

MODULE:3(HTML 5)

- **What are the new tags added in HTML5?**

Answer: The new tags added in HTML5 are as follows:

1. <article>
2. <aside>
3. <audio>
4. <canvas>
5. <command>
6. <datalist>
7. <details>
8. <embed>
9. <figure>
10. <footer>
11. <header>
12. <mark>
13. <video>

- **How to embed audio and video in a webpage?**

Answer:

Audio:

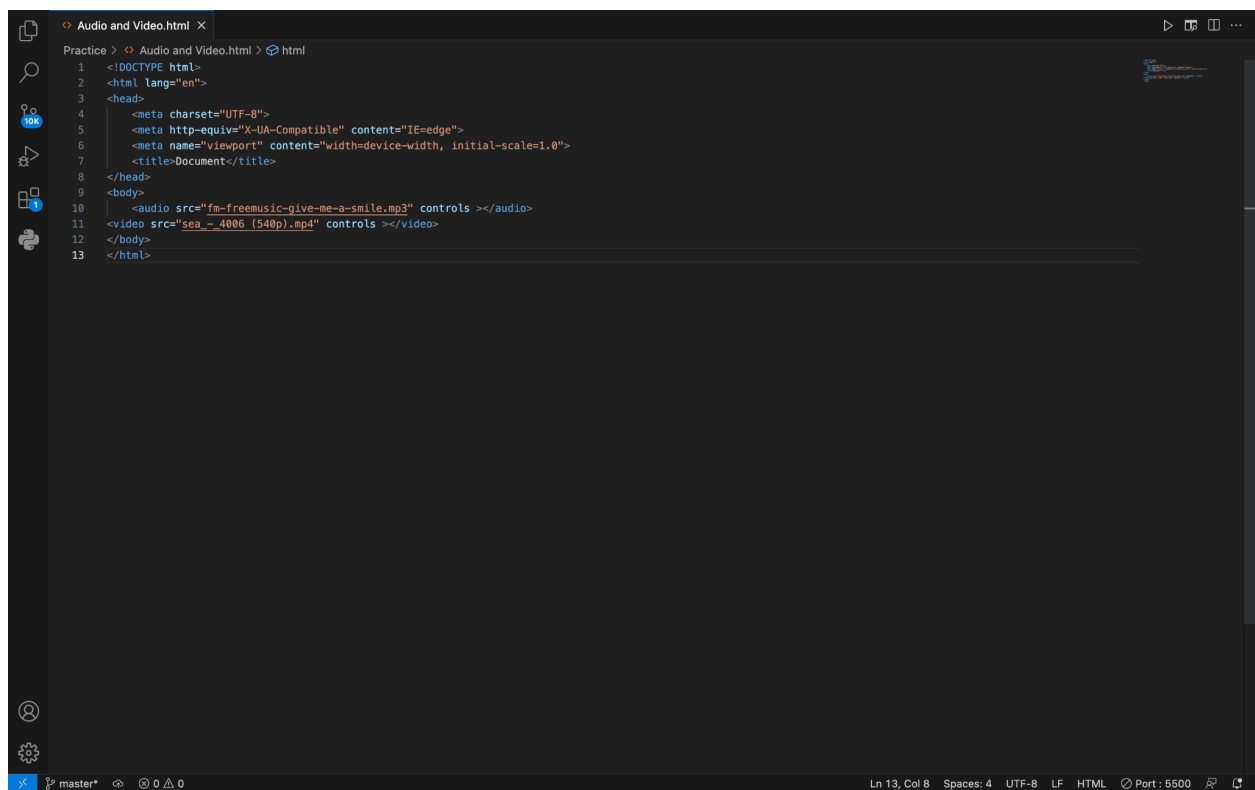
To embed audio in HTML, we use the <audio> tag. Before HTML5, audio cannot be added to web pages in the Internet Explorer era. To play audio, we used web plugins like Flash. After the release of HTML5, it is possible. This tag supports Chrome,

Firefox, Safari, Opera, and Edge in three audio formats - MP3, WAV, OGG. Only Safari browser doesn't support OGG audio format.

