HTML 5

1. What are the new tags added in HTML5?

Ans:

```
<article> - defines an independent, self-contained content
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<aside> - defines content that is related to the main content but can be considered separate from it

<audio> - embeds audio content into a web page

<canvas> - provides a drawing area for graphics and animations

<datalist> - provides a pre-defined list of options for input controls

<details> - defines additional details that the user can view or hide

<embed> - embeds external content such as multimedia files into a web page

<footer> - defines a footer for a document or section

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<nav> - defines a set of navigation links

<output> - displays the result of a calculation or user action

cprogress> - displays the progress of a task

<section> - defines a section in a document

<source> - specifies multiple media resources for media elements such as <audio> and <video>

<video> - embeds video content into a web page

2. How to embed audio and video in a webpage?

Ans:

For audio

<audio controls>

<source src="audiofile.mp3" type="audio/mpeg">

Your browser does not support the audio tag.

</audio>

For video

<video controls width="640" height="360">

<source src="videofile.mp4" type="video/mp4">

Your browser does not support the video tag.

</video>

2. Semantic element in HTML5?

Ans:

- 1. <header> Defines a header section for a document or a section of a document
- 2. <nav> Defines a set of navigation links
- 3. <article> Defines an independent, self-contained content
- 4. <section> Defines a section in a document
- 5. **<aside>** Defines content that is related to the main content but can be considered separate from it
- 6. <footer> Defines a footer section for a document or a section of a document
- 7. <main> Defines the main content of a document
- 8. **<figure>** Defines self-contained content, such as images or diagrams, that are referenced in the main content
- 9. <figcaption> Defines a caption or description for a <figure> element
- 10. <time> Defines a date or time in a standard format

4. Canvas and SVG tags

Ans:

The <canvas> and <svg> tags are both used for creating graphics on a web page, but they differ in their approach and functionality.

The <canvas> tag provides a drawing area on the page using JavaScript, and allows for dynamic rendering of graphics, animations, and interactive elements. It's essentially a bitmap canvas that you can draw on using JavaScript code. The content inside a <canvas> element is rendered using a scripting language, typically JavaScript, which means that it's highly dynamic and can respond to user input and other events. Examples of use cases for <canvas> include games, data visualizations, and photo editors.

The **<svg>** tag, on the other hand, is a vector graphics language that allows for the creation of scalable, resolution-independent graphics that can be manipulated using CSS or JavaScript. It's essentially a markup language for defining shapes, lines, curves, and other geometric elements using XML. The content inside an **<svg>** element is not rendered using a scripting language, but rather by the browser, which means that it's more static and less dynamic than **<canvas>**. Examples of use cases for **<svg>** include logos, icons, and illustrations.