

Term-1

Module (HTML) -1

- Are the HTML tags and elements the same thing?

Ans:

HTML Tags are building blocks of HTML Page. HTML Elements are components that are used in HTML Page.

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.

HTML elements: Elements enclose the contents in between the tags. They consist of some kind of structure or expression. It generally consists of a start tag, content and an end tag.

- 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 attributes are found only in the starting tag.

- What are void elements in HTML?

Ans:

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

Characteristics:

Void elements do not have end tags.

Void elements cannot have content inside it.

Void elements have attributes.

Void elements cannot be nested.

- What are HTML Entities?

Ans:

HTML character entities are basically a set of characters (entity) used to represent few characters reserved by the HTML, especially invisible characters or characters difficult to type out using a regular keyboard.

HTML provides some entity names and entity numbers to use these symbols.

Syntax:

&entity_name; or &#entity_number;

- What are different types of lists in HTML?

Ans:

There are 3 types of lists in HTML :

Unordered List

Ordered List

Description List

Unordered List: An Unordered list is used to create a list of related items, in bulleted or unordered format. It starts with the `` tag, followed by the `` tag to show list items inside `` tag.

ex:

```
<ul>
<li>Item1</li>
...
</ul>
```

Ordered Lists: The Ordered lists have an order which is either numerical or alphabetical. The `` tag is used to create ordered lists in HTML and just like unordered list, we use `` tag to define or show lists inside `` tag.

ex:

```
<ol>
<li>Item1</li>
<li>Item2</li>
<li>Item3</li>
</ol>
```

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.

ex:

```
<dl> Contents... </dl>
```

The HTML definition list contains following 3 tags:

<dl>: It defines the start of the list.

<dt>: It defines a item.

<dd>: It defines the description of each item.

- What is the 'class' attribute in HTML?

Ans:

Class in HTML:

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.

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

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

Ans:

HTML id Attribute: The id attribute is a unique identifier that is used to specify the document.

It is used by CSS and JavaScript to perform a certain task for a unique element.

In CSS, the id attribute is written using the '#' symbol followed by id.

Syntax:

```
<element id="id_name">
```

In CSS Stylesheet:

```
#id_name  
{  
    // CSS Property  
}
```

HTML class Attribute: The class attribute is used to specify 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.

The class name in CSS stylesheet using “.” symbol.

Syntax:

```
<element class="class_name">
```

In CSS Stylesheet:

```
.class  
{  
    // CSS Property  
}
```

- What are the various formatting tags in HTML?

Ans:

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.), highlight the text, make text superscript and subscript, etc.

Formatting elements were designed to display special types of text:

`` - Bold text

`` - Important text

`<i>` - Italic text

`` - Emphasized text

`<mark>` - Marked text

`<small>` - Smaller text

`` - Deleted text

`<ins>` - Inserted text

`<sub>` - Subscript text

`<sup>` - Superscript text

- How is Cell Padding different from Cell Spacing?

Ans:

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.

Syntax:

```
<table cellpadding="value" >.....</table>
```

Cellspacing:

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

Syntax:

```
<table cellspacing="value" >.....</table>
```

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

Ans:

It can be done by using the rowspan and colspan attribute in HTML.

The rowspan is used to merge or combine the number of cells in a row whereas the colspan is used to merge column cells in a table.

rowspan :

```
<td rowspan="2">cell data</td>
```

colspan :

```
<td colspan="2">cell data</td>
```

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

Ans:

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.

HTML 5 Semantic block elements:

`<header>`: This tag is used for including all the main things of the webpage like navbar, logos, and heading of the webpage.

`<nav>`: This tag helps to navigate through different sections by including different blocks of hyperlinks in the webpage.

`<footer>`: This contains all information about the authorization, contact, and copyright details of the webpage.

`<main>`: The main content of the webpage resides in this tag.

`<section>` : This is used separate different sections in the webpage.

`<article>`: This tag is used to include different independent articles on the webpage.

`<aside>`: This tag is used to mention details of the main content aside.

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.

- How to create a Hyperlink in HTML?

Ans:

The `<a>` tag defines a hyperlink, which is used to link from one page to another.

The most important attribute of the `<a>` element is the href attribute, which indicates the link's destination.

ex: `Visit W3Schools.com!`

- What is the use of an iframe tag?

Ans:

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.

ex:

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

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

Ans:

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.

ex:

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

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

Ans:

To add a background image on an HTML element, use the HTML style attribute and the CSS background-image property:

ex:

```
<p style="background-image: url('img_girl.jpg');">
```

You can also specify the background image in the <style> element, in the <head> section:

ex:

```
<style>
p {
    background-image: url('img_girl.jpg');
}
</style>
```

If you want the entire page to have a background image, you must specify the background image on the <body> element:

ex:

```
<style>
body {
    background-image: url('img_girl.jpg');
}
</style>
```

- How are active links different from normal links?

Ans:

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.

Unvisited Links/normal link:

In HTML, an unvisited link is a hyperlink that is not yet clicked by the user. By default, the unvisited links will be in blue in color with an underline. However, we can customize the style using the CSS properties (a:link).

active links:

an action or a series of actions that are triggered when a user performs an operation and are conditionally interpreted.

An unvisited link is underlined and blue. A visited link is underlined and purple. An active link is underlined and red.

- What are the different tags to separate sections of text?

Ans:

 tag – It is used to separate the line of text. It breaks the current line and shifts the flow of the text to a new line. <p> tag–This tag is used to write a paragraph of text.

- What is SVG?

Ans:

ex:

<!DOCTYPE html>

```
<html>
<body>

<h1>My first SVG</h1>

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

</body>
</html>
```

explanation:

An SVG image begins with an <svg> element

The width and height attributes of the <svg> element define the width and height of the SVG image

The <circle> element is used to draw a circle

The cx and cy attributes define the x and y coordinates of the center of the circle. If cx and cy are not set, the circle's center is set to (0, 0)

The r attribute defines the radius of the circle

The stroke and stroke-width attributes control how the outline of a shape appears. We set the outline of the circle to a 4px green "border"

The fill attribute refers to the color inside the circle. We set the fill color to yellow

The closing </svg> tag closes the SVG image.

- What is difference between HTML and XHTML?

Ans:

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.

HTML 5:

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.

The main difference between them is the syntax and structure.

- What are logical and physical tags in HTML?

Ans:

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.

<abbr>	Defines an abbreviation
<acronym>	Defines an acronym
<address>	Defines an address element
<cite>	Defines citation
<code>	Defines computer code text
<blockquote>	Defines a long quotation

	Defines text
<dfn>	Defines a definition term
<ins>	Defines inserted text
<kbd>	Defines keyboard text
<pre>	Defines preformatted text
<q>	Defines short quotation
<samp>	Defines sample computer code
	Defines strong text
<var>	Defines a variable

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.

	Defines bold text
<big>	Defines big text
<i>	Defines italic text
<small>	Defines small text
<sup>	Defines superscripted text
<sub>	Defines subscripted text
<tt>	Defines teletype text
<u>	Deprecated. Use styles instead.

Module (CSS AND css-3) -2

- What are the benefits of using CSS?

Ans:

Better Website Speed.

For a website to function efficiently, it should have a faster load time.

Easier to Maintain. CSS is easy to maintain due to less maintenance time.

Consistent Design.

Time-Saving.

Better Device Compatibility.

Positioning of Design Elements.

- What are the disadvantage of using CSS?

Ans:

Confusion due to many CSS levels.

Beginners are more vulnerable to this issue.

Cross-Browser Issues. Different browsers work differently.

Security Issues. Security is important in today's world driven by technology and data.

Extra Work for Developers.

- What is the difference between CSS2 and CSS3?

Ans:

CSS: CSS stands for Cascading Style Sheet. Its main objective is to provide styling and fashion to the web page. CSS provides color, layout, background, font, and border properties. CSS features

allow better content accessibility, enhanced flexibility, and control, as well as the specification of the characteristics of presentation.

CSS3: CSS3 stands for Cascading Style Sheet level 3, which is the advanced version of CSS. It is used for structuring, styling, and formatting web pages. Several new features have been added to CSS3 and it is supported by all modern web browsers. The most important feature of CSS3 is the splitting of CSS standards into separate modules that are simpler to learn and use.

