

## Assignment-3

1. What are the new tags added in HTML5?

Ans: There are many types of tag added in HTML5.

1.<header>: Used to define a container for introductory Content or a set of navigational links.

2.<nav>: Indicates a section of navigation links for menus, tables of contents, or other navigational elements

3.<section>: Defines a standalone section of content within a document, often used to group related Content together.

4.<mark>: Highlights text within the document for reference or emphasis.

5.<footer>: Highlights text within the document for reference or emphasis.

6.<audio> and <video>: These elements allow for embedding audio and video content directly into web pages, with built-in playback controls.

7.<svg>: Allows for the embedding of Scalable Vector Graphics (SVG) directly into HTML documents, providing high-quality vector graphics for the web.

8.<iframe>: Enables the embedding of external content while isolating it from the parent document to enhance

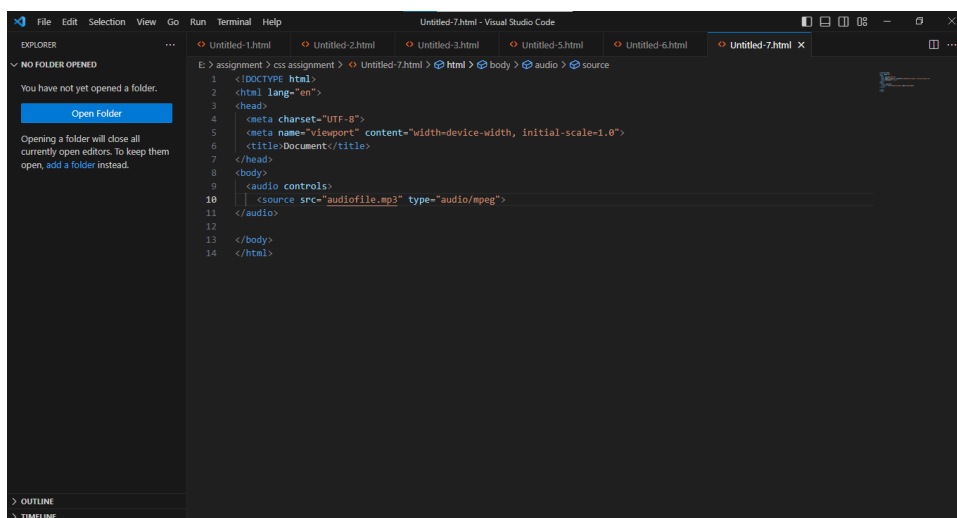
Security.

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

Ans: To embed audio and video in a webpage, you can use HTML5's built-in **<audio>** and **<video>** elements.

- **Embedding Audio:**

- Use the **<audio>** element to embed the audio on your webpage. Here's a basic example:

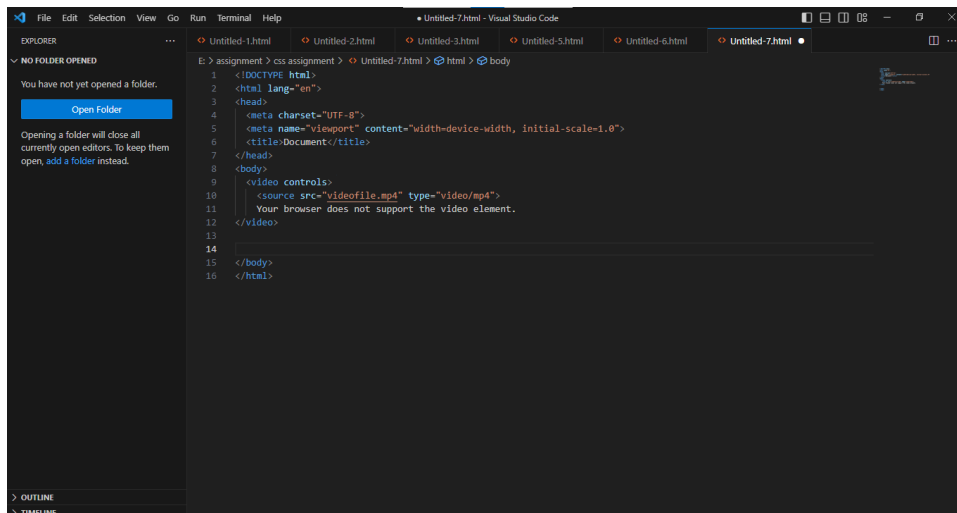
A screenshot of the Visual Studio Code editor interface. The Explorer panel on the left shows a project named 'assignment' with a file 'css assignment'. The main editor area displays an HTML file named 'Untitled-7.html'. The code in the editor is as follows:

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Document</title>
7 </head>
8 <body>
9   <audio controls>
10    <source src="audiofile.mp3" type="audio/mpeg">
11  </audio>
12
13 </body>
14 </html>
```

- The **controls** attribute adds audio playback controls (play, pause, volume, etc.) to the audio player.

- **Embedding video:**

- Use the **<video>** element to embed the video on your webpage. Here's a basic example:



- The **controls** attribute adds video playback controls to the video player.
- The **<source>** element specifies the Audio and Video file's source and MIME type.

### 3.Semantic element in HTML5?

Ans: HTML5 introduced several semantic elements that help define the structure and meaning of web content more clearly.

- **<header>**: Defines a container for introductory content or a set of navigational links. Typically, it appears at the top of a page or section.
- **<nav>**: Represents a section of a page that contains navigation links, such as menus, lists of links, or site navigation.
- **<main>**: Specifies the main content of a document or a page. There should be only one **<main>** element per page.
- **<article>**: Defines a self-contained piece of content, such as a blog post, news article, or forum post. It should make sense on its own when extracted from the rest of the page.

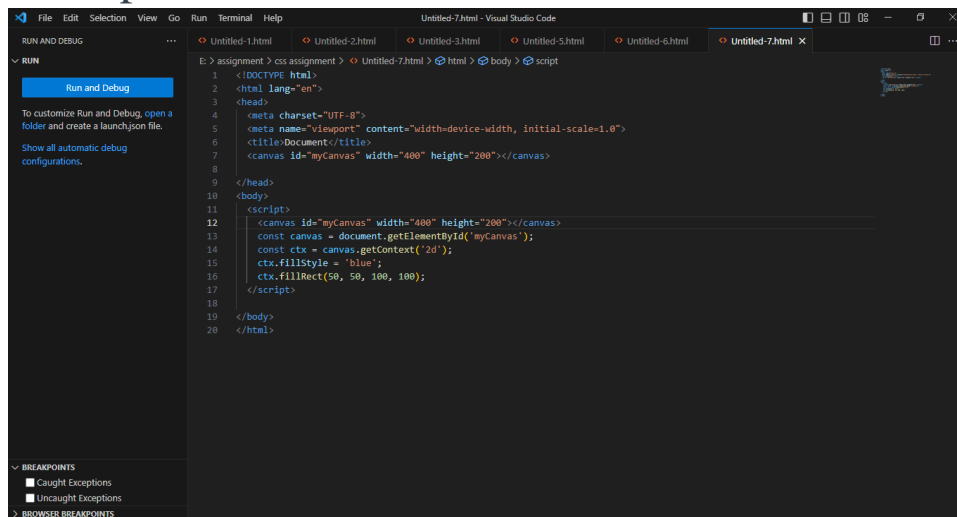
- **<section>**: Represents a thematic grouping of content within a document. It helps to organize content into meaningful sections.
- **<aside>**: Indicates content that is tangentially related to the content around it. It is often used for sidebars, advertisements, or content like pull quotes.
- **<footer>**: Defines the footer of a section or a page. It typically contains information about the author, copyright, contact information, or other relevant metadata.
- **<time>**: Represents a specific point in time or a range of time. It can help search engines and screen readers understand date and time information.
- **<mark>**: Highlights text within a document to indicate relevance or importance.
- **<details>** and **<summary>**: These elements are used to create interactive disclosure widgets for hiding and revealing additional content.
- **<address>**: Represents the contact information for the author or owner of the document.

#### 4. Canvas and SVG tags

Ans: The **<canvas>** and **<SVG>** tags are two different HTML elements used for creating graphics and visual content on web pages, but they work in distinct ways and are suitable for different purposes.

**<canvas>**:

- The **<canvas>** element provides a blank drawing surface where you can use JavaScript to draw graphics dynamically.
- It is primarily used for creating 2D graphics and animations.
- Example:



## **<svg>:**

- The **<svg>** element defines scalable vector graphics (SVG) and is XML-based. It is used for creating resolution-independent graphics that can be easily scaled without loss of quality.
- SVG allows you to create 2D vector graphics using shapes, paths, text, and other elements, and you can style and animate them using CSS and JavaScript.
- Example:

