Module (HTML) -1

1. Are the HTML tags and elements the same thing?

Ans:-

- HTML tags and elements are related but not the same thing.
- They are fundamental components of HTML (Hypertext Markup Language) used for structuring web documents, but they serve slightly different purposes.

- **Tags:** Tags are used to markup elements in HTML and XML documents. They consist of angle brackets (< and >) and are used to enclose elements. Tags are essential for defining the structure and hierarchy of content in a document. For example, in HTML, you have tags like <p> to define paragraphs and <a> to define hyperlinks.

- **Elements:** Elements are made up of one or more tags and the content they enclose. An element typically consists of a start tag, content, and an end tag. The start tag marks the beginning of the element, the end tag marks the end, and the content is the information or text enclosed between these tags. For example, in HTML, a paragraph element is represented as <p>This is a paragraph. </p>. Here, <p> is the start tag, This is a paragraph. is the content, and </p> is the end tag.

2.What are tags and attributes in HTML?

1. **Ans :-**

- HTML (Hypertext Markup Language), tags and attributes are fundamental concepts used to structure and define the content of a web page. They play a crucial role in creating web pages and specifying how elements should be displayed or behave.

   Tags:
- HTML tags are the building blocks of an HTML document. They are used to define and structure the content within a web page. Tags typically come in pairs: an opening tag and a closing tag. The opening tag contains

the name of the HTML element, and the closing tag has a forward slash before the element name to indicate the end of that element.

- EXAMPLE: -

<h1>This is a heading</h1>

Attributes:

- Attributes provide additional information about an HTML element. They are added within the opening tag and are used to modify the behavior or appearance of the element. Attributes consist of a name and a value, separated by an equals sign (=).

- EXAMPLE: -

<img src="example.jpg" alt="Example image">

3.What are void elements in HTML?

Ans :-

- Void elements, also known as self-closing or empty elements, are a special category of HTML elements that don't have a closing tag because they don't contain any content or text. Instead, they are self-contained within a single tag and are used to insert various types of content or elements into a web page. Void elements are often used for embedding multimedia, adding line breaks, and including images or input fields.

Example:-

1. **<img>**: Used to display images on a web page.
2. **
**: Used to create line breaks or vertical spacing within text.
3. **<input>**: Used to create input fields in forms.
4. **<link>**: Typically used to link external CSS stylesheets or define relationships between documents.
5. **<meta>**: Used to provide metadata about the HTML document, such as character encoding or authorship information.
6. **<hr>**: Used to insert horizontal lines or thematic breaks.

4. What are HTML Entities?

- HTML entities are special codes or sequences of characters used in HTML documents to represent characters that have a special meaning in HTML, or characters that cannot be easily typed on a keyboard.

- < represents the less-than sign (<).
- > represents the greater-than sign (>).
- & represents the ampersand itself (&).
- " represents a double quotation mark (").
- ' represents an apostrophe or single quotation mark (').

5.What are different types of lists in HTML?

- In HTML, you can create different types of lists to organize and structure content. The three main types of lists in HTML are:

- Ordered List (OL): An ordered list is used to represent a list of items in a specific order or sequence. Each item in an ordered list is preceded by a sequential number or letter, typically starting from 1. By default, the numbering is numerical (1, 2, 3...), but you can change it to use uppercase or lowercase letters or even Roman numerals.

EXAMPLE: -

```
<ol>
    <li>First item</li>
    <li>Second item</li>
    <li>Third item</li>
</ol>
```

Unordered List (UL): An unordered list is used to represent a list of items in no particular order or sequence. Each item in an unordered list is typically preceded by a bullet point or another symbol (such as a square, circle, or custom image).

EXAMPLE: -

```
<ul>
    <li>Item one</li>
```

Item two

Item three

Definition List (DL): A definition list is used to create a list of terms (dt elements) and their corresponding definitions (dd elements). This type of list is often used for glossaries or dictionaries.

EXAMPLE: -

```
<dl>
    <dt>HTML</dt>
    <dd>HyperText Markup Language</dd>
    <dt>CSS</dt>
    <dd>Cascading Style Sheets</dd>
</dl>
```

6. What is the 'class' attribute in HTML?

- The class attribute in HTML is used to assign one or more class names to an HTML element. It allows you to associate one or more CSS classes with an element, which, in turn, enables you to apply styles and formatting to that element based on the defined CSS rules for those classes. This attribute is one of the key mechanisms for styling and targeting specific elements on a web page using CSS.

EXAMPLE: -

```
<!DOCTYPE html>
<html>
<head>
<style>
.note {
  font-size: 120%;
  color: red;
}
</style>
```

```
</head>
<body>

<h1>My <span class="note">Important</span> Heading</h1>
<p>This is some <span class="note">important</span> text.</p>

</body>
</html>
```

7.What is the difference between the 'id' attribute and the 'class' attribute of HTML elements?

- The class attribute in HTML is used to assign one or more class names to an HTML element. It allows you to associate one or more CSS classes with an element, which, in turn, enables you to apply styles and formatting to that element based on the defined CSS rules for those classes. This attribute is one of the key mechanisms for styling and targeting specific elements on a web page using CSS.

EXAMPLE: -

```
<p class="highlighted">This is a highlighted paragraph. </p>
```

CSS

```
. highlighted {

    background-color: yellow;

    color: black;

    font-weight: bold;

}
```

8.What are the various formatting tags in HTML

- HTML provides various formatting tags and elements that allow you to control the presentation and appearance of content on a web page. While HTML is primarily used for structuring content, these formatting tags can

help style and format text and other elements on your web page. Here are some common HTML formatting tags:?

EXAMPLE: -

Headings (`<h1>` to `<h6>`):

- <h1>This is a Heading 1</h1>
- <h2>This is a Heading 2</h2>

Paragraphs (`<p>`):

- <p>This is a paragraph of text.</p>

Bold (`<strong>` or `<b>`):

- <p>This text is important.</p>
- <p>This text is bold.</p>

Italic (`<em>` or `<i>`):

- <p>This text is emphasized.</p>
- <p>This text is <i>italic</i>.</p>

Underline (`<u>`):

- <p>This text is <u>underlined</u>.</p>

Line Break (`<br>`):

- <p>This is the first line.
This is the second line.</p>

9. How is Cell Padding different from Cell Spacing?

Cellpadding:

- **Purpose:** Cell padding controls the space between the content (text or other elements) within a table cell and the cell's border.
- **Attribute**: It is set using the cellpadding attribute within the <table> element.
- **Value**: The value of cellpadding specifies the amount of space, in pixels or other applicable units, to be added between the content and the cell's border.

EXAMPLE: -

<table cellpadding="10">
  <tr>
    <td>This is some text in a cell.</td>

```
<td>Another cell with content.</td>
 </tr>
</table>
```

CellSpacing:

- **Purpose:** Cell spacing controls the space between adjacent cells in a table.
- **Attribute:** It is set using the cellspacing attribute within the <table> element.
- **Value:** The value of cellspacing specifies the amount of space, in pixels or other applicable units, to be added between adjacent cells in the table.

EXAMPLE: -

```
<table cellspacing="5">
 <tr>
   <td>Cell 1</td>
   <td>Cell 2</td>
 </tr>
 <tr>
   <td>Cell 3</td>
   <td>Cell 4</td>
 </tr>
</table>
```

10.How can we club two or more rows or columns into a single row or column in an HTML table?