CSS3 has been split into different sections, called modules.

- Name a few CSS style components?

Ans:

The major components of a CSS style are:

Selector: The HTML element name, id name, or class name

Property: An attribute such as background color, font-size, position, text-align, color, or border

Values: The values allocated for properties

Other components of CSS style include:

Inline CSS:

Styles included within the HTML document and specific to individual HTML elements

Embedded cascading style sheet:

Also referred to as internal CSS, this technique entails inserting the CSS code

Descendent selector:

Refers to a situation where a particular element is inside another

CSS1:

A simple style sheet mechanism that allows authors and readers to attach style to HTML documents.

- What do you understand by CSS opacity?

Ans:

The CSS opacity property is used to specify the transparency of an element. In simple word, you can say that it specifies the clarity of the image.

- How can the background color of an element be changed?

Ans:

The background-color property of CSS is used to set the background of an element. We can set background color by selecting the element by its class name or id name and then apply the background-color property on it to set the background color.

ex:

```
background-color: color_name;
```

- How can image repetition of the backup be controlled?

Ans:

using the background-repeat property.

- What is the use of the background-position property?

Ans:

The background-position property sets the starting position of a background image.

ex:

```
body {  
    background-image: url('w3css.gif');  
    background-repeat: no-repeat;  
    background-attachment: fixed;  
    background-position: center;  
}
```

values:

left top

left center

left bottom

right top

right center

right bottom

center top

center center

center bottom

- Which property controls the image scroll in the background?

Ans:

The background-attachment property in CSS is used to specify the kind of attachment of the background image with respect to its container. It can be set to scroll or make it remain fixed. It can be applied to all HTML elements.

Syntax:

background-attachment: scroll|fixed|local|initial|inherit;

- Why should background and color be used as separate properties?

Ans:

In CSS, background and color are separate properties for two reasons:

Legibility: The background property is complex in CSS, and combining it with color increases the complexity.

Inheritance: Color is an inherited property, but background is not.

- How to center block elements using CSS1?

Ans:

There are two steps to center a block-level element –

Step 1: Define the external width – We need to define the external width. Block-level elements have the default width of 100% of the webpage, so for centering the block element, we need space around it. So for generating the space, we are giving it a width.

Step 2: Set the left-margin and the right-margin of the element to auto – Since we produced a remaining space by providing external width so now we need to align that space properly that's why we should use margin property. Margin is a property that tells how to align a remaining space. So for centering the element you must set left-margin to auto and right-margin to auto.

- How to maintain the CSS specifications?

Ans:

The World Wide Web Consortium (W3C) maintains the CSS specifications. You can access the specifications online.

Here are some tips for maintaining CSS specifications:

Mark up your <dfn>s for proper cross-linking.

Use classes instead of IDs.

Write test cases and explain why they are correct according to the spec.

Minimize the CSS to make it load faster.

The W3C also operates a free CSS validation service for CSS documents.

- What are the ways to integrate CSS as a web page?

Ans:

ex:

```
<link rel="stylesheet" href="style.css">
```

External style sheet (Using the @import At-Rule): At-rule method must be included either within <style> tag or else inside the style sheet.

ex:

```
<style>
@import url(style.css);
</style>
```

Internal style sheet (Using the <style> Element): This can be used when a single HTML document must be styled uniquely. The CSS rule set should be within the HTML file in the head section i.e the CSS is embedded within the HTML file.

Ex:

```
<style>
element {
    // CSS property
}
</style>
```

Inline Style Inline CSS contains the CSS property in the body section attached with element is known as inline CSS. This kind of style is specified within an HTML tag using style attribute. It is used to apply a unique style for a single element.

Ex:

```
<h1 style="style property">Geeksforgeeks</h1>
```

The External Style Sheet (using HTML <link> Tag) is the best method which is used to link the element. Maintaining and re-using the CSS file across different pages is easy and efficient. The <link> tag is placed in the HTML <head> element.

type="text/css" for a Cascading Style Sheet <type> attribute which is used to ignore style sheet types that are not supported in a browser.

- What is embedded style sheets?

Ans:

Embedded Stylesheet:

It allows you to define styles for a particular HTML document as a whole in one place. This is done by embedding the <style></style> tags containing the CSS properties in the head of your document.

