**HTML 5 Assignment**

1. **What are the new tags added in HTML5?**

* <Article> - Defines an article in a document
* <Section> - Defines a section in a document
* <Aside> - Defines content aside from the page content
* <Details> - Defines additional details that the user can view or hide
* <Dialog> - Defines a dialog box or window
* <Fig Caption> -Define a caption for <figure> element.
* <Figure> - Define self-contained content.
* <Footer> - Defines footer for a document or section.
* <Header> - Defines header for a document or section.
* <Main> - Defines the main content of a document.
* <Mark> - Define highlighted text.
* <Nav> - Define navigation links.
* <Summary> - Define a visible heading for a <details> element.
* <Time> - Defines a date/time.
* <Wbr> - Define a Possible line break.

1. **How to embed audio and video in a webpage?**

**Audio:-**

* To embed audio in HTML, we use the <audio> tag.
* Before HTML5, audio cannot be added to web pages in the Internet Explorer era.
* To play audio, we used web plugins like Flash. After the release of HTML5, it is possible.
* This tag supports Chrome, Firefox, Safari, Opera, and Edge in three audio formats – MP3, WAV, OGG. Only Safari browser doesn’t support OGG audio format.

**Syntax:-**

<audio>

<source src="file\_name" type="audio\_file\_type">

</audio>

**Video:-**

* To embed video in HTML, we use the <video> tag.
* It contains one or more video sources at a time using <source> tag.
* It supports MP4, WebM, and Ogg in all modern browsers.
* Only Ogg video format doesn’t support in Safari browser.

**Syntax:-**

<video>

<source src="file\_name" type="video\_file\_type">

</video>

1. **Semantic element in HTML5?**

* A semantic element clearly describes its meaning to both the browser and the developer.
* Examples of **non-semantic** elements: <div> and <span> - Tells nothing about its content.
* Examples of **semantic** elements: <form>, <table>, and <article> - Clearly defines its content.

1. **Canvas and SVG tags?**
   * SVG is a language for describing 2D graphics in XML.
   * Canvas draws 2D graphics, on the fly (with a JavaScript).
   * SVG is XML based, which means that every element is available within the SVG DOM. You can attach JavaScript event handlers for an element.
   * In SVG, each drawn shape is remembered as an object. If attributes of an SVG object are changed, the browser can automatically re-render the shape.
   * Canvas is rendered pixel by pixel. In canvas, once the graphic is drawn, it is forgotten by the browser. If its position should be changed, the entire scene needs to be redrawn, including any objects that might have been covered by the graphic.
   * The HTML <svg> element is a container for SVG graphics.
   * The HTML <canvas> element is used to draw graphics, on the fly, via JavaScript.