- To combine two or more rows or columns into a single row or column in an HTML table, you can use the rowspan and colspan attributes. These attributes allow you to specify how many rows or columns a cell should span. Here's how you can use them:

-

- Combining Rows: To combine rows into a single row, use the rowspan attribute in a <td> or <th> element. Here's an example:

<table border="1">

```
<tr>
 <td rowspan="2">Row 1, Cell 1</td>
 <td>Row 1, Cell 2</td>
```

```
      <td>Row 1, Cell 3</td>
    </tr>
    <tr>
      <td>Row 2, Cell 2</td>
      <td>Row 2, Cell 3</td>
</tr>
```

- Combining Columns: To combine columns into a single column, use the colspan attribute in a <td> or <th> element. Here's an example:

```
<table border="1">
 <tr>
   <td>Row 1, Cell 1</td>
   <td colspan="2">Row 1, Cell 2 and Cell 3 combined</td>
 </tr>
 <tr>
   <td>Row 2, Cell 1</td>
   <td>Row 2, Cell 2</td>
   <td>Row 2, Cell 3</td>
 </tr>
</table>
```

11. What is the difference between a block-level element and an inline element?

Block-Level Elements:

- Block-level elements are elements that create a new "block" or rectangular box on a web page. They typically start on a new line and extend across the full width of their parent container
- They are used to structure the layout and organization of web content. Common block-level elements include <div>, <p>, <h1>, <ul>, <ol>, <li>, <header>, <footer>, and <section>.

Inline Elements:

- Inline elements do not create a new block or start on a new line; instead, they are contained within block-level elements and flow within the text or content. They occupy only as much width as necessary.

- They are typically used to style or modify specific parts of the text or content, such as emphasizing text with <em>, creating hyperlinks with <a>, or adding strong emphasis with <strong>.

12.How to create a Hyperlink in HTML?

- You can create a hyperlink in HTML using the <a> (anchor) element. The <a> element allows you to link to other web pages, websites, or resources by specifying the target URL. Here's the basic syntax for creating a hyperlink:

Absolute Link:

- An absolute link specifies the complete URL of a resource, including the protocol (e.g., http:// or https://), the domain name (e.g., www.example.com), and the path to the resource (e.g., /images/pic.jpg).
- Relative Link:

- Absolute links provide the full and unambiguous address of a resource, making it easy for browsers to find the resource regardless of the current page's location.
- Example: About Us

- A relative link specifies the URL of a resource relative to the current location of the HTML document.
- Relative links are often used when linking to resources within the same website or domain, as they are more concise and don't require specifying the full domain.
- There are two types of relative links:
- Relative to the current directory: These links specify the path to the resource based on the location of the current HTML document.
- Example: Image
- Relative to the root directory: These links specify the path to the resource starting from the root directory of the website.
- Example: Image

13.What is the use of an iframe tag?

- The <iframe> (short for "inline frame") tag in HTML is used to embed another HTML document or web page within the current document. It

allows you to display content from a different source within a specific section of your webpage. This can be useful for various purposes, such as including videos, maps, external widgets, or even displaying content from another website on your own page. Here are some common uses of the <iframe> tag:

14. What is the use of a span tag? Explain with example:

- The <span> tag in HTML is a non-semantic inline element used primarily for styling and applying CSS to a specific portion of text or content within a larger block of text. It does not add any structural meaning to the content but allows you to apply styles, scripts, or other attributes to a specific part of the text without affecting the surrounding content.

EXAMPLE: -

```
<style>
  .blue-text {
    color: blue;
  }
  .bold-text {
    font-weight: bold;
  }
</style>

<p>This is a <span class="blue-text bold-text">blue and bold</span>
text.</p>
```

15. How to insert a picture into a background image of a web page?

- o insert a picture (an image) into the background of a web page, you can use CSS to set the background image property of an HTML element, typically a <div> or the <body> element. Here's a step-by-step guide on how to do this:

- **HTML Structure:** Create the HTML structure of your web page. You can set the background image for the entire page by targeting the <body> element, or you can set it for specific sections using <div> elements.

  For example:

```
<!DOCTYPE html>
<html>
<head>
  <title>Background Image Example</title>
  <link rel="stylesheet" type="text/css" href="styles.css">
</head>
<body>
  <div class="content">
    <!-- Your page content goes here -->
  </div>
</body>
</html>
```

- **Create a CSS File:** Create an external CSS file (e.g., styles.css) and link it to your HTML document. This is where you'll define the background image and its properties.
- **Define the Background Image:** In your CSS file, use the background-image property to specify the image's URL. You can use the background-repeat, background-size, and other properties to control how the image behaves as a background.

For example:

```
body {
    background-image: url('path-to-your-image.jpg'); /* Replace 'path-to-your-image.jpg' with the actual path to your image */
    background-size: cover; /* This property scales the image to cover the entire element */
    background-repeat: no-repeat; /* Prevents the image from repeating */
    background-attachment: fixed; /* Optional: keeps the background fixed while scrolling */
}
```

16. How are active links different from normal links?

Normal Links:

- Normal links, often just referred to as "links" or "hyperlinks," are elements on a web page that users can click on to navigate to another web page, website, or resource.
- These links are typically styled using CSS to differentiate them from regular text, and they change appearance (usually color) when hovered over or visited.

Active Links:

- "Active links" is not a common term in web development, but it could be interpreted to mean links that are currently in use or links that are part of a user's current interaction with a web page or application.
- For example, in a navigation menu, the link corresponding to the current page might appear differently (e.g., with a different color or background) to indicate that it is "active."

17. What are the different tags to separate sections of text?

- In HTML, you can use various tags to separate and structure sections of text or content within a web page. These tags help organize your content and provide meaning to different parts of the page. Here are some common HTML tags used for this purpose:

For example:
```
<div>
<section>
<article>
<header>
<h1 to h6>
```

18. What is SVG?

- SVG stands for Scalable Vector Graphics. It is a widely used XML-based vector image format for displaying two-dimensional graphics on the web. SVG is used to describe graphics and graphical applications in a way that is both vector-based (meaning it uses geometric shapes to define images) and scalable (meaning it can be resized without losing image quality). Here are some key points about SVG:
- SVG is a versatile and powerful format for creating graphics on the web and is often used in conjunction with HTML and CSS to enhance the visual appeal and interactivity of web pages.

19. What is difference between HTML and XHTML?

- HTML (Hypertext Markup Language) and XHTML (Extensible Hypertext Markup Language) are both markup languages used for creating web pages, but there are significant differences between the two.

❖ FULL STRACK ASSIGNMENT (Web Designing Assignment)

Syntax Rules:

- HTML: HTML has more forgiving syntax rules, allowing for some sloppy coding practices. For example, it allows unclosed or mismatched tags, optional closing tags, and attribute values without quotes.
- XHTML: XHTML follows stricter XML rules. All tags must be properly nested, closed, and written in lowercase. Attribute values must be enclosed in double or single quotes, and all tags must be closed, including empty elements like <img> and <br>.

Self-Closing Tags:

- HTML: In HTML, self-closing tags like <img> and <br> can be written without a trailing slash (e.g., <img src="image.jpg">), and they are still recognized by browsers.
- XHTML: In XHTML, self-closing tags must be closed with a trailing slash (e.g.,) to be valid.

Attribute Minimization:
- HTML: HTML allows attribute minimization, meaning you can omit attribute values for certain attributes (e.g., <input type="text" autofocus>).
- XHTML: XHTML does not allow attribute minimization, so all attributes must have values (e.g., <input type="text" autofocus="autofocus">).

20. What are logical and physical tags in HTML?

Block elements (Logical):

- Block-level elements are HTML elements that create a block of content, typically starting on a new line and extending the full width of their parent container. Examples of block-level elements include <div>, <p>, <h1> to <h6>, <ul>, <ol>, <li>, <table>, <form>, etc. These are often considered "logical" containers as they define the structure and organization of the content on a webpage.

Inline elements (Physical):

- Inline elements are HTML elements that do not create a new line and only take up as much width as necessary. They are typically used within block-level elements to style or format specific parts of the content.

❖   FULL STRACK ASSIGNMENT (Web Designing Assignment)

Examples of inline elements include <span>, <strong>, <em>, <a>, <img>, <br>, <i>, <b>, etc. These are often considered "physical" in the sense that they affect the appearance or style of the content without altering the overall structure.