Experiment 2

2. Program on HTML basic tags to handle multimedia elements on web page.

1. Basic HTML Structure

- The document starts with <!DOCTYPE html> to declare the HTML version.
- The <html> tag defines the document as an HTML file, and the lang="en" attribute specifies the language as English.
- Inside the <head> section, the document specifies the character encoding with <meta charset="UTF-8"> and sets the viewport for responsiveness with <meta name="viewport" content="width=device-width, initial-scale=1.0">.
- The <title> tag defines the title of the webpage (which will appear in the browser tab).

2. Multimedia Elements

Image Embedding ()

- Section: <h2>Image Example</h2> creates a section titled "Image Example."
- Image Tag: embeds an image into the HTML page.
 - o src="Image.jpeg" specifies the path to the image file (in this case, "Image.jpeg").
 - alt="Sample Image" provides alternative text for screen readers or if the image doesn't load.
 - o width="500" and height="300" define the size of the image in pixels.
- **Description**: A short description is added using a tag.

Audio Embedding (<audio>)

- Section: <h2>Audio Example</h2> introduces the "Audio Example" section.
- Audio Tag: <audio controls> embeds an audio file with built-in browser controls (play, pause, volume).
 - o Inside the <audio> tag, a <source> tag is used to specify the audio file:
 - src="Audio.mp3" is the path to the audio file.
 - type="audio/mpeg" specifies the format of the audio file (MPEG in this case).
 - If the browser doesn't support the audio element, the message "Your browser does not support the audio element." will be displayed.

• **Description**: A short description is provided using a tag.

Video Embedding (<video>)

- **Section**: <h2>Video Example</h2> introduces the "Video Example" section.
- **Video Tag**: <video> is used to embed a video with width and height specified (500x300 pixels) and controls enabled.
 - o The <source> tag specifies the video file:
 - src="Video.mp4" points to the video file.
 - type="video/mp4" defines the video format (MP4).
 - If the browser doesn't support the video element, the message "Your browser does not support the video tag." will be displayed.
- **Description**: A brief description follows in a tag.

Embedding a YouTube Video (<iframe>)

- Section: <h2>YouTube Video Example</h2> introduces the "YouTube Video Example" section.
- Iframe Tag: <iframe> is used to embed a YouTube video from the provided URL.
 - o width="560" and height="315" define the size of the embedded video.
 - o src="https://youtu.be/_JP0fl3S1uU?feature=shared" is the link to the YouTube video.
 - o frameborder="0" removes the border around the video.
 - allow="autoplay; encrypted-media" allows the video to autoplay and ensures encrypted media can be used.
 - o allowfullscreen allows the video to be played in fullscreen mode.
- **Description**: A brief description follows in a tag.

Steps to Create this HTML Page:

- 1. Open a text editor (e.g., Notepad, Sublime Text, VS Code).
- 2. **Create the HTML structure** as shown in your example.
- 3. Add the multimedia elements like:
 - a. An image using with src pointing to the image file.
 - b. An audio element using <audio> with controls and a valid audio file.
 - c. A video element using <video> with controls and a valid video file.
 - d. Embed a YouTube video using <iframe> with the YouTube video link.
- 4. Save the file with a .html extension (e.g., multimedia_example.html).

5. **Open the saved HTML file** in a web browser to view the embedded multimedia content.

Output:

