

**Exp.no:** 3.a

**AIM:** Write a HTML program, that makes use of `<article>`, `<aside>`, `<figure>` `<figcaption>` `<footer>`, `<header>`, `<main>`, `<nav>`, `<section>`, `<div>`, `<span>` tags.

**DESCRIPTION:**

This HTML document is a demo webpage that showcases the use of HTML5 semantic elements such as

, , , , , and to structure a blog-style website.

**1.DOCTYPE & Metadata**

- `<!DOCTYPE html>` declares the document type as HTML5.
- `<html lang="en">` specifies that the page is in English.
- `<meta charset="UTF-8">` ensures the webpage supports special characters.
- `<title>` sets the title of the browser tab.

**2.CSS Styling (`<style>`)**

- Defines layout, background colors, fonts, and spacing.
- Uses flexbox in `<main>` to align article and aside side by side.
- Navigation links styled to look neat and user-friendly.

**3.Header (`<header>`)**

- Displays the blog's title: "My Blog Website".

**4.Navigation (`<nav>`)**

- Provides links to different sections: Home, Articles, Gallery, Contact.
- Styled with spacing and white text for readability.

**5.Main Content (`<main>`)**

- Divided into two parts:
- Article (`<article>`): Contains the main blog content.
- A heading: Understanding HTML5 Semantic Tags.
- A paragraph explaining semantic elements.
- Figure (`<figure>`): Contains an image with a caption (`<figcaption>`).
- Section (`<section>`): Explains Why Use Semantic Tags?
- Aside (`<aside>`): Sidebar with related posts (Introduction to HTML, CSS Basics, JavaScript).

**6.Footer (`<footer>`)**

- Displays copyright:

**PROGRAM:**

```
<!DOCTYPE html>

<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>HTML 5 Semantic elements demo</title>

    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 0;
        }

        header, nav, footer {
            background-color: #333;
            color: white;
            padding: 1em;
        }

        nav a {
            color: white;
            margin: 0 10px;
            text-decoration: none;
        }

        main {
            display: flex;
            padding: 20px;
        }

        article {
            flex: 3;
            padding: 20px;
            background-color: #f9f9f9;
        }
    </style>

```

```
aside {
    flex: 1;
    padding: 20px;
    background-color: #e0e0e0;
}

figure {
    margin: 0;
    text-align: center;
}

figcaption {
    font-style: italic;
    font-size: 0.9em;
}

footer{
    text-align: center;
}

</style>

</head>

<body>

    <header>

        <h1>My Blog Website (24B11CS039)</h1>

    </header>

    <nav>

        <a href="#">Home</a>
        <a href="#">Articles</a>
        <a href="https://photos.google.com/?pli=1">Gallery</a>
        <a href="#">Contact</a>

    </nav>

    <main>

        <article>

            <h2> Understanding HTML 5 Semantic Tags </h2>
```

```

<p> <span style="font-weight: bold;">HTML5</span>
introduced semantic elements that make your code more readable and accessible.. </p>

<figure>
  
  <figcaption>Figure: Illustration of HTML5 layout </figcaption>
</figure>

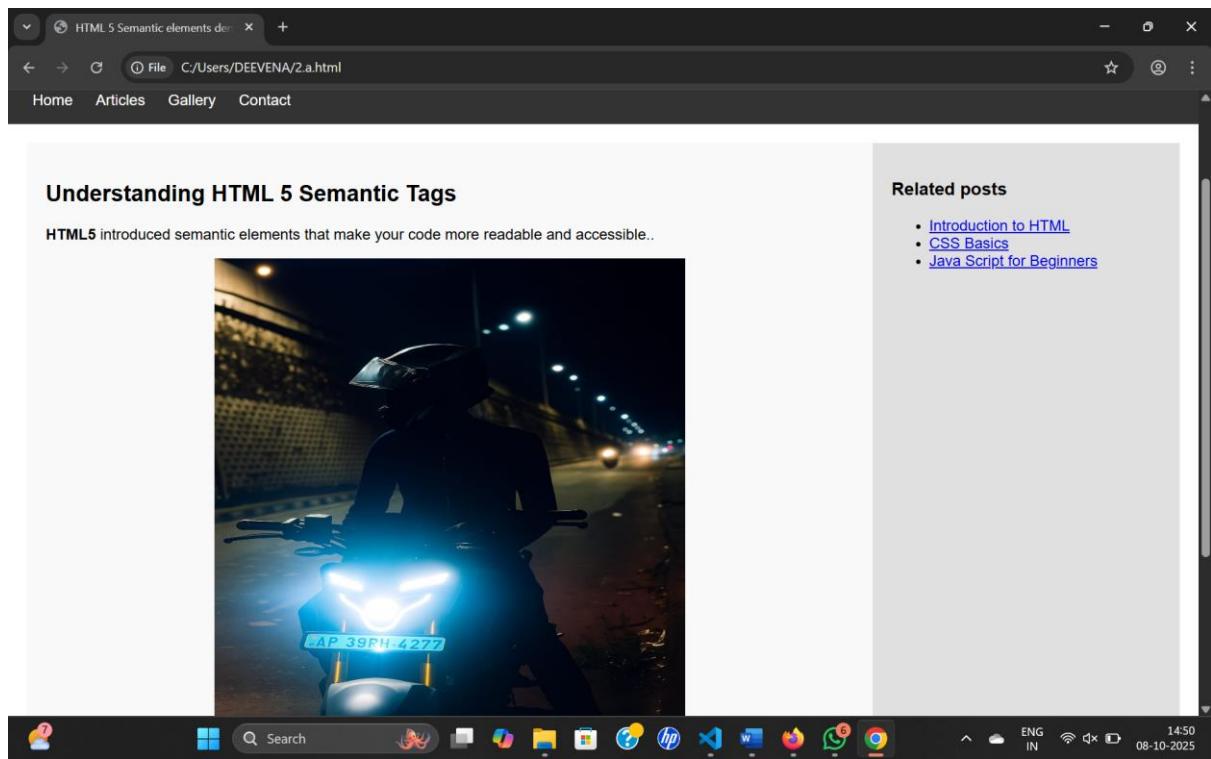
<section>
  <h3>Why Use Semantics Tags?</h3>
  <p>Semantic tags help search engines and screen readers understand the structure of your web page</p>
</section>
</article>

<aside>
  <h3>Related posts</h3>
  <ul>
    <li><a href="#">Introduction to HTML</a></li>
    <li><a href="#">CSS Basics</a></li>
    <li><a href="#">Java Script for Beginners</a></li>
  </ul>
</aside>
</main>

<footer>
  <p>&copy; 2025 My Blog. All rights reserved.</p>
</footer>
</body>
</html>

```

**OUTPUT:**



## RESULT:

**Exp.no: 3.b**

**AIM:** Write a HTML program, to embed audio and video into HTML web page.

**DESCRIPTION:**

This HTML page demonstrates how to embed audio and video files into a web page using the <audio> and <video> tags in HTML5.

1. Document Setup

- <!DOCTYPE html> declares HTML5 document type.
- <html lang="en"> specifies the language as English.
- <meta charset="UTF-8"> ensures correct character encoding.
- <title> sets the title of the webpage to “Audio and Video Embedding”.

2. Page Content (<body>)

- Main Heading (<h1>): "Embedded Audio and Video in HTML".

3. Audio Section (<audio>)

- <audio controls> creates an audio player with built-in play, pause, volume controls.
- <source> elements specify different audio files (MP3 format in this case):
  - .mp3 file
  - .mp3 file
- If the browser cannot play audio, the fallback text “Your browser does not support the audio element.” is shown.

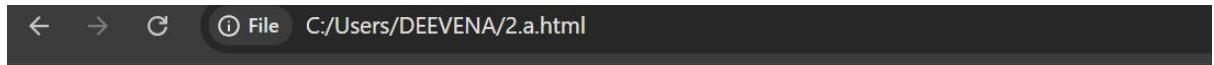
4. Video Section (<video>)

- <video width="640" height="360" controls> creates a video player with playback controls and fixed size.
- <source> elements specify two video files (MP4 format):
  - .mp4 file
  - .mp4 file
- If the browser cannot play video, the fallback text “Your browser does not support the video element.” is shown.

**PROGRAM:**

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Audio and Video</title>
</head>
<body >
    <h1>Embedded audio and video in html (24B11CS039)</h1>
    <!-- Audio section -->
    <h2>Sample Audio</h2>
    <audio controls>
        <source src="c:\Users\DEEVENA\Downloads\ElevenLabs_2025-01-30T09_40_28_Brian_pre_s50_sb75_se0_b_m2.mp3" type="audio/mpeg">
        <source src="c:\Users\DEEVENA\Downloads\ElevenLabs_2025-01-30T09_40_28_Brian_pre_s50_sb75_se0_b_m2.mp3" type="audio/ogg">
        Your browser does not support the audio element.
    </audio >
    <!-- Video section -->
    <h2>Sample Video</h2>
    <video width="640" height="360" controls>
        <source src="c:\Users\DEEVENA\Downloads\ElevenLabs_2025-01-29T10_35_00_Daniel_pre_s50_sb75_se0_b_m2 (1).mp4" type="video/mp4">
        <source src="c:\Users\DEEVENA\Downloads\ElevenLabs_2025-01-29T10_35_00_Daniel_pre_s50_sb75_se0_b_m2 (1).mp4" type="video/webm">
        Your browser does not support the video element.
    </video >
</body>
</html>
```

**OUTPUT:**



## **Embedded audio and video in html (24B11CS039)**

### **Sample Audio**



### **Sample Video**



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**RESULT:**

### **Exp.no: 3.c**

**AIM:** Write a program to apply different types (or levels of styles or style specificatio formats) - inline, internal, external styles to HTML elements. (identify selecto property and value).

#### **DESCRIPTION:**

##### Inline CSS

- Styles are applied directly to individual HTML elements using the `style` attribute.
- Example: a heading can have its color and alignment defined inside the tag itself.
- Advantage: Quick and easy for small changes.
- Disadvantage: Not reusable, mixes design with content, harder to maintain.

##### Internal CSS

- Styles are written inside a `<style>` tag within the `<head>` section of the HTML document.
- These styles apply only to that particular web page.
- Advantage: Better separation of content and style than inline, good for single-page sites.
- Disadvantage: Cannot be reused across multiple pages.

##### External CSS

- Styles are stored in a separate `.css` file and linked to the HTML document using the `<link>` tag.
- Allows multiple web pages to share the same stylesheet.
- Advantage: Clean separation of structure (HTML) and design (CSS), reusable, easier maintenance, consistent styling across pages.
- Disadvantage: Requires an extra file (won't work if CSS file is missing or link breaks).

In short:

- Inline = one-time quick style
- Internal = page-level style
- External = project-wide reusable style

**Program:**

**1) Inline Function**

```
<html>
<body>
<h2>24B11CS002</h2>
<h1 style="color:blue;text-align:center;bgcolor:black;">This is a heading</h1>
<p style="color:red;">This is a paragraph.</p>
</body>
</html>
```

**OUTPUT:**

---

**24B11CS039**

**This is a heading**

This is a paragraph.

---

**2) Internal function:**

```
<html>
<head>
<style>
body {
    background-color:skyblue;
}
</style>
</head>
```

```
<body>
<h2>24B11CS039 </h2>
<h1 style="color:violet;text-align:center;"><strong>This is a heading</strong></h1>
<p style="color:yellow;font-size:30px;">This is a paragraph.</p>
</body>
</html>
```

**OUTPUT:**



**3) External function**

(External file)-{mystyle.css}

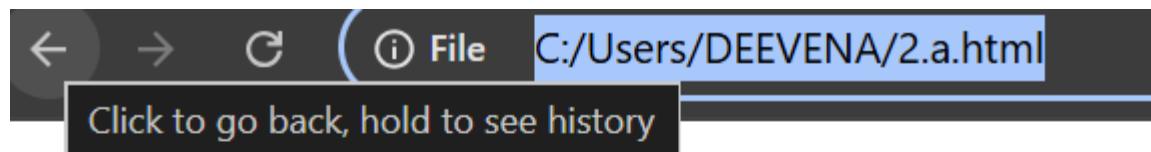
```
body{
    background-color:skyblue ;
}
h1
{
    color:orange;font-size:40px;
    text-align:center;
}
```

**Actual Program:**

```
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" type="text/css" href="mystyle.css">
```

```
</head>  
<body>  
<h2>24B11CS039</h2>  
<h1>This is a heading</h1>  
<p>This is a paragraph.</p>  
</body>  
</html>
```

**OUTPUT:**



**24B11CS039**

**This is a heading**

This is a paragraph.

---

**RESULT:**