

Day 1 Assignments

1) Write a program to display the heading and paragraph into the web page?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Heading and Paragraph Example</title>
</head>
<body>
  <h1>This is a Heading</h1>
  <p>This is a paragraph of text. You can add more text here.</p>
</body>
</html>
```

This is a Heading

This is a paragraph of text. You can add more text here.

2) Write a program to differentiate the different doctype and their benefits?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>DOCTYPE Examples</title>
</head>
<body>

  <!-- HTML5 Doctype -->
  <!DOCTYPE html>
  <h1>HTML5 Doctype</h1>
  <p>This is the doctype declaration for HTML5.</p>
  <!-- HTML 4.01 Strict Doctype -->
  <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN"
"http://www.w3.org/TR/html4/strict.dtd">
  <h1>HTML 4.01 Strict Doctype</h1>
  <p>This doctype declaration enforces strict adherence to HTML 4.01 specifications.</p>
  <!-- XHTML 1.0 Transitional Doctype -->
  <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
  <h1>XHTML 1.0 Transitional Doctype</h1>
  <p>This doctype allows for a mix of HTML and XML syntax.</p>
</body>
</html>
```

HTML5 Doctype

This is the doctype declaration for HTML5.

HTML 4.01 Strict Doctype

This doctype declaration enforces strict adherence to HTML 4.01 specifications.

XHTML 1.0 Transitional Doctype

This doctype allows for a mix of HTML and XML syntax.

3) Write a program to display the text formatting tags?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Text Formatting Tags</title>
</head>
<body>
<h1>Text Formatting Examples</h1>
<p><strong>Bold Text:</strong> This text is bold.</p>
<p><em>Italic Text:</em> This text is italicized.</p>
<p><u>Underlined Text:</u> This text is underlined.</p>
<p><del>Deleted Text:</del> This text is marked as deleted.</p>
<p><ins>Inserted Text:</ins> This text is marked as inserted.</p>
<p><code>Code Text:</code> This text is formatted as code.</p>
<p><sub>Subscript Text:</sub> This text is subscript.</p>
<p><sup>Superscript Text:</sup> This text is superscript.</p>
</body>
</html>
```

Text Formatting Examples

Bold Text: This text is bold.

Italic Text: This text is italicized.

Underlined Text: This text is underlined.

~~Deleted Text:~~ This text is marked as deleted.

Inserted Text: This text is marked as inserted.

Code Text: This text is formatted as code.

• Subscript Text: This text is subscript.

Superscript Text: This text is superscript.

4) Write a program to highlight a text in the paragraph like below?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Text Highlighting Example</title>
</head>
<body>
  <h1>Highlighting Text Example</h1>
  <p>
    This is a sample paragraph with some text.
    <mark>This text is highlighted.</mark>
    The rest of the paragraph continues here.
  </p>
</body>
</html>
```

Highlighting Text Example

This is a sample paragraph with some text. **This text is highlighted.** The rest of the paragraph continues here.

5) Write a program to show all meta tag attributes?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta name="keywords" content="HTML, CSS, JavaScript">
```

```

<meta name="description" content="A sample webpage with meta tags">
<meta name="author" content="Your Name">
<meta http-equiv="refresh" content="30">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="robots" content="index, follow">
<meta name="theme-color" content="#007bff">

<!-- Open Graph meta tags for social media -->
<meta property="og:title" content="Your Website Title">
<meta property="og:description" content="Description for social media">
<meta property="og:image" content="url-to-your-image.jpg">
<meta property="og:url" content="https://www.yourwebsite.com">

<title>Meta Tag Attributes Example</title>
</head>
<body>
  <h1>Your Web Content Goes Here</h1>
  <p>This is a sample webpage with various meta tags.</p>
</body>
</html>

```

Your Web Content Goes Here

This is a sample webpage with various meta tags.

6) Write a program to highlight the text in the paragraph using bold,italic and underline tag?

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Text Highlighting Example</title>
</head>
<body>
  <h1>Highlighting Text Example</h1>
  <p>
    This is a sample paragraph with some <b>bold</b>, <i>italic</i>, and <u>underlined</u>
    text.
    You can combine these styles to achieve various text effects.
  </p>
</body>
</html>

```

Highlighting Text Example

This is a sample paragraph with some **bold**, *italic*, and underlined text. You can combine these styles to achieve various text effects.

