**HTML ASSIGNMENT**

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

Ans: - HTML tags and elements are not same thing .there are so many differences between HTML tags and elements.

An HTML element are both the opening tag and closing tags.

1 .HTML tags:-

An HTML tag is the actual code used to define and structure elements within an HTML document. It includes the opening < and closing > brackets and May or may not have attributes within it. Tags are used to define and control the behavior and appearance of HTML elements.

2. HTML elements:-

An HTML element is a structural component of an HTML document. It consists of an opening tag, content, and a closing tag .The opening tag contains the element's name and the closing tag has a forward slash before the element . Some elements are self-closing and don't require a closing tag.

**2. What are tags and attributes in HTML?**

Ans: HTML tags are used to hold the HTML element. HTML element holds the content. HTML attributes are used to describe the characteristic of an HTML element in detail. HTML tag starts with < and ends with > whatever written within a HTML tag are HTML elements.

Tags are used to mark up the start of an HTML element and they are usually enclosed in angle brackets.

Attributes contain additional pieces of information. Attributes take the form of an opening tag and additional info is placed inside.

Example

<p> this is a paragraph. </p>

<img src="nature.jpg" alt="A photo of beautiful nature.">

HTML tags:-

- HTML tags are used to hold the HTML element.

- HTML tag starts with < and ends with >

- HTML tags are almost like keywords where every single tag has unique meaning.

HTML attributes:-

- HTML attributes are used to describe the characteristic of an HTML element in detail.

- HTML attributes are found only in the starting tag.

- HTML attributes specify various additional properties to the existing HTML element.

In HTML, tags and attributes are essential components used to structure and describe the content of a web page. They define the elements and properties of elements within an HTML document.

**3. What are void elements in HTML? With Example.**

Ans: void elements are also known as self-closing elements.

Void elements are written with a single opening tag and an optional slash before the closing angle bracket. That don't have a closing tag because they don't contain any content between an opening and closing tag.

There is a special group of elements that only have start tags and does not contain any content within it, these elements are called void elements. Void elements doesn’t have ending tags and can only have attributes but do not contain any kind of content. These elements can have backslash before ending of start tag but that is completely optional. Example of such elements are <br>, <hr>, <img>, <input>, <link>, <base>, <Meta>, <param> etc.

* Void elements do not have end tags.
* Void elements cannot have content inside it.
* Void elements have attributes.
* Void elements cannot be nested.

Example:-

<br> tag: - This tag is used to insert line breaks in text in HTML. It accepts clear attribute that indicates where to start the next line.

<! DOCTYPE html>

<Html>

<head>

<title>webpage</title>

</head>

<body>

<h1 style="color: red">hello world </h1>

    <p>Hi <br>Welcome to my page !!!</p>

</body>

</html>

<hr> tag: - The <hr> tag in HTML stands for horizontal rule and is used to insert a horizontal rule or a thematic break in an HTML page to divide or separate document sections. The <hr> tag is an empty tag, and it does not require an end tag.

<! DOCTYPE html>

<html>

<head>

<title>webpage</title>

<title>webpage</title>

</head>

<body>

<p>Welcome to our webpage !!! </p>

<hr>

<p>stay always happy </p>

</body>

</html>

<Img> tag: - This tag is used to add images to HTML web pages. It can have attributes like src, alt, height, width, ismap, loading, etc.

<! DOCTYPE html>

<html>

<head>

<title>webpage</title>

</head>

<body>

<h2 style="color: yellow ">hey there</h2>

    <img src= “index. Img” width="320" height="100" alt="nature img" >

</body>

</html>

<Input> tag: - This tag is used to insert an input field that can accept different types of inputs based on the value of the type attribute. It can also have attributes like name, alt, placeholder etc.

<! DOCTYPE html>

<html>

<head>

<title>webpage</title>

</head>

<body>

  <h2 style="color: green">hey there!!! </h2>

  <input type="text" placeholder="Enter name...">

</body>

</html>

<Link> tag: - defines the relationship between the current document and an external resource. The <link> tag is most often used to link to external style sheets or to add a favicon to your website.

<! DOCTYPE html>

<html>

<head>

<title>webpage</title>

</head>

<body>

<h2>Hello world</h2>

</body>

</html>

**4. What are HTML Entities? With Example.**

Ans: - An HTML entity is used to display invisible characters and reserved characters that would otherwise be interpreted as HTML code. It is a piece of text, or string, that begins with an ampersand (&) and ends with a semicolon (;).

HTML character entities are used as a replacement of reserved characters in HTML. You can also replace characters that are not present on your keyboard by entities.

These characters are replaced because some characters are reserved in HTML. HTML entities provide a wide range of characters which can allow you to add icons, geometric shapes, mathematical operators, etc.

Example:-

There are many type of entities

Result description entity name entity number

Non-breaking space &nbsp; &#160;

< Less than &lt; &#60;

> Greater than &gt; &#62;

& ampersand &amp; &#38;

" Double quotation mark &quot; &#34;

' Single quotation mark &apos; &#39;

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£ pound &pound; &#163;

**5. What are different types of lists in HTML? With Example**.

Ans: - there are three type of lists.

1. Ordered list

2. Unordered list

3. Description list

1.Ordered list: -

in HTML, all the list items in an ordered list are marked with numbers by default instead of bullets. An HTML ordered list starts with the <ol> tag and ends with the </ol> tag. The list items start with the <li> tag and end with </li> tag.

Syntax:-

<ol>List of Items</ol>

Example:-

<! DOCTYPE html>

<html>

<head>

<title>Ordered List</title>

</head>

<Body>

<h2>flowers </h2>

<ol>

<li>rose</li>

<li>lily</li>

<li>jasmin</li>

<li>daisy</li>

<li>lavender </li>

</ol>

</body>

</html>

2. Unordered list :-

In HTML unordered list, the list items have no specific order or sequence. An unordered list is also called a Bulleted list, as the items are marked with bullets. It begins with the <ul> tag and and closes with a </ul> tag. The list items begin with the <li> tag and end with </li> tag.

Syntax :-

<ul>List of Items</ul>

Example :-

<!DOCTYPE html>

<html>

<head>

<title>Unordered List</title>

</head>

<body>

<h2>flowers</h2>

<ul>

<li>rose</li>

<li>lily</li>

<li>jasmin</li>

<li>daisy</li>

<li>lavender</li>

</ul>

</body>

</html>

3. Description list :-

A description list is a type of list where each item has a description. It is also known as a definition list. The <dl> tag is used to create description list, the <dt> tag defines the item, and the <dd> tag describes each item in list.

Syntax :-

<dl>description list</dl>

Example :-

<!DOCTYPE html>

<html>

<head>

<title>description list </title>

</head>

<body>

<h2>A Description List</h2>

<dl>

<dt>Coffee</dt>

<dd>- black hot drink</dd>

<dt>Milk</dt>

<dd>- white cold drink</dd>

</dl>

</body>

</html>

**6. What is the ‘class’ attribute in HTML? With Example.**

Ans :- The class is an attribute that specifies one or more class names for an HTML element.The class attribute can be used on any HTML element.

Example :-

<!DOCTYPE html>  
<html>  
<head>

<title>fruits</title>  
</head>  
<body style = “  background-color: yellow;  
  color: black;  
  border: 2px solid black;  
  margin: 10px;  
  padding: 10px;”>  
  
<div class="fruit">  
  <h2>mango</h2>  
  <p>Mango is the national fruit of India.</p>  
</div>  
  
<div class="fruit">  
  <h2>apple</h2>  
  <p>apple is good for health.</p>  
</div>  
  
<div class="fruit">  
  <h2>peach </h2>  
  <p> Pineapple is a sweet-smelling fruit..</p>  
</div>  
  
</body>  
</html>

**7. What is the difference between the ‘id’ attribute and the ‘class’ attribute of HTML elements? With Example.**

Ans :- : A Class name can be used by multiple HTML elements, while an ID name must only be used by one HTML element within the page.