Video:

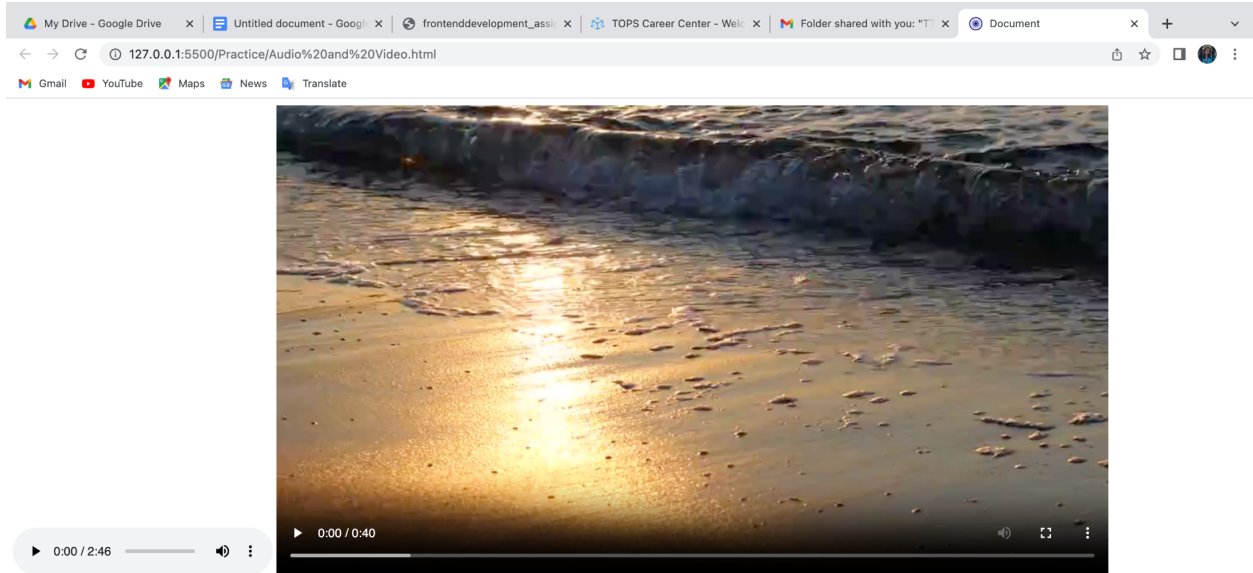
To embed video in HTML, we use the <video> tag. It contains one or more video sources at a time using <source> tag. It supports MP4, WebM, and Ogg in all modern browsers. Only Ogg video format isn't supported in Safari browser.

For example:

A screenshot of a code editor window titled 'Audio and Video.html'. The editor shows HTML code for embedding audio and video. The code includes a DOCTYPE declaration, language and charset meta tags, a viewport meta tag, and an audio tag with a source pointing to 'fm-freemusic-give-me-a-smile.mp3'. A video tag is also present with a source pointing to 'sea_-_4006 (540p).mp4'. The code is as follows:

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta http-equiv="X-UA-Compatible" content="IE=edge">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>Document</title>
8 </head>
9 <body>
10   <audio src="fm-freemusic-give-me-a-smile.mp3" controls ></audio>
11   <video src="sea_-_4006 (540p).mp4" controls ></video>
12 </body>
13 </html>
```

The editor interface includes a sidebar on the left with icons for file explorer, search, and other tools. The bottom status bar shows 'Ln 13, Col 8', 'Spaces: 4', 'UTF-8', 'LF', 'HTML', and 'Port: 5500'.



● Semantic element in HTML5?

Answer: Semantic elements have meaningful names which tell about the type of content. For example header, footer, table, etc. HTML5 introduces many semantic elements as mentioned below which make the code easier to write and understand for the developer as well as instructs the browser on how to treat them:

1. <article>
2. <aside>
3. <details>
4. <footer>
5. <header>
6. <mark>
7. <nav>
8. <main>
9. <section>

10. <figure>

- **Canvas and SVG tags.**

Answer:

Canvas:

Canvas is an HTML5 element, which is used to draw graphics for the dynamic, scriptable rendering of 2D and 3D shapes and bitmap images on the web page.

In Canvas, we need the script to draw the graphics. It provides an empty graphic zone on which specific JavaScript APIs can draw.

SVG:

SVG is a vector-based graphics, and it's useful for defining graphics such as boxes, circles, text, and XML-based image format.

It is a language for describing 2D-graphics and graphical applications in XML. Most WEB browsers can display SVG just like they can display PNG, GIF, and JPG. SVG images are way better than bitmap images.

For example:

```
Canvas and SVG.html
Practice > Canvas and SVG.html > html
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <meta http-equiv="X-UA-Compatible" content="IE=edge">
7   <meta name="viewport" content="width=device-width, initial-scale=1.0">
8   <title>Document</title>
9 </head>
10
11 <body>
12   <canvas id="myCanvas" width="300" height="200" style="border:2px solid red;">
13   </canvas>
14   <svg width="100" height="100" style="border: 1px solid green">
15     <circle cx="50" cy="50" r="50" fill="blue" />
16   </svg>
17 </body>
18
19 </html>
```