7) Write a program to highlight the paragraph text using inserted,deleted and stricken?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Text Highlight Example</title>
</head>
<body>
  <p><ins>Inserted</ins>, <del>Deleted</del>, <s>Strikethrough</s> text in a
paragraph.</p>
</body>
</html>
```

Inserted, Deleted, Strikethrough text in a paragraph.

8) Write a program to highlight the paragraph text using superscript and subscript?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Superscript and Subscript Example</title>
</head>
<body>
  <p>This text contains <sup>superscript</sup> and <sub>subscript</sub> elements.</p>
</body>
</html>
```

This text contains ^{superscript} and _{subscript} elements.

9) Write a program to link external css and external js files into the web page?

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

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<link rel="stylesheet" href="styles.css">
<script src="script.js" defer></script>
<title>External Files Example</title>
</head>
<body>
  <p> Hello everyone </p>
</body>
</html>
```

Hello everyone

10) Write a program to include internal css and internal js into the web page?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <style>
    /* Internal CSS styles go here */
    body {
      background-color: red;
    }
  </style>
  <script>
    // Internal JS script goes here
    console.log('Internal JS script');
  </script>
  <title>Internal Files Example</title>
</head>
<body>
  <h1>Content goes here</h1>
</body>
</html>
```

Content goes here

Day 2 Assignments

1) Write a program that displays the following output?

- a) HTML
- b) CSS
- c) JS

Program:

```
<!DOCTYPE html>
<html>
<head>
  <title>Web Technologies</title>
</head>
<body>
  <ul>
    <li>HTML</li>
    <li>CSS</li>
    <li>JS</li>
  </ul>
</body>
</html>
```

- HTML
- CSS
- JS

2) Write a program that displays the following output?

- a) Bootstrap
- b) Ajax
- c) Json
- d) ReactJS

Program:

```
<!DOCTYPE html>
<html>
<head>
  <title>Web Technologies</title>
</head>
<body>
  <ul>
    <li>Bootstrap</li>
    <li>Ajax</li>
    <li>Json</li>
    <li>ReactJS</li>
  </ul>
```

```
</body>
</html>
```

- Bootstrap
- Ajax
- Json
- ReactJS

3) Write a program that displays the following output?

- item 1
- item 2
 - sub-item 2.1
 - sub-item 2.2
- item 3

Program:

```
<!DOCTYPE html>
<html>
<head>
  <title>Web Technologies</title>
</head>
<body>
  <ul>
    <li>item 1</li>
    <li>item 2</li>
    <ul shape="empty-circle">
      <li>Sub-item2.1</li>
      <li>Sub-item2.2</li>
    </ul>
    <li>item 3</li>
  </ul>
</body>
</html>
```

4) write a program to explain the single and multi line comments in html?

Program:

```
<!DOCTYPE html>
<html>
<head>
  <title>Comments in HTML</title>
</head>
<body>
  <!-- This is a single-line comment -->

  <!--
    This is a
    multi-line comment
  -->
```



```
-->
</body>
</html>
```

5) Write a program that displays the following output?

row 1 col 1	row 1 col 2	row 1 col 3
This second row spans all three columns		
This cell spans two rows	row 3 col 2	row 3 col 3
	row 4 col 2	row 4 col 3

Program:

```
<html>
  <head>
    <title>Table</title>
    <style>
      table{
        margin: 0 ;

      }
      table,th,td {
        border-collapse: collapse;
      }
    </style>
  </head>
  <body>
    <table border="1">
      <tr>
        <td>row 1 col 1</td>
        <td>row 1 col 2</td>
        <td>row 1 col 3</td>
      </tr>
      <tr>
        <td colspan="3">This second row spans all three columns</td>
      </tr>
      <tr>
        <td rowspan="2">This cell spans two rows</td>
        <td>row 3 col 2</td>
        <td>row 3 col 3</td>
      </tr>
      <tr>
        <td>row 4 col 2</td>
        <td>row 4 col 3</td>
      </tr>

    </table>
  </body>
```

```
</html>
```

6) Write a program to design semantic web page layout?