The only difference between them is that “id” is unique in a page and can only apply to at most one element, while “class” selector can apply to multiple elements.

Example of id attribute :-

<!DOCTYPE html>

<html>

<head>

<title>

id attribute example

</title>

</head>

<body style="text-align: center;

#id{

color: green;

font-size: 25px;

}

">

<h1>id attribute </h1>

<p id="1">Welcome to my page</p>

<p>this is a example of id attribute</p>

</body>

</html>

Example of class attribute :-

<!DOCTYPE html>

<html>

<head>

<style>

.class{

color: green;

font-size: 25px;

}

</style>

</head>

<body style="text-align: center;">

<h1>class attribute</h1>

<p> Welcome to my page</p>

<p class="1 ">

This is a example of class attribute

</p>

</body>

</html>

**8. What are the various formatting tags in HTML?**

Ans :- there are mainly two parts of formatting tags.

1 . logical tags

2 . physical tags

1 . logical tags :-

Logical tags are used to tell the meaning of the enclosed text. The example of the logical tag is <strong> </strong> tag. When we enclose the text in the strong tag, it tells the browser that enclosed text is more important than other texts.

Example of logical tags

<abbr> abbreviation

<address> address element

<cite> citation

<code> computer code text

<blockquote> long quotation

<del> text

<kbd> keyboard text

<strong> strong text

<var> variable

2 . physical tags :-

 Physical tags are used to tell the browser how to display the text enclosed in the physical tag. Some of the examples of physical tags are <b>, <big>, <i>.

Example of physical tags

<b> bold text

<big> big text

<i> italic text

<small> small text

<sup> superscripted text

<sub> subscripted text

<tt> teletype text

<u> underline

**9 .How is Cell Padding different from Cell Spacing? With Example.**

Ans :- cellpadding and cellspacing are the two attributes used for formatting table cells. Both cellpadding and cellspacing are used to insert whitespaces in the table cells. The most basic difference between cellpadding and cellspacing is that the cellpadding is used to set the whitespace between cell edge and cell content, whereas cellspacing is used to set the whitespace between two cells.

Cellpadding :-

Cellpadding is the attribute that defines the space in a cell between the cell content and its border.

1 . It is the attribute that defines the space in a cell between the content and its border.

2 . It deals with a single cell.

3 . Creation It can be created with the HTML <table> tag, but the type attribute is set to cellpadding.

4 . It is more extensively employed and thought to be more efficient than Cellspacing.

5 . Its deafault value is 1 .

Example of cellpadding :-

<!DOCTYPE html>

<html>

<head>

<title> fruits name </title>

</head>

<body>

<table border="2" cellpadding="15">

<tr>

<td>apple</td>

<td>banana</td>

<td>pineapple</td>

</tr>

<tr>

<td>papaya</td>

<td>orange</td>

<td>grapes</td>

</tr>

</table>

</body>

</html>

Cellspacing :-

Cellspacing is something different from cellpadding. In HTML, cellspacing is yet another attribute of the table tag. It regulates the distance between the single cells in a table.

1 . It regulates the distance between the single cells in a table.

2 . It deals with multiple cells.

3 . It can be created with the HTML <table> tag, but the type attribute is set to cellspacing.

1. . It is less effective than Cellpadding.

5. Its default value is 2.

Example :

<!DOCTYPE html>

<html>

<head>

<title>fruits name</title>

</head>

<body>

<table border="3" cellspacing="25">

<tr>

<td>apple</td>

<td>banana</td>

<td>pineapple</td>

</tr>

<tr>

<td>Papaya</td>

<td>orange</td>

<td>grapes</td>

</tr>

</table>

</body>

</html>

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

Ans : - you can merge two or more rows or columns into a single row or column in an HTML table using the colspan and rowspan attributes.

This allows you to create tables with complex layouts where some cells span across multiple rows or columns.

Example of rowspan and colspan : -

<!DOCTYPE html>

<html>

<head>

<title>Table </title>

</head>

<body>

<table border="1">

<tr>

<th>Header 1</th>

<th>Header 2</th>

<th>Header 3</th>

</tr>

<tr>

<td rowspan="2">Row 1, Col 1</td>

<td>Row 1, Col 2</td>

<td>Row 1, Col 3</td>

</tr>

<tr>

<td>Row 2, Col 2</td>

<td>Row 2, Col 3</td>

</tr>

<tr>

<td>Row 3, Col 1</td>

<td colspan="2">Row 3, Col 2 and 3 </td>

</tr>

</table>

</body>

</html>

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

Ans :- Block elements always start from a new line. Inline elements never start from a new line. Block elements cover space from left to right as far as it can go. Inline elements only cover the space as bounded by the tags in the HTML element.

Block Elements occupy the full width irrespective of their sufficiency. Inline elements don't start in a new line. Block elements always start in a line. Inline elements allow other inline elements to sit behind.

Inline elements occupy only sufficient width required when Block Elements occupy the full width irrespective of their sufficiency.

Inline elements don’t start in a new line when Block elements always start in a line.

Inline elements allow other inline elements to sit behind when Block elements doesn’t allow other elements to sit behind.

Inline elements don’t have top and bottom margin when Block elements have top and bottom margin.

**12. How to create a Hyperlink in HTML? With Example.**

Ans :- To create a hyperlink in HTML, you can use the anchor tag .

To make a hyperlink in an HTML page, use the <a> and </a> tags, which are the tags used to define the links. The <a> tag indicates where the hyperlink starts and the </a> tag indicates where it ends. Whatever text gets added inside these tags, will work as a hyperlink. Add the URL for the link in the <a href=" ">.

Syntax :-

<a href="https://www.google.com">click here and open google !!</a>

Example :-

<!DOCTYPE html>

<html>

<head>

<title>google</title>

</head>

<body>

<h2>

Welcome to my page

</h2>

<a href="<https://www.google.com>"> click here and open google</a>

</body>

</html>

**13. What is the use of an iframe tag? With Example.**

Ans :- The iframe stands for Inline Frame. The HTML iframe name attribute is used to specify a reference for an <Iframe> element. The iframe is basically used to show a webpage inside the current web page. The ‘ src ‘ attribute is used to specify the URL of the document that occupies the iframe. An iframe is used to display a web page within a web page.

The HTML <iframe> tag specifies an inline frame.The src attribute defines the URL of the page to embed.Always include a title.The height and width attributes specify the size of the iframe .

An iframe is a HTML element that loads another HTML page within the document. It essentially puts another webpage within the parent page. They are commonly used for advertisements, embedded videos, web analytics and interactive content.

Syntax :-

<iframe src="URL" title="description"></iframe>

Example :-

<!DOCTYPE html>

<html>

<head>

<title>iframe Tag</title>

</head>

<body style="text-align: center">

<h1>google</h1>

<h2>HTML iframe Tag</h2>

<iframe src= "https://google.com/abc.html" height="200" width="400">

</iframe>

</body>

</html>

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

Ans :- The HTML <span> tag is used for grouping and applying styles to inline elements.

The <span> tag is an inline container used to mark up a part of a text, or a part of a document.

 The <span> tag is much like the <div> element, but <div> is a block-level element and <span> is an inline element.

There is a difference between the span tag and the div tag. The span tag is used with inline elements whilst the div tag is used with block-level content.

Syntax :-

<span class="">some text……………..</span>

Example :-

<!DOCTYPE html>

<html>

<head>

<title>Span Tag</title>

</head>

<body>

<h2> span tag</h2>

<p>I have choosen only

<span style="color: red;">red</span>,

<span style="color: blue;">blue</span>

<span style="color: green;">green</span> colors for my painting.

</p>

</body>

</html>

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

Ans :- to insert a picture into a background image of webpage In the body tag, specify a background image in the background attribute by passing the URL of the image or location path.

Syntax :-

<body background = "URL or path" > Website Body </body>

Example :-

<!DOCTYPE html>

<html>

<head>

<title>Website</title>

</head>

<body background="https://abc.png">

<h1>nature</h1>

<h2>Background Image</h2>

</body>

</html>

**16. How are active links different from normal links?**

Ans :- Active links and normal links are terms used to describe the state of hyperlinks on a web page, and they serve different purposes in user interface design. Here's how they differ:

Normal Links :-

Normal links, also known as unvisited links, are the default appearance of hyperlinks on a web page.

They are typically styled with a default color and underline to indicate that they are clickable.

Normal links are displayed when a web page is loaded and before any interaction with them.

Once a user clicks on a normal link and visits the linked page, it typically changes to a visited link to signify that the user has already been to that page. This change in appearance is usually controlled by the browser.

Active Links:-

Active links, on the other hand, represent links that are currently being interacted with by the user.

They may change their appearance when the user hovers their cursor over them or clicks on them .

The change in appearance is a visual feedback mechanism to indicate that the link is being actively engaged with.

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

Ans :- In HTML, there are various tags you can use to separate and structure sections of text. These tags help organize and format your content for web display. Here are some common HTML tags used for this purpose:

- The <div> element is a generic container that can be used to group and separate sections of text or other HTML elements. It is often used for layout and styling purposes.

- The <p> element is used to define and separate paragraphs of text.

- <h1>, <h2>, <h3>, <h4>, <h5>, <h6>: These heading elements are used to define headings of varying levels within your content.

- The <section> element is used to define thematic sections or blocks of content within a webpage.

- The <blockquote> element is used for quoting text from another source.

- The <aside> element is used to mark content that is tangentially related to the main content, such as sidebars, pull quotes, or supplementary information.

**18. What is SVG?**

Ans :- SVG is an XML-based markup language for describing two-dimensional based vector graphics.

SVG :- Scalable Vector Graphics

SVG images and their related behaviors are defined in XML text files, which means they can be searched, indexed, scripted, and compressed.

they can be created and edited with any text editor or with drawing software.

SVG provides elements for circles, rectangles, and simple and complex curves.

**19 .What is difference between HTML and XHTML?**

Ans :- XHTML was developed to make HTML more extensible and flexible to work with other data formats . In addition, browsers ignore errors in HTML pages, and try to display the website even if it has some errors in the markup. So XHTML comes with a much stricter error handling.

difference between HTML and XHTML :-

HTML :-

HTML stands for Hypertext Markup Language.

Doctype is not necessary to write at the top.

All tags and attributes are not necessarily to be in lower or upper case.

It is extended from SGML.

Filename extension used are .html, .htm.

It is not necessary to close the tags in the order they are opened.

Doctype is not necessary to write at the top.

XHTML :-

XHTML stands for Extensible Hypertext Markup Language.

It is necessary to close the tags in the order they are opened.

Filename extension are .xhtml, .xht, .xml.

Doctype is very necessary to write at the top of the file.

In this, every tag and attribute should be in lower case.

The format is a markup language.

It is extended from XML and HTML.

**20 . What are logical and physical tags in HTML?**

Ans :- Physical and Logical tags are used in HTML for better visibility and understanding of the text by the user on the web page.

In HTML the formatting tags are divided into two categories:

 Physical tag: These tags are used to provide the visual appearance to the text.

 Logical tag: These tags are used to add some logical or semantic value to the text.

Logical Tags :

Logical Tags are used in HTML to display the text according to the logical styles.

<abbr> Defines an abbreviation

<address> Defines an address element

<cite> Defines citation

<code> Defines computer code text

<blockquote> Defines a long quotation

<del> Defines text

<ins> Defines inserted text

<kbd> Defines keyboard text

<q> Defines short quotation

<strong> Defines strong text

<var> Defines a variable

Physical Tags :

Physical Tags are used in HTML to provide actual physical formatting to the text.

<b> Defines bold text

<big> Defines big text

<i> Defines italic text

<small> Defines small text

<sup> Defines superscripted text

<sub> Defines subscripted text

<u> Deprecated. Use styles instead