

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

->HTML tags are used to hold the HTML elements.HTML elements holds the content.

2> What are tags and attributes in HTML?

->HTML Tags: Tags are the starting and ending parts of an HTML element. They begin with < symbol and end with > symbol. Whatever written inside < and > are called tags.

ex:

->HTML Attributes: It is used to define the character of an HTML element. It always placed in the opening tag of an element. It generally provides additional styling (attribute) to the element.

ex:<p align="center">This is paragraph.</p>

3>What are void elements in HTML?

->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
, <hr>, , <input>, <link>, <base>, <meta>, <param>, <area>, <embed>, <col>, <track>, <source> etc.

4>What are HTML Entities?

->HTML provides some method to display reserved characters. Reserved characters are those characters that are either reserved for HTML or those which are not present in the basic keyboard. For instance, '<' is reserved in HTML language. Sometimes this character needs to display on the web page which creates ambiguity in code. Along with these are the characters which are normally not present in basic keyboard (£, ¥, €, ©), etc. HTML provides some Entity names and Entity numbers to use these symbols. Entity names are case-sensitive. Entity number is easy to learn.

5>What are different types of lists in HTML?

->There are two types of lists in html

1>ordered lists-

2>Unordered list-

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

-> The class is an attribute which specifies one or more class names for an HTML element.

The class attribute can be used on any HTML element.

The class name can be used by CSS and JavaScript to perform certain tasks for elements with the specified class name.

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

->In HTML, both Id and Class are the element selector and are used to identify an element based on the name assign to these parameters. ID and Class selectors are the most widely used element selectors in CSS (HTML). The basic difference between ID and Class is that the ID selector is applied only to one element in a page, whereas the class selector can be applied to several elements on a single page.

8>What are the various formatting tags in HTML?

->As we know, HTML provides many predefined elements that are used to change the formatting of text. The formatting can be used to set the text styles (like – bold, italic, or emphasized, etc.)

ex: both tags used to bold the text

9>How is Cell Padding different from Cell Spacing?

->Cellpadding:

Cellpadding specifies the space between the border of a table cell and its contents (i.e) it defines the whitespace between the cell edge and the content of the cell.

->Cellspacing:

Cellspacing specifies the space between cells (i.e) it defines the whitespace between the edges of the adjacent cells.

Name	Age
Rani	30
Rajan	35
Akshaya	17
Ashick	13

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

->You can merge two or more table cells in a column using the colspan attribute in a <td> HTML tag (table data). To merge two or more row cells, use the rowspan attribute. On this page, we provide examples and information on using these attributes and show you how they display in the browser.

Example : Colspan

```
Ex: <table>

<tr>

<td colspan="2">&nbsp;</td>

<td>&nbsp;</td>

</tr>

<tr>

<td>&nbsp;</td>

<td>&nbsp;</td>

<td>&nbsp;</td>

</tr>

<tr>

<td>&nbsp;</td>

<td>&nbsp;</td>

<td>&nbsp;</td>

</tr>

</table>
```

Output:

Example : Rowspan

```
Ex: <table>

<tr>

  <td rowspan="2">&nbsp;</td>

  <td>&nbsp;</td>

  <td>&nbsp;</td>

</tr>

<tr>

  <td>&nbsp;</td>

  <td>&nbsp;</td>

</tr>

<tr>

  <td>&nbsp;</td>

  <td>&nbsp;</td>

  <td>&nbsp;</td>

</tr>

</table>
```

Output:

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

-> Block elements: They consume the entire width available irrespective of their sufficiency. They always start in a new line and have top and bottom margins. It does not contain any other elements next to it.

Examples of Block elements:

- <h1>-<h6> : This element is used for including headings of different sizes ranging from 1 to 6.
- <div>: This is a container tag and is used to make separate divisions of content on the web page.
- <hr>: This is an empty tag and is used for separating content by horizontal lines.
- : This tag is used for including list items of an ordered or unordered list.
- : This tag is used to make an unordered list.
- : This tag is used to make an ordered list.
- <p>: This tag is used to include paragraphs of content in the webpage.
- <table>: This tag is used for including the tables in the webpage when there is a need for tabular data

-> Inline elements: Inline elements occupy only enough width that is sufficient to it and allows other elements next to it which are inline. Inline elements don't start from a new line and don't have top and bottom margins as block elements have.