Program:

```
<!DOCTYPE html>
<html>
<head>
  <title>Semantic Layout</title>
</head>
<body>
  <header>
    <h1>Main Title</h1>
  </header>

  <nav>
    <ul>
      <li>Home</li>
      <li>About</li>
      <li>Contact</li>
    </ul>
  </nav>

  <section>
    <article>
      <h2>Article Title</h2>
      <p>Article content goes here.</p>
    </article>

    <article>
      <h2>Another Article</h2>
      <p>More content here.</p>
    </article>
  </section>

  <footer>
    <p>&copy; 2024 Your Website</p>
  </footer>
</body>
</html>
```

Main Title

- Home
- About
- Contact

Article Title

Article content goes here.

Another Article

More content here.

© 2024 Your Website

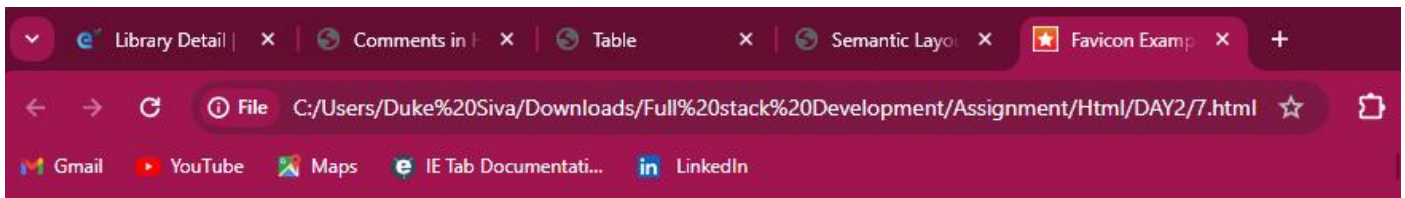
7) Write a program to load **'favicons'** into a web page?

Program:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Favicon Example</title>

  <!-- Add your favicon file (favicon.ico) to the same directory as this HTML file -->
  <link rel="icon" href="C:\Users\Duke Siva\Downloads\Full stack
Development\Assignment\Html\DAY3\assets\favicon image.jpeg" type="image/x-icon">
</head>
<body>

  <h1>Welcome to My Website</h1>
  <p>This is a simple web page with a favicon.</p>
</body>
</html>
```



Welcome to My Website

This is a simple web page with a favicon.

8) Write a program to explain the use of 'div' tag?

```
<!DOCTYPE html>
<html>
<head>
  <title>Div Tag Example</title>
  <style>
    .container {
      width: 80%;
      margin: 0 auto;
      background-color: #14c92c;
      padding: 20px;
    }
  </style>
</head>
<body>
  <div class="container">
    <h1>Main Content</h1>
    <p>This is a simple example using the div tag for layout.</p>
  </div>
</body>
</html>
```

Main Content

This is a simple example using the div tag for layout.

9) Write a program to show non semantic tags?

Program:

```
<!DOCTYPE html>
<html>
<head>
  <title>Non-Semantic Tags</title>
</head>
<body>
  <div>Hi hello</div></body><br>
  <span>I am Manjula</span><br>
  <i>My Wishes</i><br>
  <b>love</b><br>
  <font color="red">This is a non-semantic font tag.</font>
  <center>This is a non-semantic center tag.</center>
  <br>
  <u>This is a non-semantic underline tag.</u>
</body>
</html>
```

Hi hello

I am Manjula

My Wishes

love

This is a non-semantic font tag.

This is a non-semantic center tag.

This is a non-semantic underline tag.

10) Write a program to display inline, block and inline-block elements?

Program:

```
<!DOCTYPE html>
<html>
<head>
  <title>Display Property Example</title>
  <style>
    .inline {
      display: inline;
      border: 1px solid red;
      margin: 5px;
      padding: 5px;
    }
  </style>

```

```

.block {
  display: block;
  border: 1px solid green;
  margin: 5px;
  padding: 5px;
}
.inline-block {
  display: inline-block;
  border: 1px solid blue;
  margin: 5px;
  padding: 5px;
}
</style>
</head>
<body>
  <span class="inline">Inline</span>
  <div class="block">Block</div>
  <div class="inline-block">Inline-Block</div>
</body>
</html>

```

Inline

Block

Inline-Block

11) Write a program to explain about the 'void' elements such as

- a) Area
- b) Base
- c) Br
- d) Hr
- e) Img
- f) Input
- g) Link
- h) Meta
- i) Param
- j) Command
- k) Keygen
- l) Command
- m) Source

Program:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Void Elements Example</title>
</head>
<body>
  <!-- a) Area -->
  <area shape="rect" coords="34,44,270,350" alt="Clickable Area">
  <!-- b) Base -->
  <base href="https://www.example.com/">
  <!-- c) Br -->
  <p>This is some text.<br>Text on a new line after a line break.</p>
  <!-- d) Hr -->
  <hr>
  <!-- e) Img -->
  
  <!-- f) Input -->
  <input type="text" placeholder="Enter text">
  <!-- g) Link -->
  <link rel="stylesheet" href="styles.css">
  <!-- h) Meta -->
  <meta name="description" content="Web page description">
  <!-- i) Param -->
  <param name="autoplay" value="true">
  <!-- j) Command -->
  <command type="command" label="Save" icon="save.png" onclick="saveFunction()">
  <!-- k) Keygen -->
  <keygen name="user_key">
  <!-- l) Source -->
  <source src="video.mp4" type="video/mp4">
</body>
</html>
```

Day 3 Assignments

1) Write a program that includes all the form input control element such as

- a) Class
- b) Id
- c) Type
- d) Name
- e) Disabled
- f) Checked
- g) Multiple
- h) Placeholder
- i) Autocomplete
- j) Readonly
- k) Required
- l) Autofocus
- m) Value
- n) Step

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>All Form Input Elements</title>
</head>
<body>

  <form action="/submit" method="post">
    <!-- Class -->
    <label for="username">Username:</label>
    <input type="text" id="username" class="inputClass" name="username"><br>
    <!-- ID -->
    <label for="password">Password:</label>
    <input type="password" id="password" name="password"><br>
    <!-- Type -->
    <label for="email">Email:</label>
    <input type="email" id="email" name="email"><br>
    <!-- Name -->
    <label for="gender">Gender:</label><br>
    <input type="radio" id="male" name="gender" value="male"> Male<br>
    <input type="radio" id="female" name="gender" value="female"> Female<br>
    <!-- Disabled -->
    <label for="disabledInput">Disabled Input:</label><br>
    <input type="text" id="disabledInput" name="disabledInput" disabled>
    <!-- Checked -->
    <label for="checkMe">Check Me:</label><br>
    <input type="checkbox" id="checkMe" name="checkMe" checked>
    <!-- Multiple -->
    <label for="cars">Select Cars:</label><br>
    <select id="cars" name="cars" multiple>
```