The CSS syntax for embedded style sheets is exactly the same as other CSS code, apart from the fact that it is now wrapped within the <style></style> tags. The <style> tag takes the 'type' attribute that defines the type of style sheet being used (ie. text/CSS).

- What are the external style sheets?

Ans:

Below is the HTML file that is making use of the created external style sheet.

link tag is used to link the external style sheet with the html webpage.

href attribute is used to specify the location of the external style sheet file.

External CSS:

External CSS contains separate CSS files that contain only style properties with the help of tag attributes (For example class, id, heading, ... etc).

CSS property is written in a separate file with a .css extension and should be linked to the HTML document using a link tag.

It means that, for each element, style can be set only once and will be applied across web pages.

- What are the advantages and disadvantages of using external style sheets?

Ans:

advantage:

Easy for the user to customize the online page

It reduces the file transfer size.

It is less complex therefore the effort are significantly reduced.

It helps to form spontaneous and consistent changes.

Web designers needs to use few lines of programming for every page improving site speed.

you can apply styles to multiple web pages.

disadvantage:

With CSS, what works with one browser might not always work with another. The web developers need to test for compatibility, running the program across multiple browsers.

There exists a scarcity of security.

The programming language world is complicated for non-developers and beginners. Browser compatibility (some styles sheet are supported and some are not).

CSS works differently on different browsers. IE and Opera supports CSS as different logic.

There might be cross-browser issues while using CSS.

There are multiple levels which creates confusion for non-developers and beginners.

- What is the meaning of the CSS selector?

Ans:

CSS selectors are used to "find" (or select) the HTML elements you want to style.

We can divide CSS selectors into five categories:

Simple selectors (select elements based on name, id, class)

Combinator selectors (select elements based on a specific relationship between them)

Pseudo-class selectors (select elements based on a certain state)

Pseudo-elements selectors (select and style a part of an element)

Attribute selectors (select elements based on an attribute or attribute value)

- What are the media types allowed by CSS?

Ans:

defines the following media groups:

Continuous or paged

Visual, audio, speech, or tactile

Grid (for character grid devices), or bitmap

Interactive (for devices that allow user interaction), or static (for those that do not):

All (includes all media types):

Print: For printers

Screen: For computer screens, tablets, and smartphones

Speech: For screen readers that "read" the page out loud

Aural: For speech synthesizers

Braille: For braille tactile feedback devices

Embossed: For paged braille printers

- What is the rule set?

Ans:

A CSS ruleset is various affirmations to various pieces or elements of the document.

The objective is to apply a bunch of properties for certain distinct qualities to a solitary, or a particular arrangement of components in the connected HTML page.

ex:

```
selector: pseudo-class{  
    property: value;  
}
```

Module (html-5) -3

- What are the new tags added in HTML5?

Ans:

`<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.

- How to embed audio and video in a webpage?

Ans:

html . Add `<audio>` and `<video>` elements to the page; make them display the default browser controls. Give both of them `<source>` elements so that browsers will find the audio format they support best and load it. These should include type attributes.

- Semantic element in HTML5?

Ans:

A semantic element clearly describes its meaning to both the browser and the developer.

Examples of non-semantic elements: `<div>` and `` - Tells nothing about its content.

Examples of semantic elements: `<form>`, `<table>`, and `<article>` - Clearly defines its content.

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

- Canvas and SVG tags

Ans:

SVG

Uses files and XML to describe 2D graphics. SVG is vector based, meaning it uses mathematical metadata to describe a graphic. SVG is considered more accessible because it supports text.

Canvas

Uses scripting and JavaScript to draw 2D graphics. Canvas is raster based, meaning it's arrays of pixels arranged on a grid. Canvas is not accessible by default because it doesn't provide any semantic information or alternative text for screen readers or other assistive technologies.

Here are some other differences between SVG and canvas:

SVG performs better with a smaller number of objects or larger surface. Canvas performs better with a smaller surface or larger number of objects.

SVG can be slower and less flexible for rendering animations, but it can also be more lightweight and responsive.

SVG integrates with JavaScript, while canvas does not.

NOTE:

SQL ASSINGMENT IS IN MODUAL-5 PDF.