

- What are the new tags added in HTML5?

The following tags (elements) have been introduced in HTML5 –

Tags (Elements)	Description
<article>	Represents an independent piece of content of a document, such as a blog entry or newspaper article
<aside >	Represents a piece of content that is only slightly related to the rest of the page.
<audio>	Defines an audio file.
<canvas>	This is used for rendering dynamic bitmap graphics on the fly, such as graphs or games.
<command>	Represents a command the user can invoke.
<datalist>	Together with the a new list attribute for input can be used to make comboboxes
<details>	Represents additional information or controls which the user can obtain on demand
<embed>	Defines external interactive content or plugin.
<figure>	Represents a piece of self-contained flow content, typically referenced as a single unit from the main flow of the document.
<footer>	Represents a footer for a section and can contain information about the author, copyright information, et cetera.
<header>	Represents a group of introductory or navigational aids.
<hgroup>	Represents the header of a section.
<keygen>	Represents control for key pair generation.
<mark>	Represents a run of text in one document marked or highlighted for reference purposes, due to its relevance in another context.
<meter>	Represents a measurement, such as disk usage.

<nav>	Represents a section of the document intended for navigation.
<output>	Represents some type of output, such as from a calculation done through scripting.
<progress>	Represents a completion of a task, such as downloading or when performing a series of expensive operations.
<ruby>	Together with <rt> and <rp> allow for marking up ruby annotations.
<section>	Represents a generic document or application section
<time>	Represents a date and/or time.
<video>	Defines a video file.
<wbr>	Represents a line break opportunity.

- How to embed audio and video in a webpage?

To embed audio in HTML, Just use the <audio> tag.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <audio src="Harry Styles - Watermelon Sugar x Seaside - SEB (Lyrics) TikTok Song ( 256kbps cbr ).mp3" controls>
</audio>
</body>
</html>
```

To embed video in HTML, Just use the <video> tag.

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <video src="Ning Nang Ning Nang euy ( 480 X 480 ).mp4" controls></video>
</body>
</html>

```

• Semantic element in HTML5?

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

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

The semantic elements added in HTML5 are:

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

Elements such

as <header>, <nav>, <section>, <article>, <aside>, and <footer> act more or less like <div> elements. They group other elements together into page sections. However where a <div> tag could contain any type of information,

it is easy to identify what sort of information would go in a semantic <header> region.

- 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.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    #svgelem {
      position: relative;
      left: 50%;
      -webkit-transform: translateX(-20%);
      -ms-transform: translateX(-20%);
      transform: translateX(-20%);
    }
  </style>
</head>
<body>
  <h2 align="center">
    SVG Circle(Geeks For Geeks)
  </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.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <h2>Canvas Square(Geeks For Geeks)</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>
```