Examples of Inline elements:

- <a>: This tag is used for including hyperlinks in the webpage.
-
: This tag is used for mentioning line breaks in the webpage wherever needed.
- <script> : This tag is used for including external and internal JavaScript codes.

<input>: This tag is used for taking input from the users and is mainly used in forms.

: This tag is used for including different images in the webpage to add beauty to the webpage.

: This is an inline container that takes necessary space only.

: This tag is used in places where bold text is needed.

<label>: The tag in HTML is used to provide a usability improvement for mouse users i.e, if a user clicks on the text within the <label> element, it toggles the control.

12>How to create a Hyperlink in HTML?

-> The HTML <a> tag defines a hyperlink. It has the following syntax:

```
<a href="url">link text</a>
```

Ex:Click here to go to google

13> What is the use of an iframe tag?

->The iframe in HTML stands for Inline Frame. The "iframe" tag defines a rectangular region within the document in which the browser can display a separate document, including scrollbars and borders. An inline frame is used to embed another document within the current HTML document. The HTML iframe name attribute is used to specify a reference for an <iframe> element. The name attribute is also used as a reference to the elements in JavaScript. 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.

Syntax:

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

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

-> The HTML span element is a generic inline container for inline elements and content. It is used to group elements for styling purposes (by using the class or id attributes), A better way to use it when no other semantic element is available.

The span tag is a paired tag means it has both open(<) and closing (>) tags, and it is mandatory to close the tag. The span tag is used for the grouping of inline elements & this tag does not make any visual change by itself. span is very similar to the div tag, but div is a block-level tag and span is an inline tag.

Syntax:

```
<span class="">Some Text</span>
```

Code: <!DOCTYPE html>

```
<html>
```

```
<body>
```

```
    <h2>Welcome To Mypage</h2>
```

```
<p>This is My
```

```
    <span style="font-weight:bolder">
```

```
        Document</span> for
```

```
    <span style="font-weight:bolder">HTML</span>.
```

```
</p>
```

```
</body>
```

```
</html>
```

Output:

Welcome To Mypage

This is My document for HTML

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

-> Approach:

In the body tag, specify a background image in the background attribute by passing the URL of the image or location path.

Adding CSS styling properties.

Syntax:

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

16>How are active links different from normal links?

-> Normal links are links which are there on the page and have not been clicked yet. Active links are those links, which have just been clicked at that instant.

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

->1.<p></p>: This is used for paragraphs. Whenever you want to separate two or more paragraphs, this tag can be used.For eg:

```
<p>This is first paragraph and it should be long enough to look like one</p>
```

```
<p>This is second paragraph and it should be long enough to look like one</p>
```

2.<div></div>: This can also be used to separate the blocks of text. But this tag defines a division on the page. Generally used to form divisions for either a banner or logo or something related to that on HTML page.

3.<hr>: Horizontal line tag can be used to separate the paragraphs (or lines) in the HTML file. For eg:

This is the first line

```
<hr>
```

This is the second line.

4.
: Line break tag can also perform the same purpose. It is generally used to start a text on a new line in HTML.

18>What is SVG?

->

SVG stands for Scalable Vector Graphics

SVG is used to define graphics for the Web

SVG is a W3C recommendation

```
<svg width="100" height="100">  
  <circle cx="50" cy="50" r="40" stroke="green" stroke-width="4" fill="yellow" />  
</svg>
```

19> What is difference between HTML and XHTML?

-> 1. XHTML :

XHTML stands for Extensible Hypertext Markup Language. It can be considered as a part of the XML markup language this is because of XHTML have features of both XML and HTML. XHTML is extended from XML and HTML. XHTML can be considered as a better version of HTML.

2. HTML :

HTML is the Hypertext Markup Language which is the most widely used language over the internet. HTML is used to create web pages and link them from one to another. Please note HTML is not a programming language, it is a markup language. We can use different other technologies as like CSS and javascript to give a new look to the pages developed by HTML.

20> What are logical and physical tags in HTML?

-> Logical Tags :

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

Ex: <pre>,,<var>

Physical Tags

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

Ex:,<big>,<small>,<u>

21>What are the new tags added in HTML5?

-> List of all elements introduced in HTML5:

`<article>` tag: The `<article>` tag is one of the new sectioning element in HTML5. The HTML `<article>` tag is used to represent an article. More specifically, the content within the `<article>` tag is independent of the other content of the site (even though it can be related).

