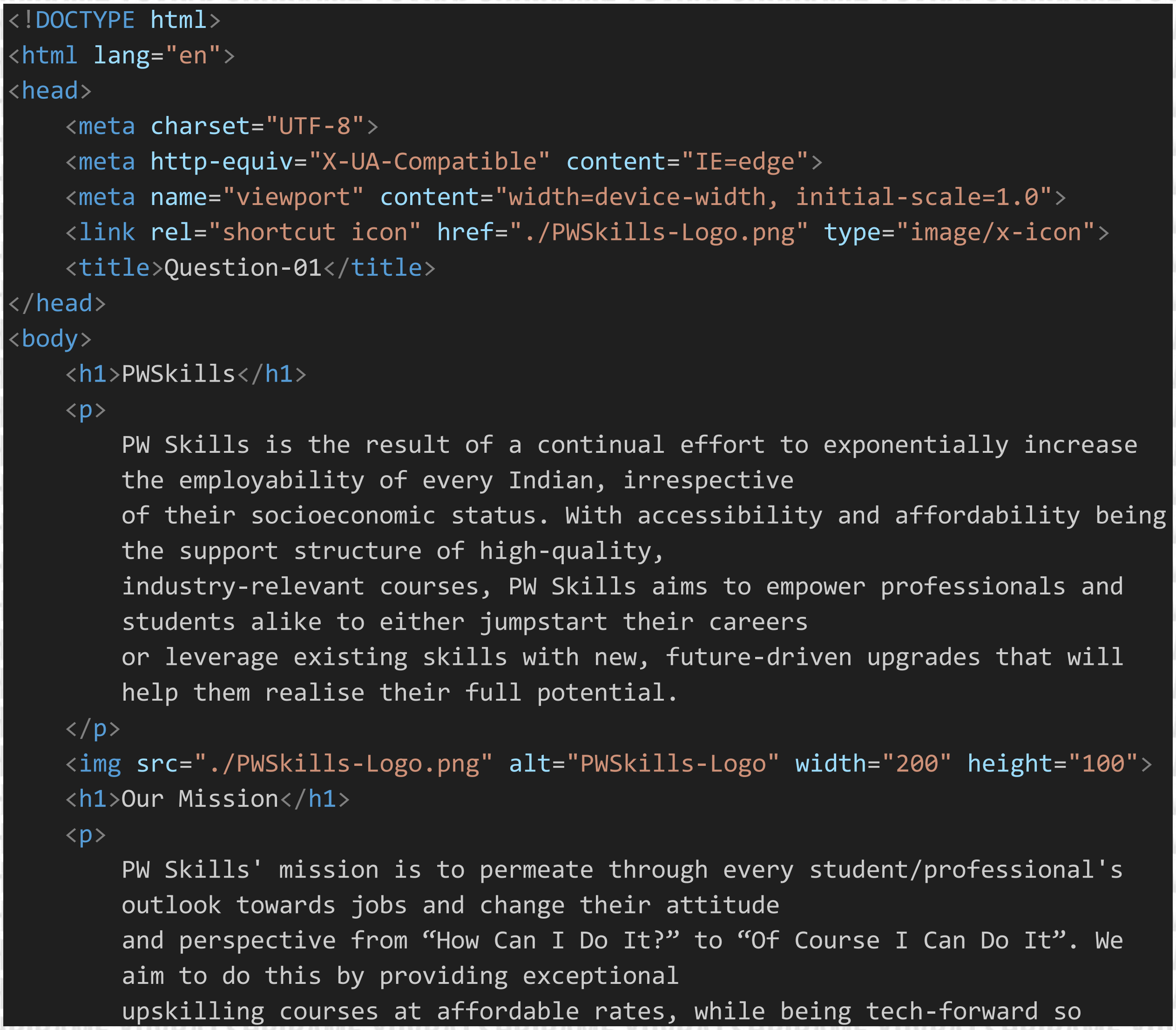
MEDIA AND FORMS

ASSIGNMENT

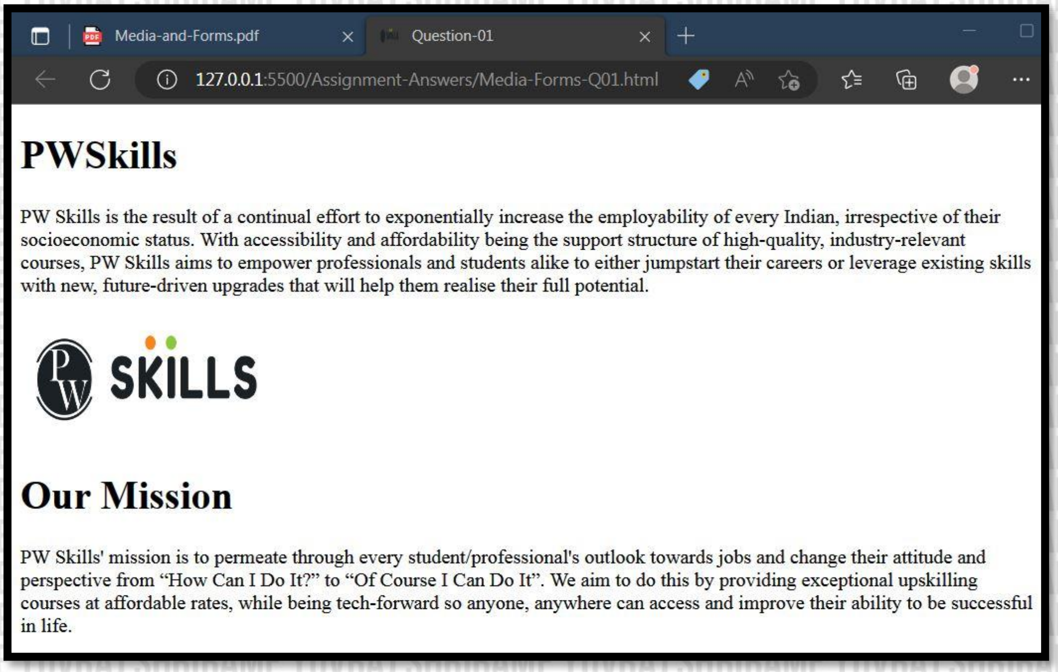
1. **Create a simple blog webpage on PW Skills. The webpage must contain at least 1 heading, 1 image, and some information about PW Skills.**

Code-



```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="shortcut icon" href="./PWSkills-Logo.png" type="image/x-icon">
    <title>Question-01</title>
</head>
<body>
    <h1>PWSkills</h1>
    <p>
        PW Skills is the result of a continual effort to exponentially increase
        the employability of every Indian, irrespective
        of their socioeconomic status. With accessibility and affordability being
        the support structure of high-quality,
        industry-relevant courses, PW Skills aims to empower professionals and
        students alike to either jumpstart their careers
        or leverage existing skills with new, future-driven upgrades that will
        help them realise their full potential.
    </p>
    <img src="./PWSkills-Logo.png" alt="PWSkills-Logo" width="200" height="100">
    <h1>Our Mission</h1>
    <p>
        PW Skills' mission is to permeate through every student/professional's
        outlook towards jobs and change their attitude
        and perspective from “How Can I Do It?” to “Of Course I Can Do It”. We
        aim to do this by providing exceptional
        upskilling courses at affordable rates, while being tech-forward so
        anyone, anywhere can access and improve their
        ability to be successful in life.
    </p>
</body>
</html>
```

Output-



PWSkills

PW Skills is the result of a continual effort to exponentially increase the employability of every Indian, irrespective of their socioeconomic status. With accessibility and affordability being the support structure of high-quality, industry-relevant courses, PW Skills aims to empower professionals and students alike to either jumpstart their careers or leverage existing skills with new, future-driven upgrades that will help them realise their full potential.

Our Mission

PW Skills' mission is to permeate through every student/professional's outlook towards jobs and change their attitude and perspective from “How Can I Do It?” to “Of Course I Can Do It”. We aim to do this by providing exceptional upskilling courses at affordable rates, while being tech-forward so anyone, anywhere can access and improve their ability to be successful in life.

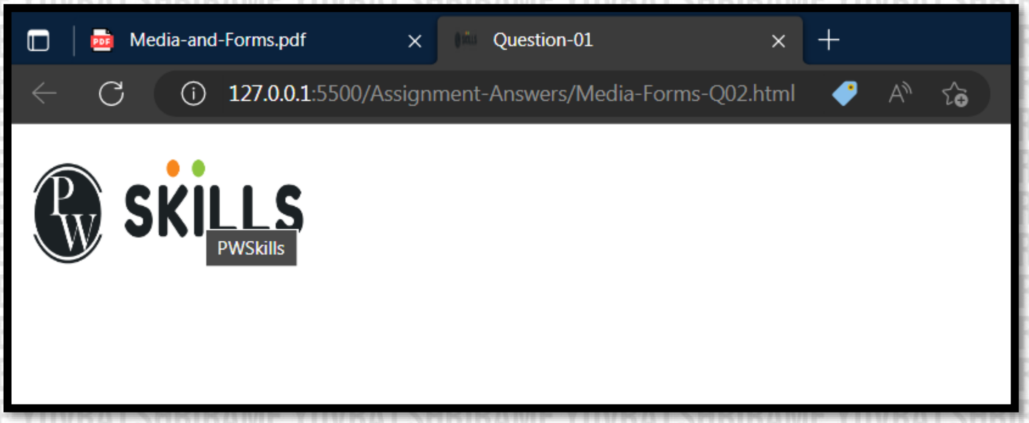
2. **Create a simple webpage with the PW Skills logo and add a title attribute with the value “PW Skills”. Observe the changes that the title attribute applies to the image.**

Code-

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="shortcut icon" href="./PWSkills-Logo.png" type="image/x-icon">
    <title>Question-02</title>
</head>
```

```html
<body>
    <img src="./PWSkills-Logo.png" alt="PWSkills-Logo" width="200" height="100"
    title="PWSkills">
</body>

</html>
```

Output-



When we hover mouse over the PW Skills logo, the name appears. That's the change we observe when we introduce title attribute to the image tag.

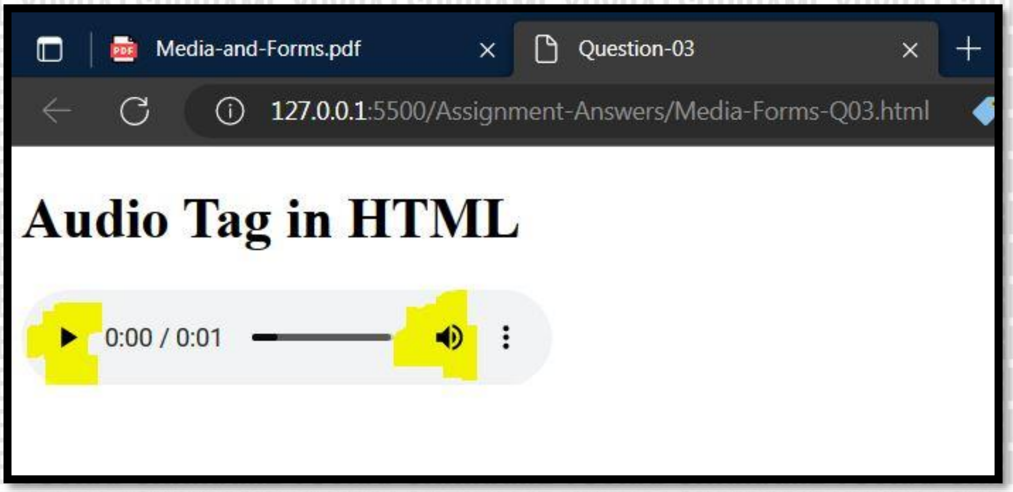
3. **Create a <audio> tag that has controls to pause, play, and adjust the volume.**

Code-

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Question-03</title>
</head>
<body>
    <h1>Audio Tag in HTML</h1>
    <audio src="./Media-Forms-Q03.wav" controls ></audio>
</body>
```

```
</html>
```

Output-



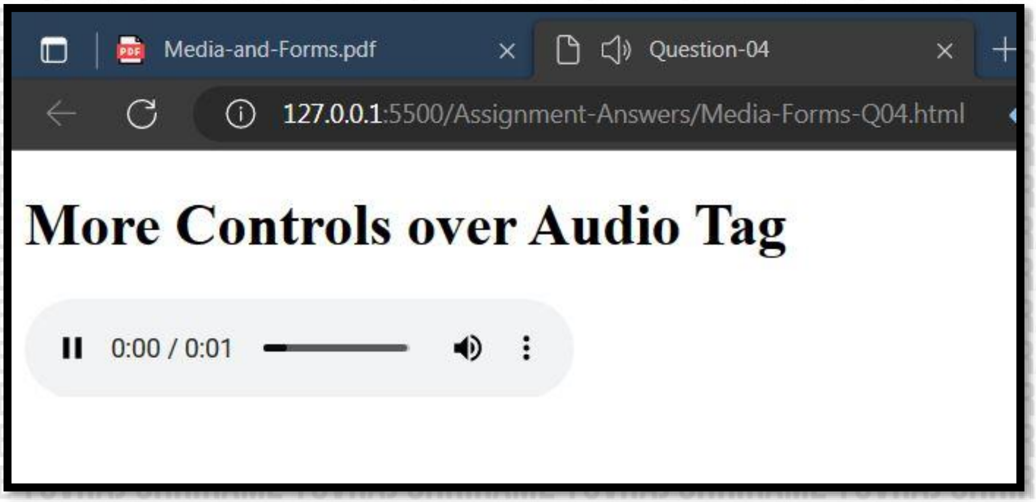
Audio Tag in HTML

4. **Create a tag that automatically starts playing a song when the page loads. The audio tag should have controls to pause, play, and adjust the volume. Additionally, the song should be set to loop continuously until it is paused by the user.**

Code-

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Question-04</title>
</head>
<body>
    <h1>More Controls over Audio Tag</h1>
    <audio src="./Arcade-Sound.wav" controls autoplay loop></audio>
</body>
</html>
```

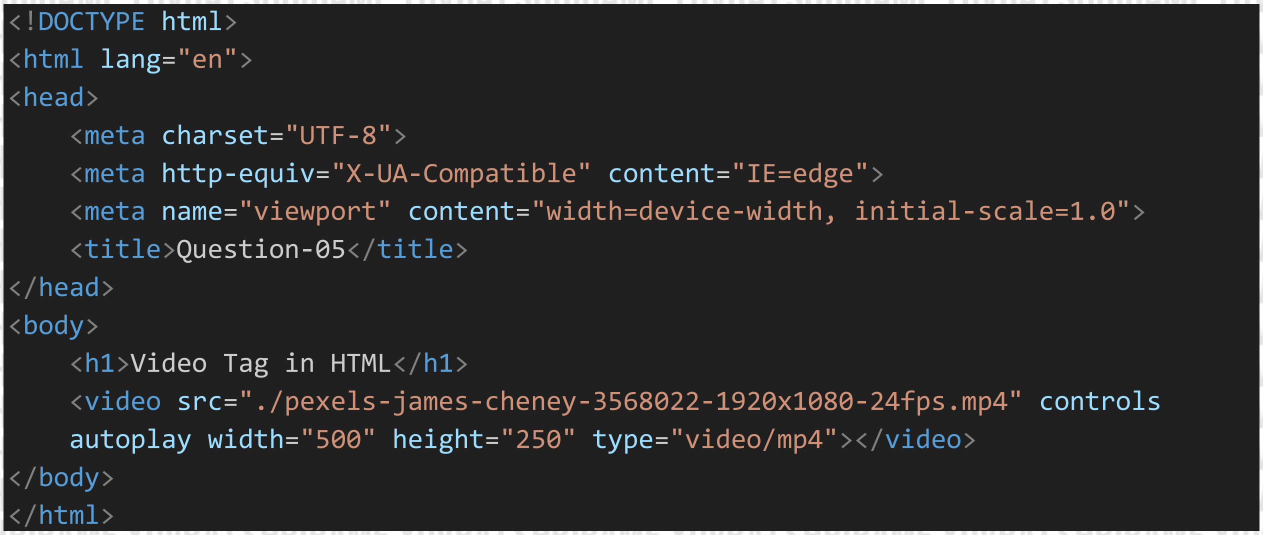
Output-



More Controls over Audio Tag

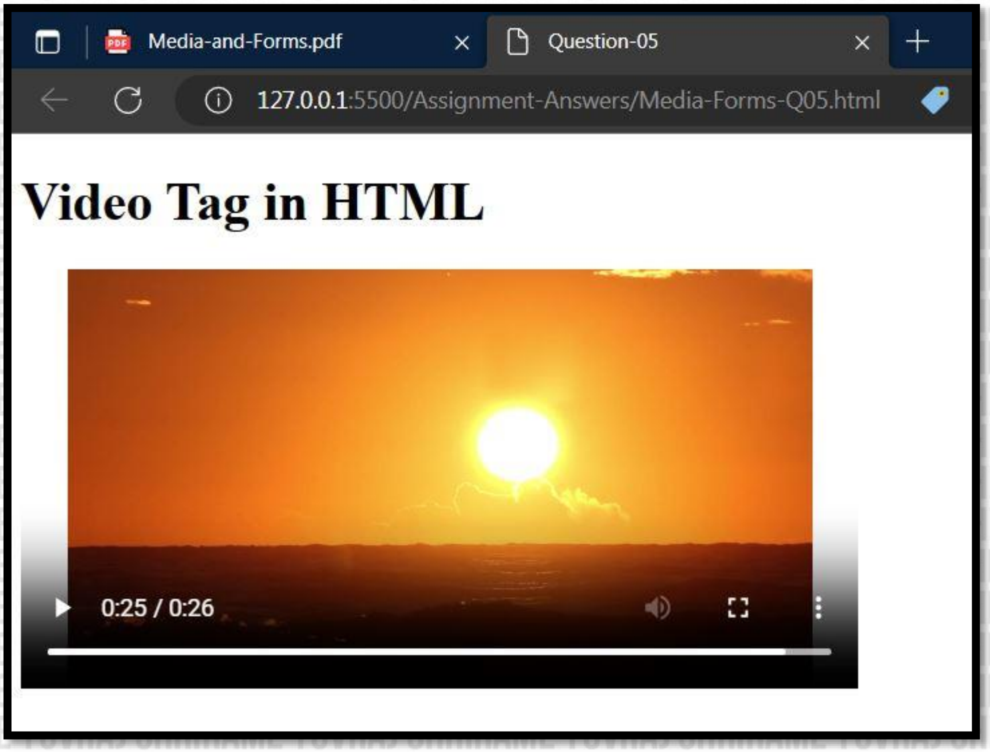
5. **Create a tag that automatically starts playing a sunrise video when the page loads. The video tag should have controls to pause, play, and adjust the volume.**

Code-



```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Question-05</title>
</head>
<body>
    <h1>Video Tag in HTML</h1>
    <video src="./pexels-james-cheney-3568022-1920x1080-24fps.mp4" controls
    autoplay width="500" height="250" type="video/mp4"></video>
</body>
</html>
```

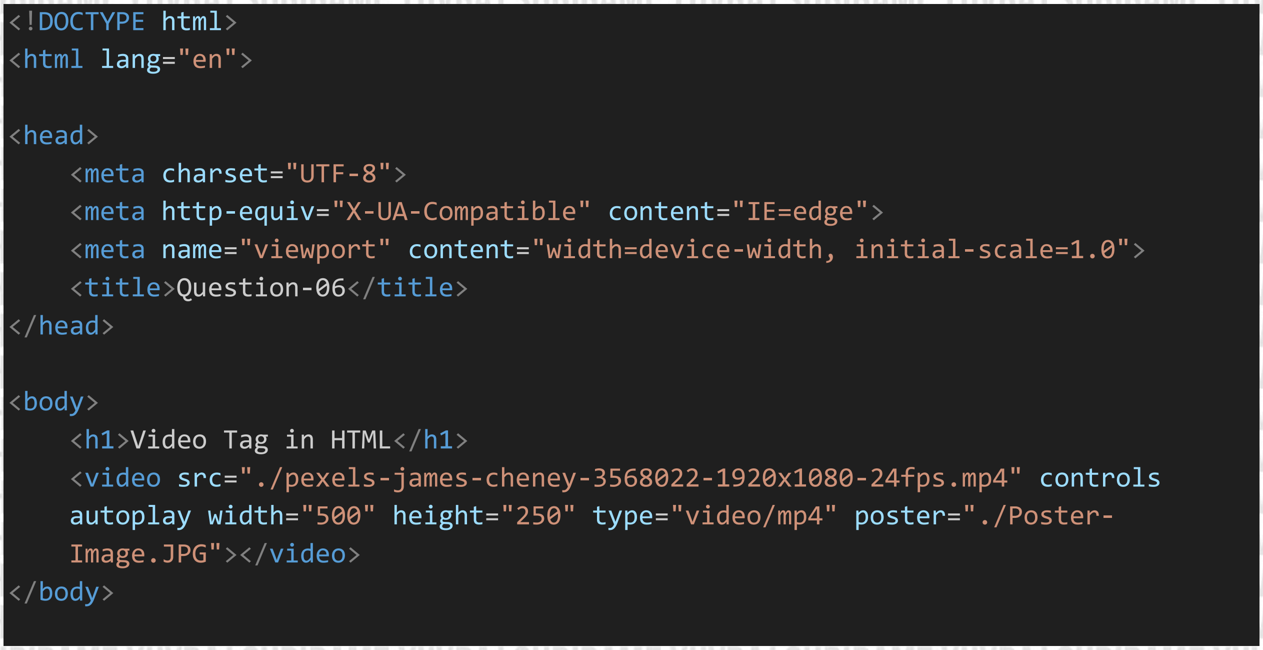
Output-



Video Tag in HTML

6. **Create a similar webpage as we built for assignment question 5. Add a poster attribute to the tag that displays an image of the sunrise.**

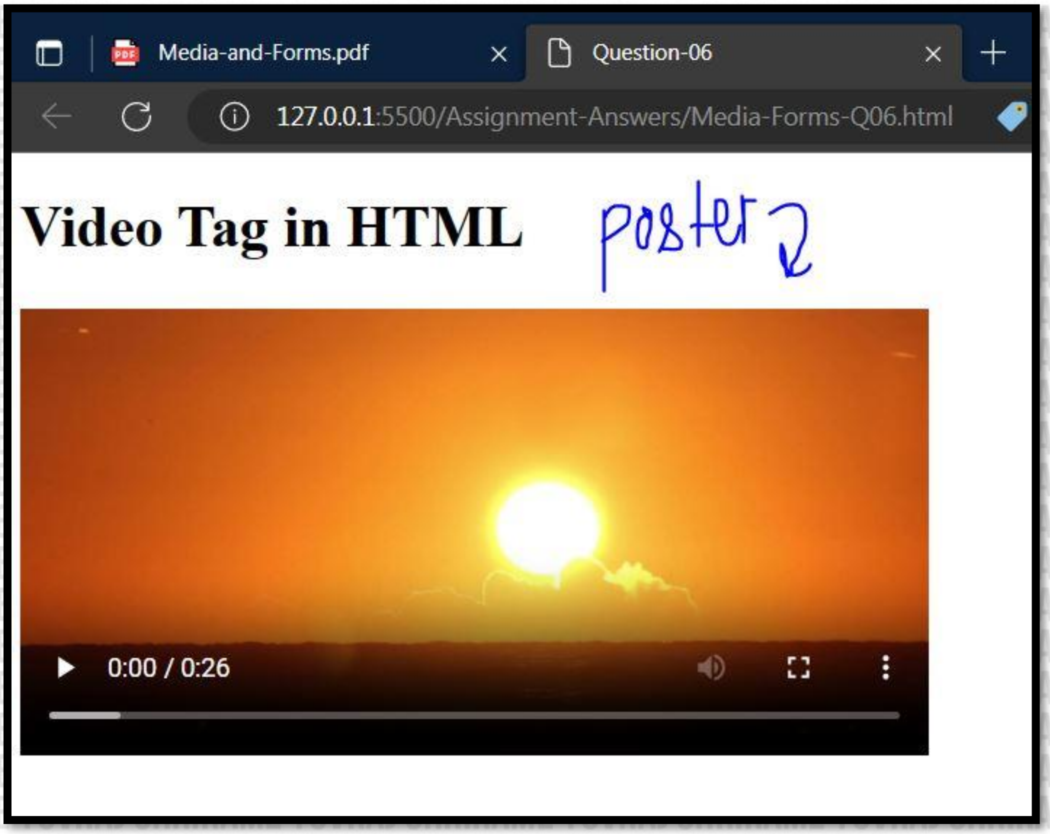
Code-



```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Question-06</title>
</head>

<body>
    <h1>Video Tag in HTML</h1>
    <video src="./pexels-james-cheney-3568022-1920x1080-24fps.mp4" controls
    autoplay width="500" height="250" type="video/mp4" poster="./Poster-
    Image.JPG"></video>
</body>
```

```
</html>
```

Output-



Video Tag in HTML

poster ?

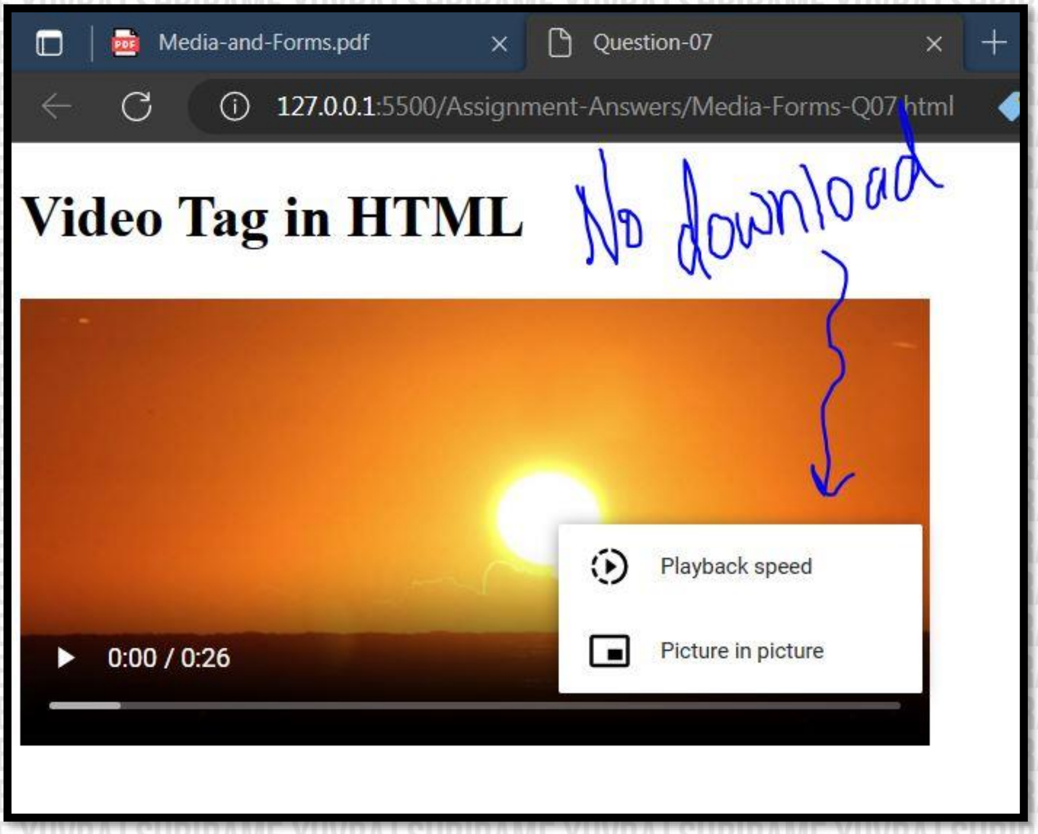
7. Create a similar webpage as we built for assignment 6 question and disable the download option.

Code-

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Question-07</title>
</head>

<body>
```

```
    <h1>Video Tag in HTML</h1>
    <video src="./pexels-james-cheney-3568022-1920x1080-24fps.mp4" controls
        autoplay width="500" height="250"
        type="video/mp4" poster="./Poster-Image.JPG"
        controlslist="nodownload"></video>
</body>

</html>
```

Output-



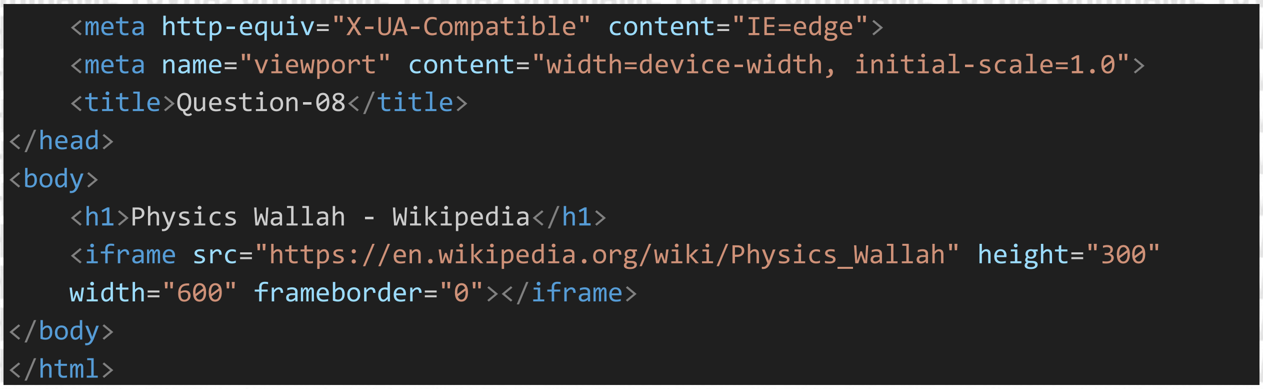
Video Tag in HTML

No download

8. Create a simple webpage that displays Wikipedia’s Physics Wallah page using an iframe.

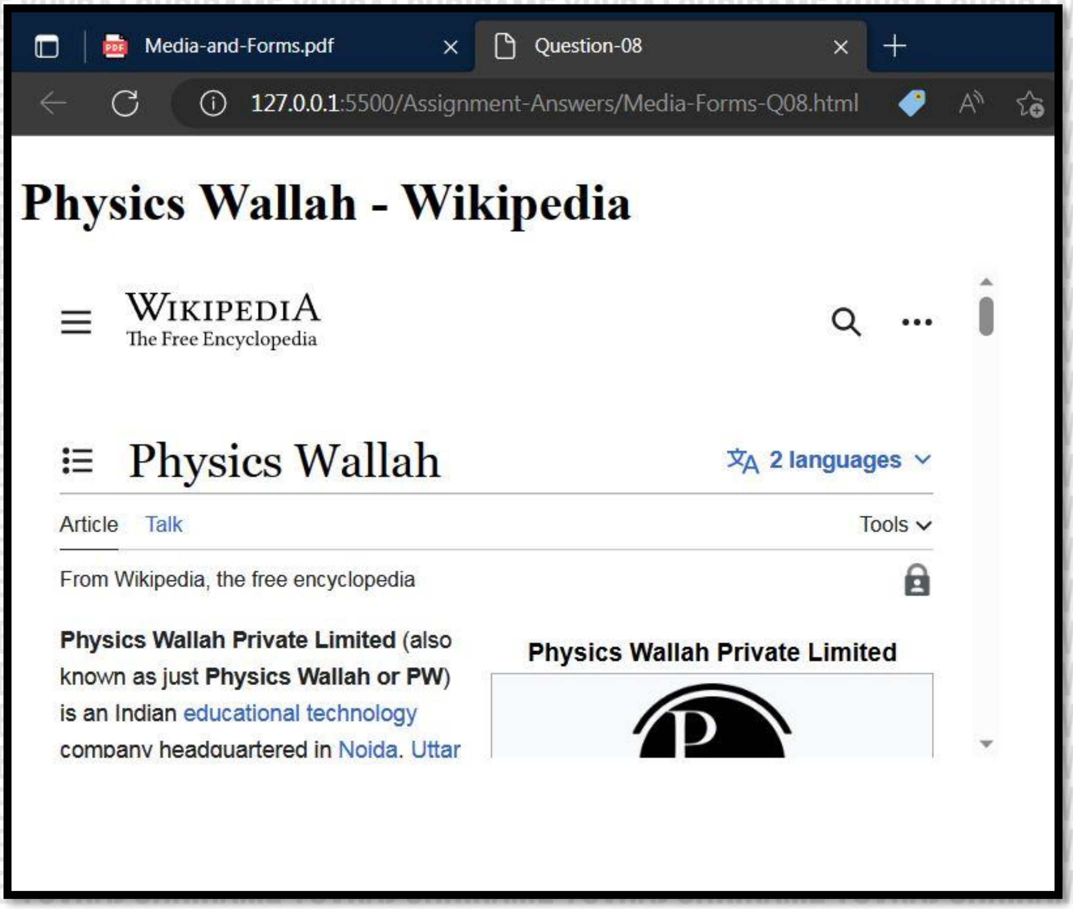
Code-

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
```



```
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Question-08</title>
</head>
<body>
    <h1>Physics Wallah - Wikipedia</h1>
    <iframe src="https://en.wikipedia.org/wiki/Physics_Wallah" height="300"
    width="600" frameborder="0"></iframe>
</body>
</html>
```

Output-



Physics Wallah - Wikipedia

Physics Wallah

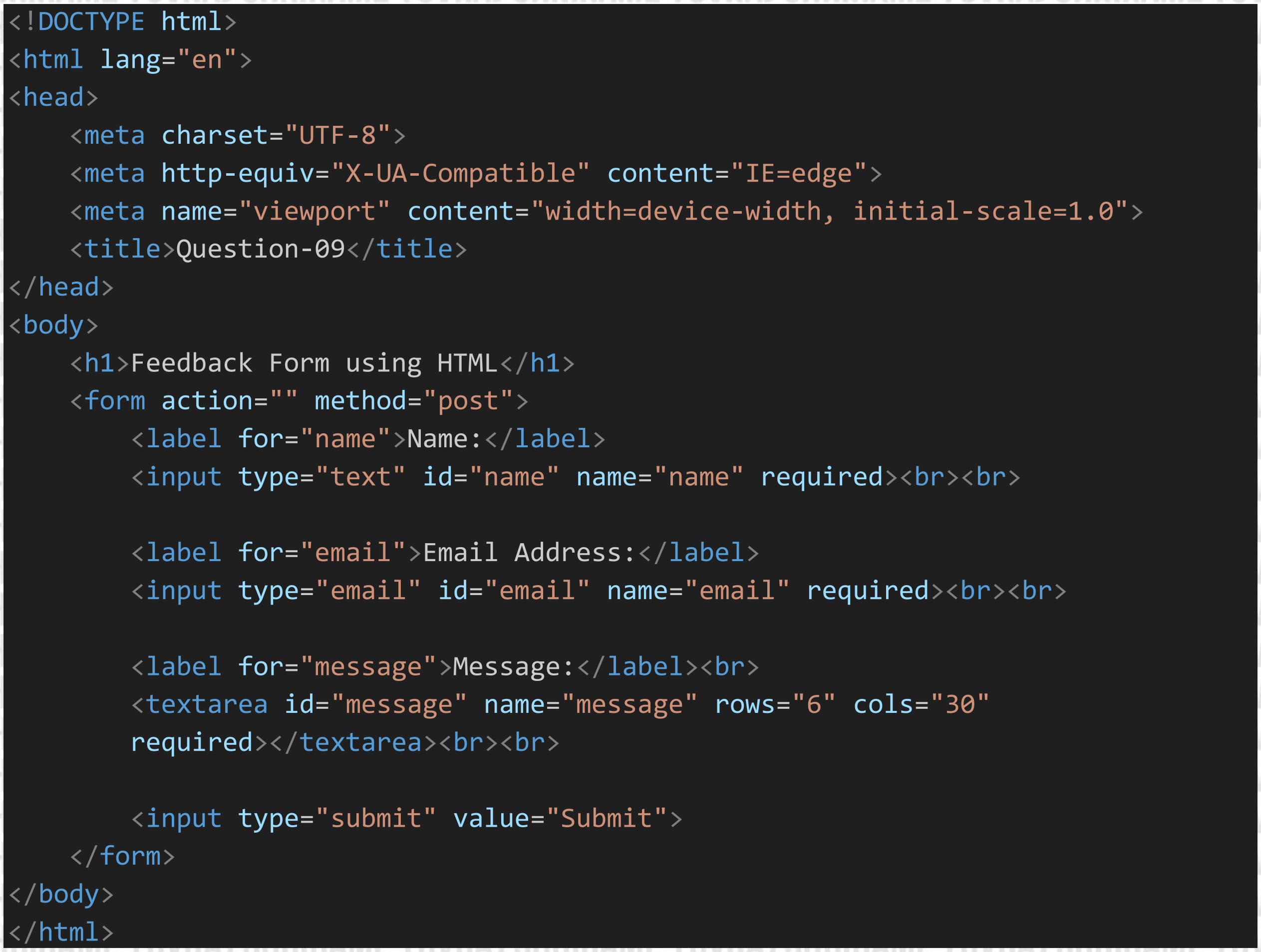
From Wikipedia, the free encyclopedia

Physics Wallah Private Limited (also known as just **Physics Wallah or PW**) is an Indian educational technology company headquartered in Noida, Uttar

Physics Wallah Private Limited

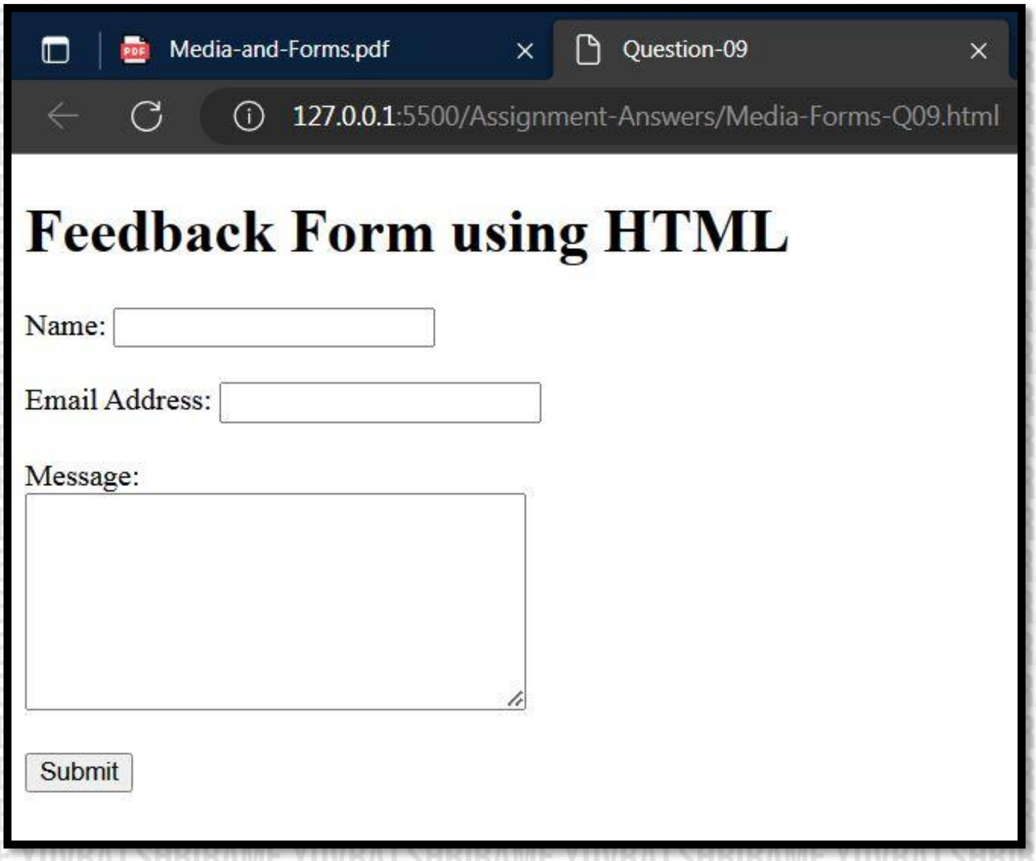
9. **Create a feedback form with a field for the user's name, email address, and message.**

Code-



```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Question-09</title>
</head>
<body>
    <h1>Feedback Form using HTML</h1>
    <form action="" method="post">
        <label for="name">Name:</label>
        <input type="text" id="name" name="name" required><br><br>

        <label for="email">Email Address:</label>
        <input type="email" id="email" name="email" required><br><br>

        <label for="message">Message:</label><br>
        <textarea id="message" name="message" rows="6" cols="30"
        required></textarea><br><br>

        <input type="submit" value="Submit">
    </form>
</body>
</html>
```

Output-



Feedback Form using HTML

Name:

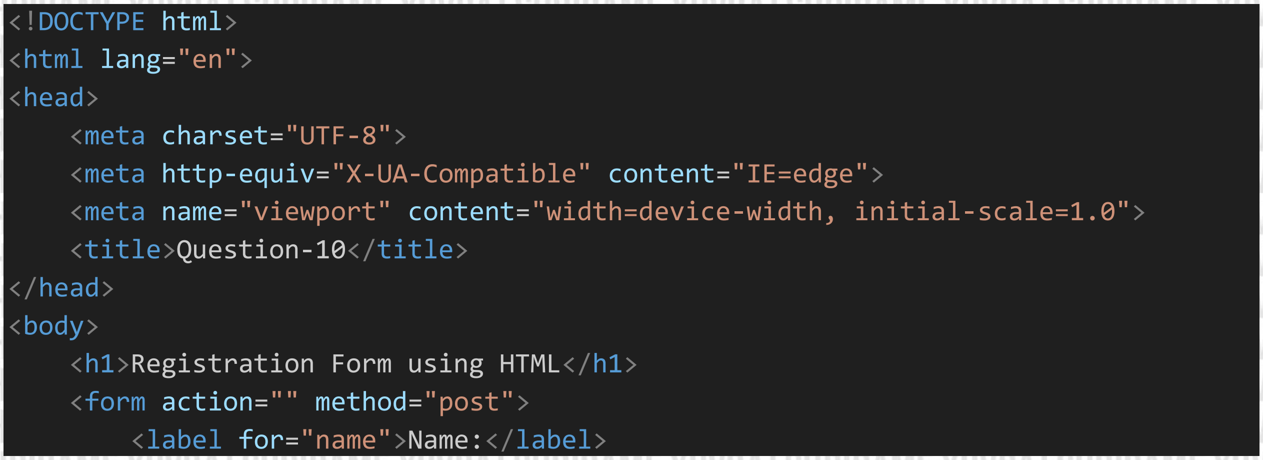
Email Address:

Message:

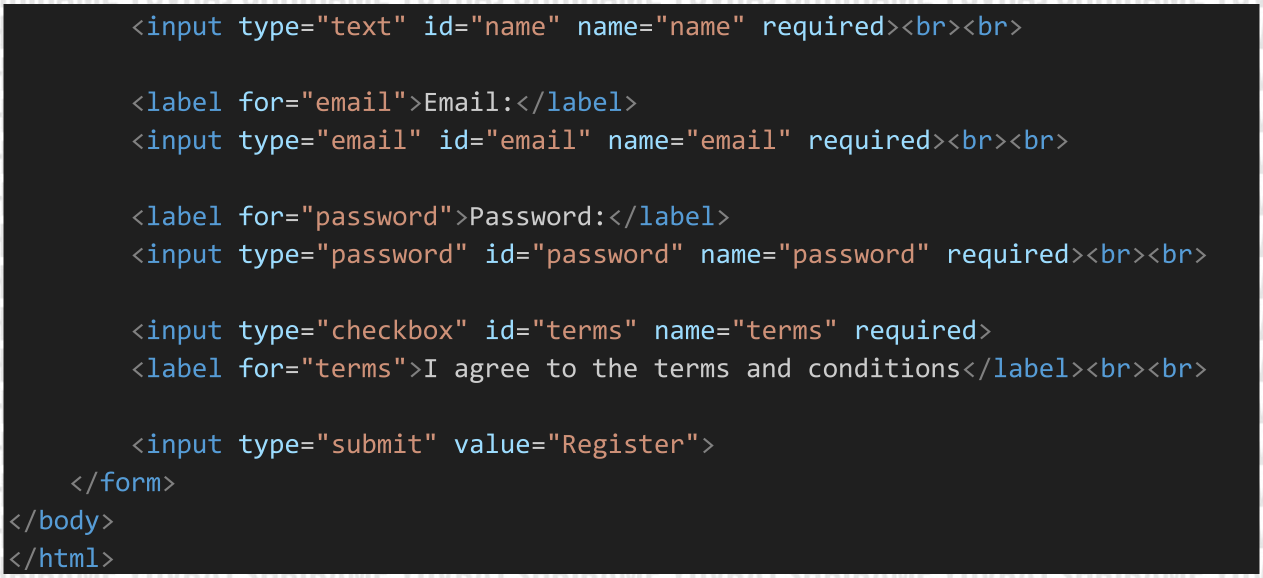
Submit

10. Create a registration form with fields for the user's name, email address, password, and a checkbox to agree to the terms and conditions. Use the text input type for the name and email fields, the password input type for the password field, and the checkbox input type for the terms and conditions field.

Code-

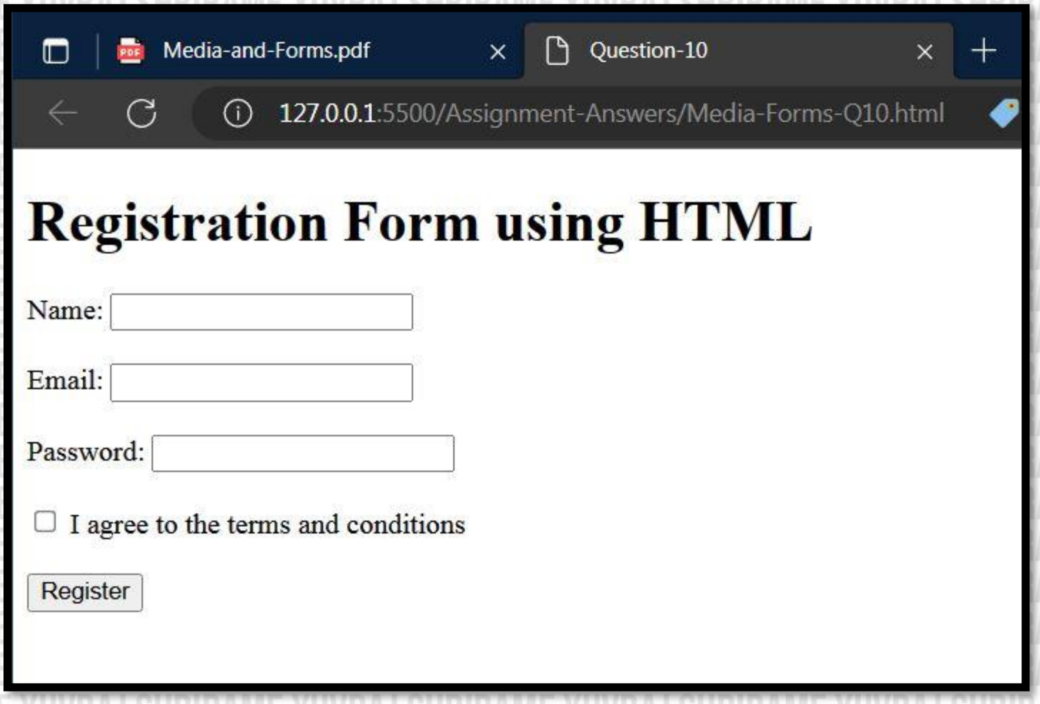


```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Question-10</title>
</head>
<body>
    <h1>Registration Form using HTML</h1>
    <form action="" method="post">
        <label for="name">Name:</label>
```



```
        <input type="text" id="name" name="name" required><br><br>

        <label for="email">Email:</label>
        <input type="email" id="email" name="email" required><br><br>

        <label for="password">Password:</label>
        <input type="password" id="password" name="password" required><br><br>

        <input type="checkbox" id="terms" name="terms" required>
        <label for="terms">I agree to the terms and conditions</label><br><br>

        <input type="submit" value="Register">
    </form>
</body>
</html>
```

Output-



Registration Form using HTML

Name:

Email:

Password:

□ I agree to the terms and conditions

MODERN HTML

ASSIGNMENT

1. **List out the features of HTML5.**

   HTML5 is the latest version of Hypertext Markup Language. HTML5 introduced several new features. Some of the features are mentioned below-

   - **Included Semantics:** HTML5 introduced some HTML elements like <nav>, <header>, <footer>, etc for better accessibility.
   - **Introduced more APIs:** For more better functionality
   - **Introduced 'canvas'**: For multimedia support
   - **HTML5 supports SVGs:** Scalable types of image formats
   - **Introduced Geolocation, Web Socket APIs:** Adds more functionality to a website
   - **Improved Forms:** Introduces more HTML elements like <datalist> for better accessibility.

2. **What are HTML entities? List out 5 commonly used HTML entities.**

   HTML entities are special character codes used to represent characters. They are primarily used to display reserved characters, characters with special meaning in HTML, or characters that are not easily typed on a keyboard.

   Here are 5 commonly used HTML entities:

   1. `&lt;`: represents the less-than symbol (<).
   2. `&gt;`: represents the greater-than symbol (>).
   3. `&amp;`: represents the ampersand symbol (&).
   4. `&quot;`: represents the double quotes (").
   5. `&apos;`: represents the apostrophe or single quotation mark (').

These entities are often used when you need to display these characters as text within an HTML document.

3. **What is web accessibility? List some of the assistive devices which play a major role in providing accessibility.**

Web accessibility refers to the process of designing and developing websites and web applications that can be accessed and used by people with disabilities.

Such websites help people with disabilities to easily access the content of website.

Here are some commonly used assistive devices that plays a major role in providing accessibility to disabled peoples:

1. Screen Readers: These software applications convert on-screen text into synthesized speech, that allows blind or visually impaired individuals to access web content.

2. Assistive Listening Devices: These devices amplify sound or provide clarity for individuals with hearing impairments, facilitating access to audio content on websites.

3. Text-to-Speech Tools: Text-to-speech software allows users to listen to the written text on web pages, benefiting individuals with reading difficulties or cognitive disabilities.

4. Voice Recognition Software: People with limited mobility or dexterity can use voice recognition software to control and navigate web interfaces using spoken commands.

5. Keyboard Accessibility: Standard keyboards or modified keyboards with larger keys can assist individuals with mobility impairments in accessing web content.

These are just a few examples of assistive devices and technologies that play a major role in enhancing web accessibility.

4. **List any 3 ways which help us in improving the accessibility of HTML.**

Improving the accessibility of HTML involves implementing some processes that make web content more accessible and usable for people suffering from disabilities.

Here are three 3 ways to improve the accessibility of HTML:

1. Use Semantic HTML: HTML5 introduces semantic HTML that involves using appropriate HTML elements to provide meaning and structure to the content.

By using elements like <header>, <nav>, <main>, <article>, <section>, and <footer>, we can make a website more accessible as well as proper browser rendering.

2. Provide Alternative Text for Images: Images are an essential part of web content, but they may not be accessible to individuals who are blind or visually impaired.

By adding descriptive alternative text (alt text) to images using the `alt` attribute, you provide a textual description of the image's content or function.

Screen readers can then read the alt text aloud, ensuring that users with visual impairments understand the context and purpose of the image.

3. Using ‘data-‘ and ‘aria-‘: Proper keyboard focus styling and the use of appropriate HTML attributes like ‘tabindex’ and ‘aria-*’ attributes can help make your HTML elements keyboard accessible.

By implementing these practices, you can significantly improve the accessibility of your HTML content and ensure that it is usable by a broader range of users, including those with disabilities.

5. **Write a short note on the tabindex.**

The ‘tabindex’ attribute is an HTML attribute that determines the order in which elements can receive focus when navigating through a web page using the keyboard.

It allows developers to define a priority order for interactive elements, such as links, buttons, other focusable elements.

The ‘tabindex’ attribute accepts a numeric value that represents the element's position in the tab order.

A value of 0 means the element is included in the natural tab order, following the order of elements as they appear in the HTML source code.

Positive values define a specific tab order for elements, with lower values being given higher priority.

Negative values exclude the element from the tab order.

By default, focusable elements are ordered based on their position in the HTML structure.

Here's an example of how the ‘tabindex’ attribute can be used:

```
<input type="text" tabindex="1">
<button tabindex="2">Submit</button>
<a href="#" tabindex="3">Link</a>
```

6. List any 5 semantic tags in HTML along with their descriptions.

Following are five commonly used semantic tags in HTML along with their descriptions:

1. <header>: The <header> tag represents the introducing content or a container for a set of introductory content at the beginning of a section or document. It typically contains the site or section title, logo, navigation menus, and other header-related content.

2. <nav>: The <nav> tag is used to define a section of navigation bar, typically for site navigation menus. It signifies a block of navigation functionality, such as a primary or secondary navigation menu, a table of contents, or a related links list.

3. <main>: The <main> tag represents the main content area or the body of the document. It should contain the primary content that is unique to the document and excludes content like headers, footers, or sidebars. There should typically be only one <main> element per document.

4. <article>: The <article> tag is used to define a self-contained composition in a document, such as a blog post, news article, or forum post. It represents a complete, standalone piece of content that can be distributed or syndicated independently from the rest of the page.

5. <footer>: The <footer> tag represents the footer section of a document or a section. It typically contains information about the document, such as copyright information, links to related documents, author information, or contact details. It is usually placed at the bottom of the page or the end of a section.

These semantic tags provide a clearer structure to the HTML markup, making it more meaningful and accessible for both humans and search engines.

7. What are benefits of using semantic tags in our webpage.

Using semantic tags in webpages provides several benefits:

1. Better Accessibility: Semantic tags provide a clearer structure and meaning to the content, making it easier for assistive technologies like screen readers to navigate and interpret the page correctly. This enhances accessibility for users with disabilities, allowing them to access and understand the content more effectively.

2. Better Search Engine Optimization (SEO): Using semantic tags can improve the SEO of a webpage by providing search engines with better information about the content, potentially resulting in higher rankings.

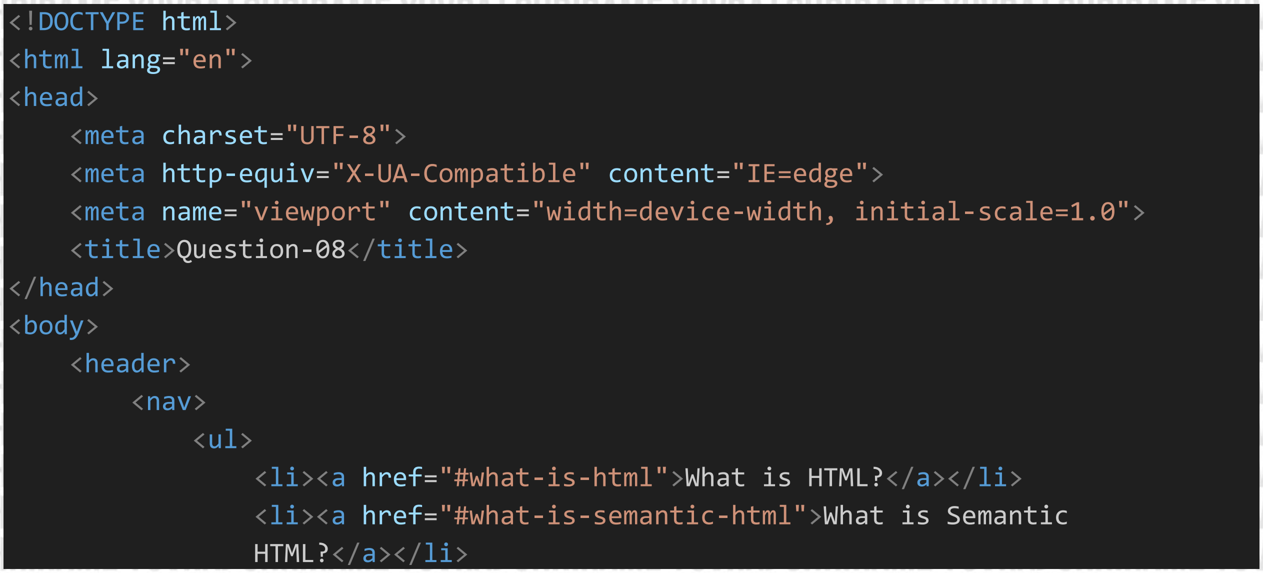
3. Readable Code: Semantic tags enhance the code's readability and maintainability by conveying the purpose and structure of elements without relying heavily on CSS classes or JavaScript. This makes it easier for developers to understand and modify the code, as well as for other developers who may work on the project in the future.

4. Easy Rendering: Using semantic tags in our HTML document can enable the faster rendering of our webpage. Therefore, semantic tags also play an important role in easier browser rendering.

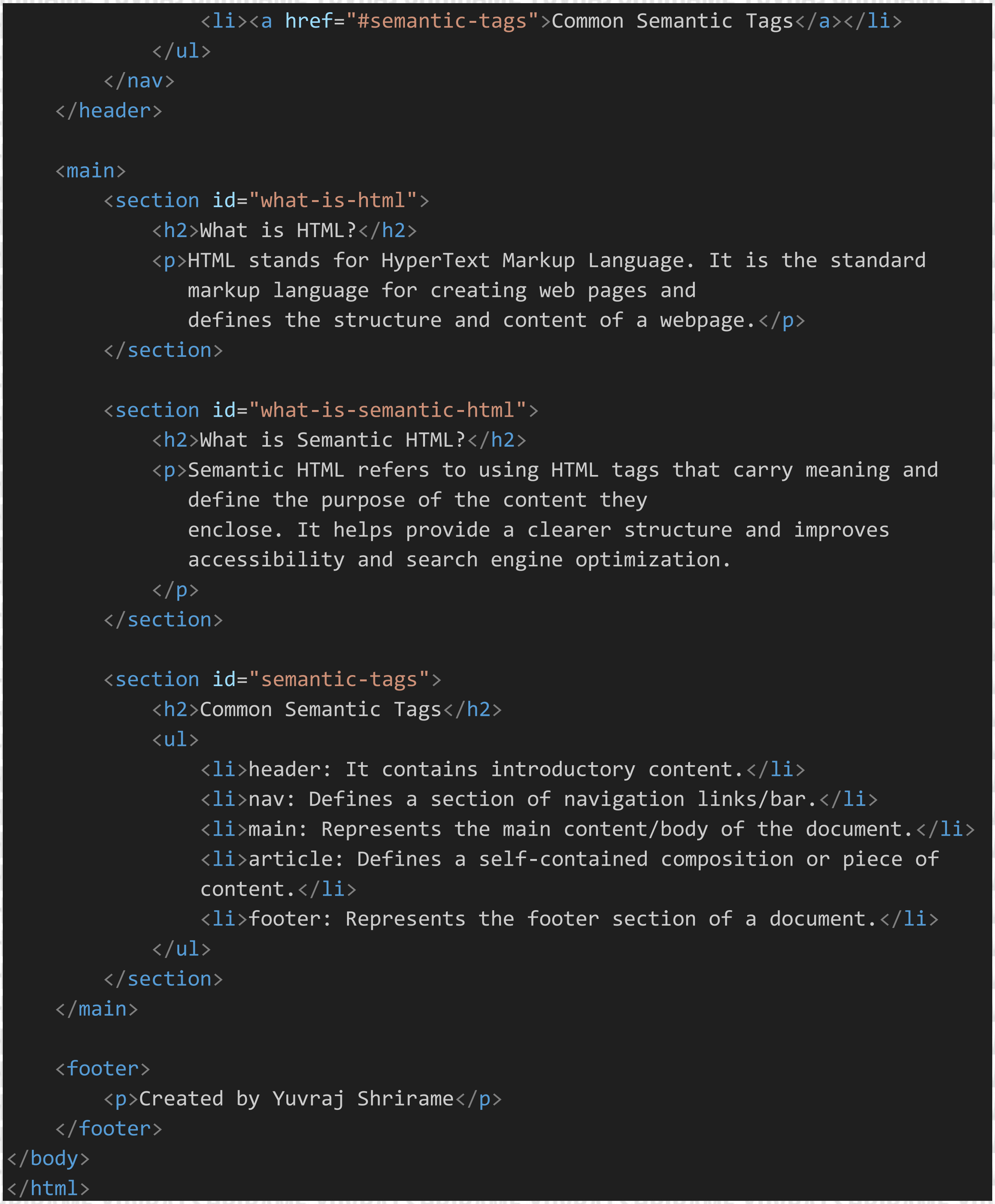
Overall, utilizing semantic tags in your webpages not only improves accessibility and SEO but also enhances code maintainability, consistency, and compatibility with evolving web standards. It helps create a well-structured, user-friendly website.

8. **Create a simple webpage with semantic HTML which has the header, main, and footer sections. The header section must contain links to navigate to different sections of the webpage. The main section must contain three subsections about what is HTML, what is semantic HTML and a list of commonly used semantic tags. In the end, the footer section must contain your name.**

Code-

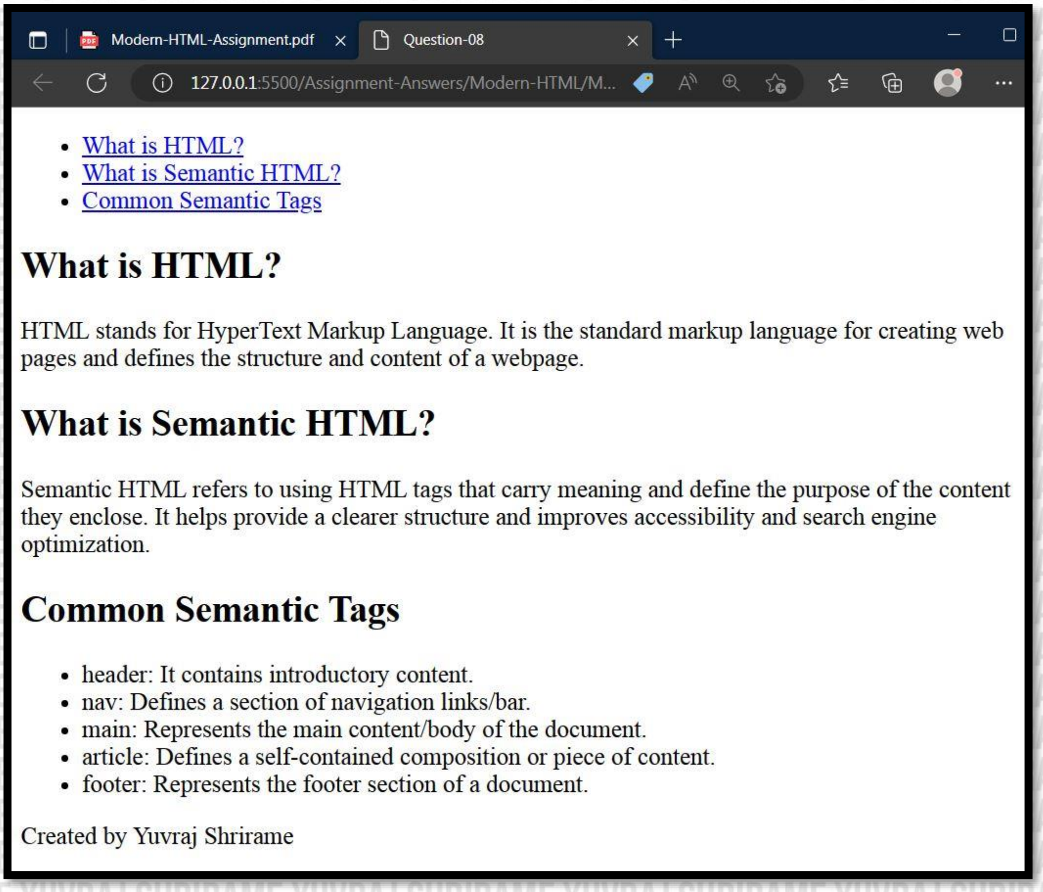