`<aside>` tag: The `<aside>` tag is used to describe the main object of the web page in a shorter way like a highlighter. It basically identifies the content that is related to the primary content of the web page but does not constitute the main intent of the primary page. The `<aside>` tag contains mainly author information, links, related content, and so on.

`<audio>` tag: The `<audio>` tag is used to insert an audio into an HTML webpage.

`<canvas>` tag: The `<canvas>` tag in HTML is used to draw graphics on a web page using JavaScript. It can be used to draw paths, boxes, texts, gradients, and add images. By default, it does not contain borders and text.

`<command>` tag: The `<command>` tag define a command button, invoke as per user action. The `<command>` tag button is used in a special type of operation. The `<command>` tag is supported only by Internet Explorer.

`<datalist>` tag: The `<datalist>` tag is used to provide autocomplete feature in the HTML files. It can be used with an input tag so that users can easily fill the data in the forms using select the data.

`<details>` tag: The `<details>` tag is used for the content/information which is initially hidden but could be displayed if the user wishes to see it. This tag is used to create an interactive widget that the user can open or close. The content of the details tag is visible when opening the set attributes. The `<summary>` tag is used with the `<detail>`s tag for specifying visible heading.

`<embed>` tag: The `<embed>` tag in HTML is used for embedding external applications which are generally multimedia content like audio or video into an HTML document. It is used as a container for embedding plug-ins such as flash animations. This tag is a new tag in HTML 5, and it requires only starting tag.

`<figure>` tag: The `<figure>` tag in HTML is used to add self-contained content like illustrations, diagrams, photos, or codes listing in a document. It is related to the main flow, but it can be used in any position of a document and the figure goes with the flow of the document and if remove it then it should not affect the flow of the document. This tag is new in HTML5.

`<footer>` tag: The `<footer>` tag in HTML is used to define a footer of HTML document. This section contains the footer information (author information, copyright information, carriers, etc). The footer tag is used within the body tag. The `<footer>` tag is new in the HTML5. The footer elements require a start tag as well as an end tag.

`<header>` tag: The `<header>` tag contains information related to the title and heading of the related content. The `<header>` element is intended to usually contain the section's heading (an `h1-h6` element or an `<hgroup>` element), but this is not required. The `<header>` element can also be used to wrap a section's table of contents, a search form, or any relevant logos. The `<header>` tag is a new tag in HTML5 and it requires a starting tag as well as an end tag. There can be several `<header>` elements in one document. A `<header>` tag cannot be placed within a `<footer>`, `<address>` or another `<header>` element.

`<hgroup>` tag: The `<hgroup>` tag in HTML stands for heading group and is used to group the heading elements. The `<hgroup>` tag in HTML is used to wrap one or more heading elements from `<h1>` to `<h6>`, such as the headings and sub-headings. The `<hgroup>` tag requires the starting tag as well as ending tag.

`<keygen>` tag: The `<keygen>` tag in HTML is used to specify a key-pair generator field in a form. The purpose of the `<keygen>` element is to provide a secure way to authenticate users. When a form is submitted then two keys are generated, private key and public key. The private key is stored locally, and the public key is sent to the server. The public key is used to generate a client certificate to authenticate a user for the future.

`<mark>` tag: The `<mark>` tag in HTML is used to define the marked text. It is used to highlight the part of the text in a paragraph. The `<mark>` tag is new in HTML5.

`<meter>` tag: It is used to define the scale for measurement in a well-defined range and also supports a fractional value. It is also known as a gauge. It is used in Disk use, relevance query result, etc.

`<nav>` tag: The `<nav>` tag is used for declaring the navigational section in HTML documents. Websites typically have sections dedicated to navigational links, which enables users to navigate the site. These links can be placed inside a nav tag. In other words, the nav element represents a section of the page whose purpose is to provide navigational links, either in the current document or to another document. The links in the nav element may point to other web pages or to different sections of the same webpage. It is a semantic element. Common examples of the nav elements are menus, tables, contents, and indexes.

`<output>` tag: The `<output>` tag in HTML is used to represent the result of a calculation performed by the client-side script such as JavaScript. The `<output>` tag is a new tag in HTML5, and it requires a starting and ends tag.

`<progress>` tag: It is used to represent the progress of a task. It is also defined how much work is done and how much is left to download a thing. It is not used to represent the disk space or relevant query.

`<ruby>` tag: The `<ruby>` tag in HTML is used to specify the ruby annotation which is a small text, attached with the main text to specify the meaning of the main text. This kind of annotation is used in Japanese publications.

`<section>` tag: The `<section>` tag defines the section of documents such as chapters, headers, footers, or any other sections. The section tag divides the content into sections and subsections. The section tag is used when requirements of two headers or footers or any other section of documents are needed. The `<section>` tag grouped the generic block of related contents. The main advantage of the section tag is, it is a semantic element, which describes its meaning to both browser and developer.

`<time>` tag: The `<time>` tag is used to display the human-readable date/time. It can also be used to encode dates and times in a machine-readable form. The main advantage for users is that they can offer to add birthday reminders or scheduled events in their calendar's and search engines can produce smarter search results.

`<wbr>` tag: The `<wbr>` tag in HTML stands for word break opportunity and is used to define the position within the text which is treated as a line break by the browser. It is mostly used when the used word is too long and there are chances that the browser may break lines at the wrong place for fitting the text.

`<video>` tag: The `<video>` tag is used to embed video content in a document, such as a movie clip or other video streams.

22>How to embed audio and video in a webpage?

->

For video: `<video src="rabbit320.webm" controls>`

```
<p>
  Your browser doesn't support HTML video. Here is a
  <a href="rabbit320.webm">link to the video</a> instead.
</p>
</video>
```

For audio:

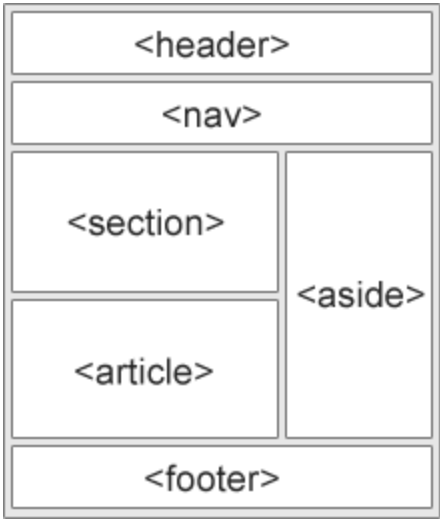
```
<audio controls>
  <source src="viper.mp3" type="audio/mp3" />
  <source src="viper.ogg" type="audio/ogg" />
  <p>
    Your browser doesn't support this audio file. Here is a
    <a href="viper.mp3">link to the audio</a> instead.
  </p>
</audio>
```

23>Semantic element in HTML5?

-> Semantic Elements in HTML

In HTML there are some semantic elements that can be used to define different parts of a web page:

```
<article>
<aside>
<details>
<figcaption>
<figure>
<footer>
<header>
<main>
<mark>
<nav>
<section>
<summary>
<time>
```



24>Canvas and SVG tags

-> **SVG:** The Scalable Vector Graphics (SVG) is an XML-based image format that is used to define two-dimensional vector-based graphics for the web. Unlike raster image (Ex .jpg, .gif, .png, etc.), a vector image can be scaled up or down to any extent without losing the image quality. An SVG image is drawn out using a series of statements that follow the XML schema — that means SVG images can be created and edited with any text editor, such as Notepad. There are several other advantages of using SVG over other image formats like JPEG, GIF, PNG, etc.

Code: `<!DOCTYPE html>`

```
<html>
<head>
  <style>
    #svgelem {
      position: relative;
      left: 50%;
      -webkit-transform: translateX(-20%);
      -ms-transform: translateX(-20%);
      transform: translateX(-20%);
    }
  </style>
  <title>HTML5 SVG</title>
</head>
<body>
  <h2 align="center">
    SVG Circle
  </h2>
  <svg id="svgelem" height="200">
    <circle id="greencircle" cx="60"
      cy="60" r="50" fill="green" />
  </svg>
</body>
</html>
```

Canvas: The HTML element is used to draw graphics on the fly, via scripting (usually JavaScript). The element is only a container for graphics. You must use a script to actually draw the graphics. Canvas has several methods for drawing paths, boxes, circles, text, and adding images.

Code: `<!DOCTYPE html>`

```
<html>

<head>
  <title>HTML5 Canvas Tag</title>
</head>

<body>
```


<h2>Canvas Square</h2>

<canvas id="newCanvas" width="100" height="100"
style="border:1px solid #000000;">
</canvas>

<script>
var c = document.getElementById('newCanvas');
var ctx = c.getContext('2d');
ctx.fillStyle = '#7cce2b';
ctx.fillRect(0, 0, 100, 100);
</script>

</body>

</html>