```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Question-08</title>
</head>
<body>
    <header>
        <nav>
            <ul>
                <li><a href="#what-is-html">What is HTML?</a></li>
                <li><a href="#what-is-semantic-html">What is Semantic
                HTML?</a></li>
```



```
                <li><a href="#semantic-tags">Common Semantic Tags</a></li>
            </ul>
        </nav>
    </header>

    <main>
        <section id="what-is-html">
            <h2>What is HTML?</h2>
            <p>HTML stands for HyperText Markup Language. It is the standard
               markup language for creating web pages and
               defines the structure and content of a webpage.</p>
        </section>

        <section id="what-is-semantic-html">
            <h2>What is Semantic HTML?</h2>
            <p>Semantic HTML refers to using HTML tags that carry meaning and
               define the purpose of the content they
               enclose. It helps provide a clearer structure and improves
               accessibility and search engine optimization.
            </p>
        </section>

        <section id="semantic-tags">
            <h2>Common Semantic Tags</h2>
            <ul>
                <li>header: It contains introductory content.</li>
                <li>nav: Defines a section of navigation links/bar.</li>
                <li>main: Represents the main content/body of the document.</li>
                <li>article: Defines a self-contained composition or piece of
                content.</li>
                <li>footer: Represents the footer section of a document.</li>
            </ul>
        </section>
    </main>

    <footer>
        <p>Created by Yuvraj Shrirame</p>
    </footer>
</body>
</html>
```

Output-


Modern-HTML-Assignment.pdf
Question-08
127.0.0.1:5500/Assignment-Answers/Modern-HTML/M...

- What is HTML?
- What is Semantic HTML?
- Common Semantic Tags

What is HTML?

HTML stands for HyperText Markup Language. It is the standard markup language for creating web pages and defines the structure and content of a webpage.

What is Semantic HTML?

Semantic HTML refers to using HTML tags that carry meaning and define the purpose of the content they enclose. It helps provide a clearer structure and improves accessibility and search engine optimization.

Common Semantic Tags

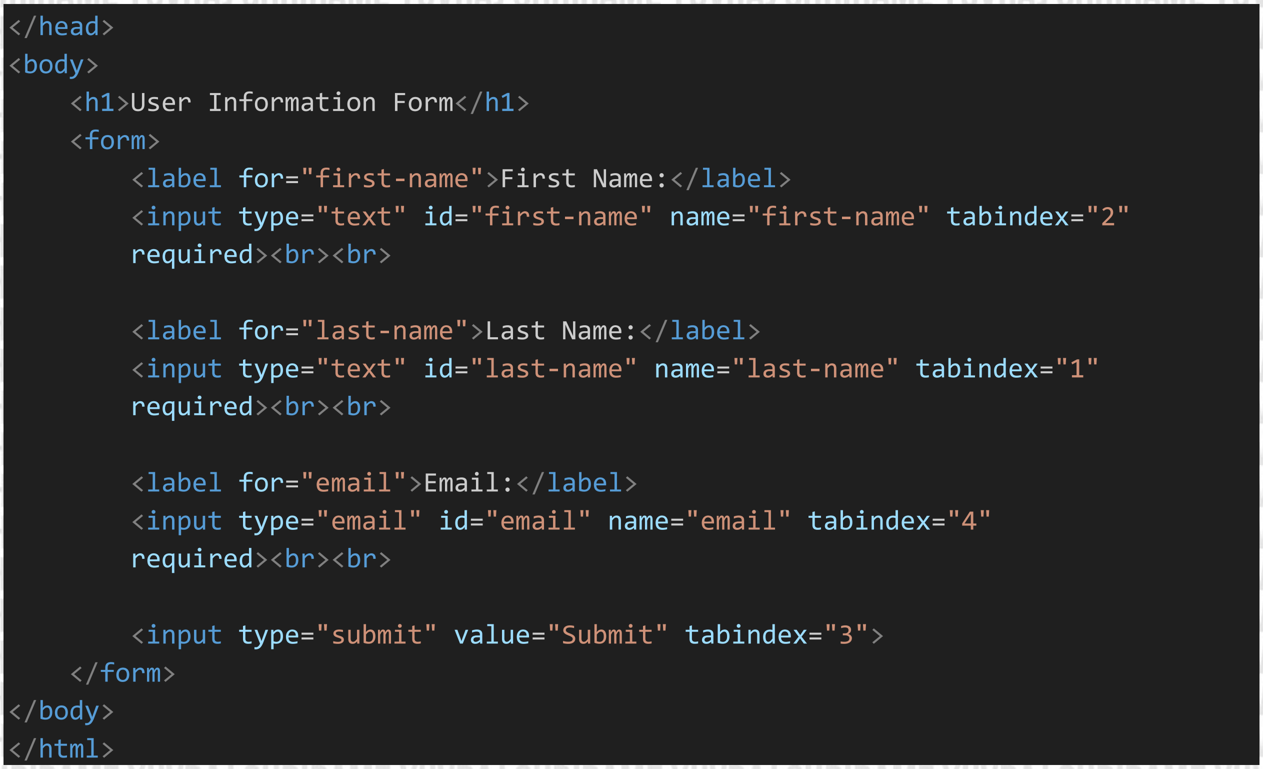
- header: It contains introductory content.
- nav: Defines a section of navigation links/bar.
- main: Represents the main content/body of the document.
- article: Defines a self-contained composition or piece of content.
- footer: Represents the footer section of a document.

Created by Yuvraj Shrirame

9. **Create a simple webpage with a form for a user to enter their personal information. The form should contain three input fields with the labels "First Name", "Last Name", and "Email". The first input field should have a tabindex value of 2. The second input field should have a tabindex value of 1. The third input field should have a tabindex value of 4. The form should have a submit button with the label "Submit" and a tabindex value of 3. Observe the behaviors of tabindex on your webpage.**

Code-

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Question-09</title>
```

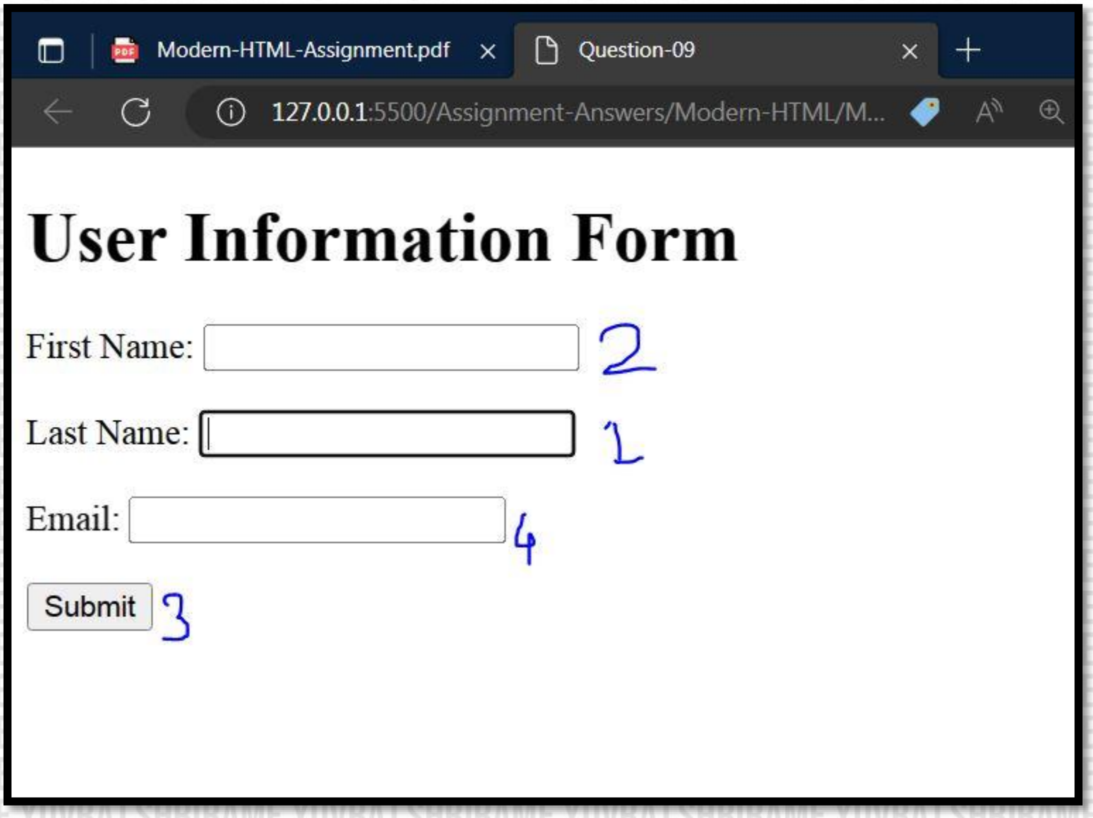


```
</head>
<body>
    <h1>User Information Form</h1>
    <form>
        <label for="first-name">First Name:</label>
        <input type="text" id="first-name" name="first-name" tabindex="2"
        required><br><br>

        <label for="last-name">Last Name:</label>
        <input type="text" id="last-name" name="last-name" tabindex="1"
        required><br><br>

        <label for="email">Email:</label>
        <input type="email" id="email" name="email" tabindex="4"
        required><br><br>

        <input type="submit" value="Submit" tabindex="3">
    </form>
</body>
</html>
```

Observation-

In this example, the tabindex attribute is used to specify the order in which elements should receive focus when navigating through the page using the tab key.
The **first name** field has a tabindex value of 2, so it will receive focus after the **last name** field (tabindex value 1) when the user presses the tab key.
The **email field** has a tabindex value of 4, so it will receive focus after the **submit button** (tabindex value 3).

Output-


Modern-HTML-Assignment.pdf
Question-09
127.0.0.1:5500/Assignment-Answers/Modern-HTML/M...

User Information Form

First Name: 2

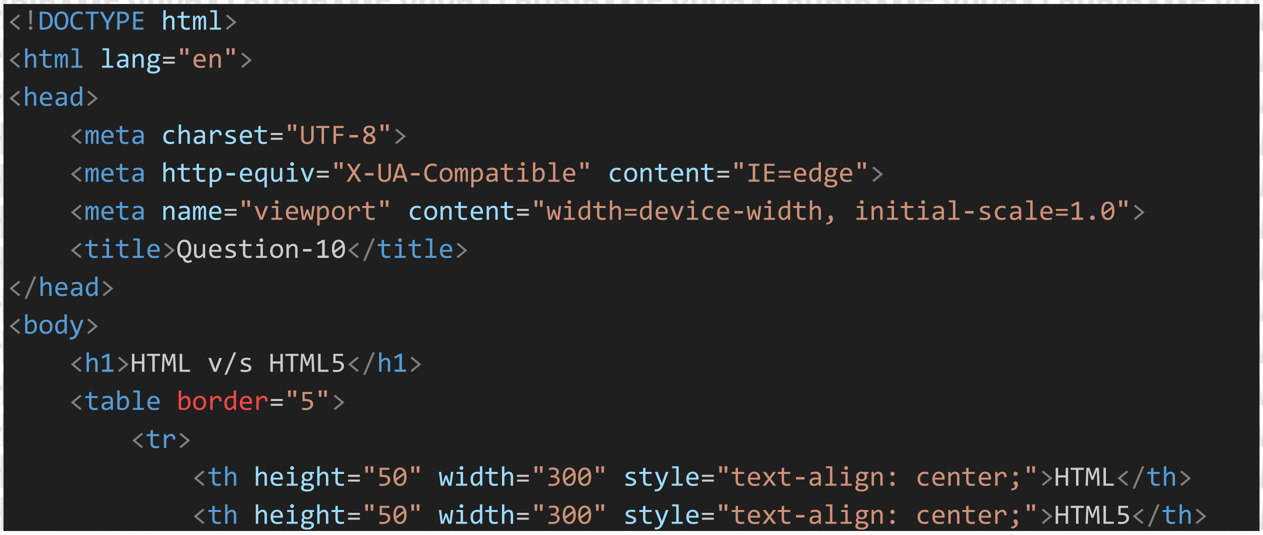
Last Name: 1

Email: 4

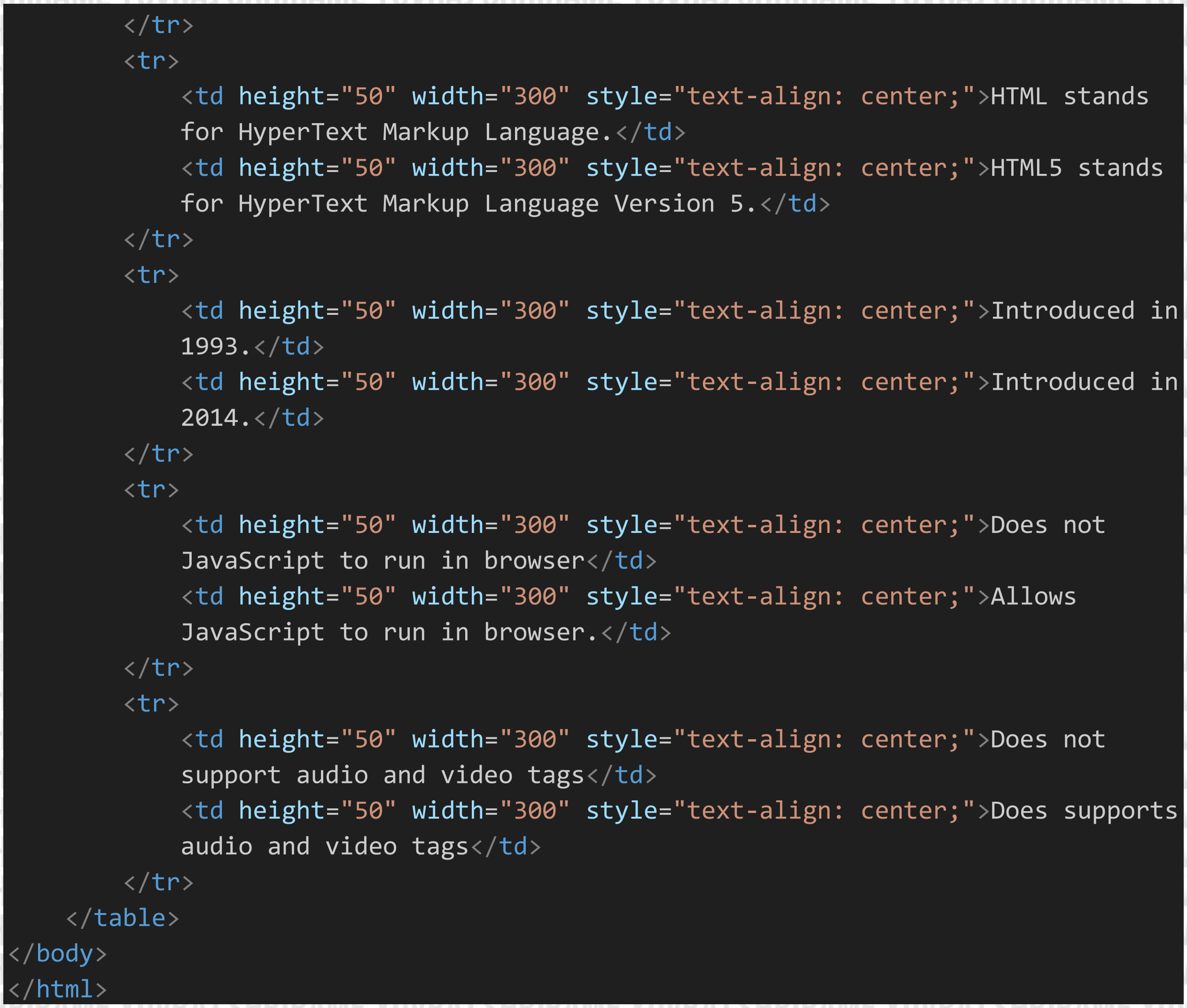
Submit 3

10. Create a simple webpage which has a table. The table must have 2 columns, HTML and HTML5. The table should include minimum three rows describing the differences between HTML and HTML5.

Code-

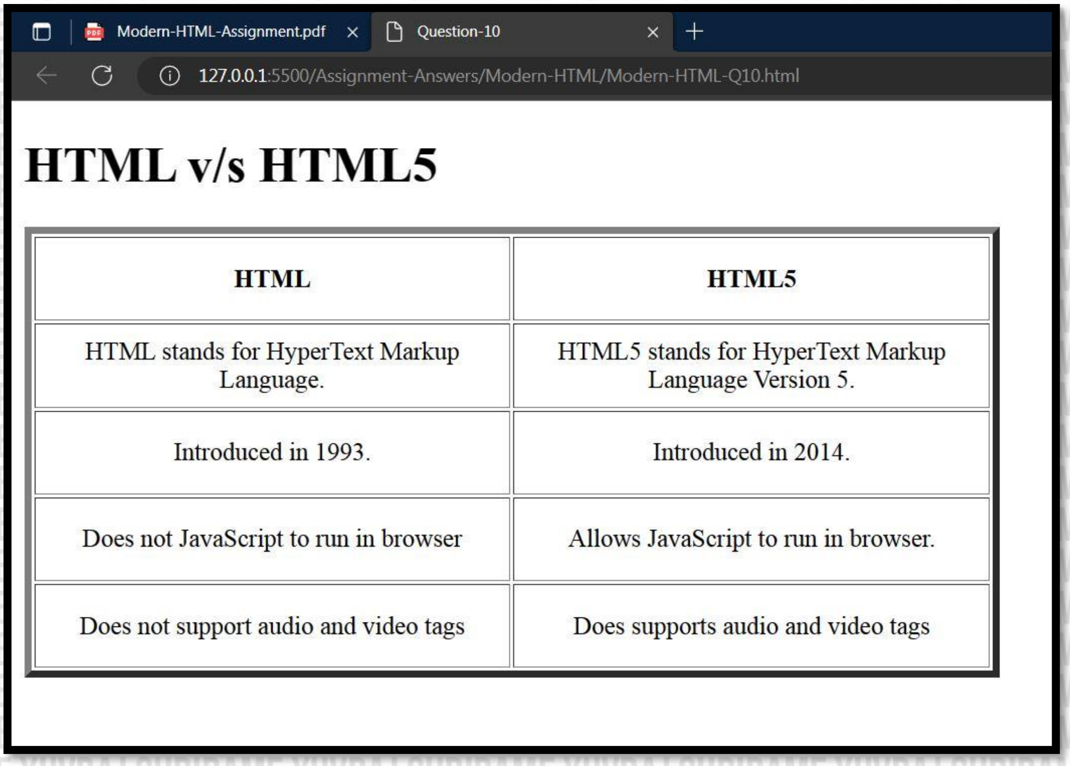


```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Question-10</title>
</head>
<body>
    <h1>HTML v/s HTML5</h1>
    <table border="5">
        <tr>
            <th height="50" width="300" style="text-align: center;">HTML</th>
            <th height="50" width="300" style="text-align: center;">HTML5</th>
```



```
        </tr>
        <tr>
            <td height="50" width="300" style="text-align: center;">HTML stands
            for HyperText Markup Language.</td>
            <td height="50" width="300" style="text-align: center;">HTML5 stands
            for HyperText Markup Language Version 5.</td>
        </tr>
        <tr>
            <td height="50" width="300" style="text-align: center;">Introduced in
            1993.</td>
            <td height="50" width="300" style="text-align: center;">Introduced in
            2014.</td>
        </tr>
        <tr>
            <td height="50" width="300" style="text-align: center;">Does not
            JavaScript to run in browser</td>
            <td height="50" width="300" style="text-align: center;">Allows
            JavaScript to run in browser.</td>
        </tr>
        <tr>
            <td height="50" width="300" style="text-align: center;">Does not
            support audio and video tags</td>
            <td height="50" width="300" style="text-align: center;">Does supports
            audio and video tags</td>
        </tr>
    </table>
</body>
</html>
```

Output-


Modern-HTML-Assignment.pdf
Question-10
127.0.0.1:5500/Assignment-Answers/Modern-HTML/Modern-HTML-Q10.html

HTML v/s HTML5

HTML	HTML5
HTML stands for HyperText Markup Language.	HTML5 stands for HyperText Markup Language Version 5.
Introduced in 1993.	Introduced in 2014.
Does not JavaScript to run in browser	Allows JavaScript to run in browser.
Does not support audio and video tags	Does supports audio and video tags