```
<option value="volvo">Volvo</option><br>
<option value="saab">Saab</option><br>
<option value="mercedes">Mercedes</option><br>
<option value="audi">Audi</option><br>
</select>
<!-- Placeholder -->
<label for="placeholderInput">Placeholder Input:</label><br>
<input type="text" id="placeholderInput" name="placeholderInput" placeholder="Enter
text">
<!-- Autocomplete -->
<label for="autocompleteInput">Autocomplete Input:</label><br>
<input type="text" id="autocompleteInput" name="autocompleteInput" autocomplete="on">
<!-- Readonly -->
<label for="readonlyInput">Readonly Input:</label><br>
<input type="text" id="readonlyInput" name="readonlyInput" readonly>
<!-- Required -->
<label for="requiredInput">Required Input:</label><br>
<input type="text" id="requiredInput" name="requiredInput" required>
<!-- Autofocus -->
<label for="autofocusInput">Autofocus Input:</label><br>
<input type="text" id="autofocusInput" name="autofocusInput" autofocus>
<!-- Value -->
<label for="valueInput">Value Input:</label><br>
<input type="text" id="valueInput" name="valueInput" value="Default Value">
<!-- Step -->
<label for="stepInput">Step Input:</label><br>
<input type="number" id="stepInput" name="stepInput" step="5">
<input type="submit" value="Submit"><br>
</form>
</body>
</html>
```

Username:

Password:

Email:

Gender:

☐ Male

☐ Female

Disabled Input:

☒ Check Me:

☒ Select Cars:

Volvo
Saab
Mercedes
Audi

Placeholder Input:

Autocomplete Input:

Readonly Input:

Required Input:

Autofocus Input:

Value Input:

Step Input:

2) Write a program to explain 'fieldset' and 'legend'?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Fieldset and Legend Example</title>
</head>
<body>
  <form action="/submit" method="post">
    <fieldset>
      <legend>Contact Information</legend>
      <label for="fname">First Name:</label>
      <input type="text" id="fname" name="fname">
      <label for="lname">Last Name:</label>
      <input type="text" id="lname" name="lname">
      <label for="email">Email:</label>
      <input type="email" id="email" name="email">
    </fieldset>
    <input type="submit" value="Submit">
  </form>
</body>
</html>
```

Contact Information

First Name:

Last Name:

Email:

Submit

3) Write a program to validate the input field using 'minlength' and 'maxlength' attribute?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Input Validation Example</title>
</head>
<body>
  <form action="/submit" method="post">
    <label for="username">Username:</label>
    <input type="text" id="username" name="username" minlength="5" maxlength="10"
required>
    <input type="submit" value="Submit">
  </form>
</body>
</html>
```

Username:

4) Write a program to upload a file from local computer?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>File Upload Example</title>
</head>
<body>
  <form action="/upload" method="post" enctype="multipart/form-data">
    <label for="file">Select File:</label>
    <input type="file" id="file" name="file" accept=".pdf, .doc, .docx">
    <input type="submit" value="Upload">
  </form>
</body>
</html>
```

Select File: No file chosen

5) Write a program to differentiate between 'submit' and 'button'?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Submit vs Button Differentiation</title>
</head>
<body>

  <form id="myForm">
    <label for="username">Username:</label>
    <input type="text" id="username" name="username" required>
    <br>
    <!-- Submit Button -->
    <input type="submit" value="Submit" onclick="identifyElement(event)">
    <br>
    <!-- Regular Button -->
    <button type="button" onclick="identifyElement(event)">Click me (Button)</button>
  </form>

</body>
</html>
```

Username:

6) Write a program that includes the following html5 input elements such as


- Email
- Number
- Range
- Search
- Image
- Week
- Url
- Month
- Datetime-local
- Time
- Date


```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>HTML5 Input Elements Example</title>
</head>
<body>
  <form action="/submit" method="post">
    <label for="email">Email:</label>
    <input type="email" id="email" name="email" required>
    <label for="quantity">Quantity:</label>
    <input type="number" id="quantity" name="quantity" min="1" max="10" step="1"
value="5">
    <label for="range">Range:</label>
    <input type="range" id="range" name="range" min="0" max="100" value="50">
    <label for="search">Search:</label>
    <input type="search" id="search" name="search">
    <input type="image" src="submit.png" alt="Submit">
    <label for="week">Select a week:</label>
    <input type="week" id="week" name="week">
    <label for="url">Website URL:</label>
    <input type="url" id="url" name="url">
    <label for="month">Select a month:</label>
    <input type="month" id="month" name="month">
    <label for="datetime">Select a date and time:</label>
    <input type="datetime-local" id="datetime" name="datetime">
    <label for="time">Select a time:</label>
    <input type="time" id="time" name="time">
    <label for="date">Select a date:</label>
    <input type="date" id="date" name="date">
    <input type="submit" value="Submit">
  </form>
</body>
</html>
```

Email:


Quantity:


Range:


Search:  Submit


Select a week: 

Website URL:

Select a month: 

Select a date and time: 

Select a time: 

Select a date: 

7) Explain the difference between the method 'get' and 'post' with an example?

```

!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>GET vs POST Example</title>
</head>
<body>
  <form action="/submit" method="get">
    <!-- Form elements go here -->
    <input type="submit" value="Submit">
  </form>
  <form action="/submit" method="post">
    <!-- Form elements go here -->
    <input type="submit" value="Submit">
  </form>
</body>
</html>

```

Submit

Submit

8) Write a program to create a student form in HTML?

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Student Form</title>

```

```

</head>
<body>
  <form action="/submit" method="post">
    <label for="studentName">Student Name:</label><br>
    <input type="text" id="studentName" name="studentName" required>
    <label for="rollNumber">Roll Number:</label><br>
    <input type="text" id="rollNumber" name="rollNumber" required>
    <label for="department">Department:</label><br>
    <select id="department" name="department">
      <option value="CSE">Computer Science</option>
      <option value="ECE">Electronics and Communication</option>
      <option value="ME">Mechanical Engineering</option>
    </select>
    <label for="grade">Grade:</label><br>
    <input type="text" id="grade" name="grade" required>
    <input type="submit" value="Submit">
  </form>
</body>
</html>

```

Student Name:
 Roll Number:
 Department: Grade:

9) Write a program to display the progress bar?

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Progress Bar Example</title>
</head>
<body>
  <h2>Uploading...</h2>
  <progress value="50" max="100"></progress>
</body>
</html>

```

Uploading..!



10) Write a program that can allow user to select multiple elements from the dropdown?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Multiple Selection Dropdown Example</title>
</head>
<body>
  <form action="/submit" method="post">
    <label for="fruits">Select Fruits (multiple):</label>
    <select id="fruits" name="fruits[]" multiple>
      <option value="apple">Apple</option>
      <option value="banana">Banana</option>
      <option value="orange">Orange</option>
      <option value="grape">Grape</option>
      <option value="strawberry">Strawberry</option>
    </select>
    <input type="submit" value="Submit">
  </form>
</body>
</html>
```

Select Fruits (multiple):

Apple	▲
Banana	
Orange	
Grape	▼

11) Write a program to explain about 'datalist' tag and their usage?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Datalist Example</title>
</head>
<body>
  <form action="/submit" method="post">
    <!-- Input element with datalist -->
    <label for="browser">Choose a Browser:</label>
    <input list="browsers" id="browser" name="browser" autocomplete="off">
    <!-- Datalist with predefined options -->
    <datalist id="browsers">
      <option value="Chrome">
      <option value="Firefox">
      <option value="Safari">
      <option value="Edge">
      <option value="Opera">
    </datalist>
    <input type="submit" value="Submit">
  </form>
</body>
</html>
```

Choose a Browser:

- Chrome
- Firefox
- Safari
- Edge
- Opera

1) Write a program to link to **excelr.com** site in a new tab?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Link to excelr.com</title>
</head>
<body>
  <p>ExcelR Home page</p>
  <a href="https://www.excelr.com" target="_blank">Visit ExcelR</a>
</body>
</html>
```

ExcelR Home page

[Visit ExcelR](https://www.excelr.com)

2) Write a program to open a link while click on **excler** logo image?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Open Link on Image Click</title>
</head>
<body>
  <h1>ExcelR Logo</h1>
  <a href="https://www.excelr.com" target="_blank">
    
  </a>
</body>
</html>
```

ExcelR Logo



3) Write a program to Link to a page on the same site?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Link to Another Page</title>
</head>
<body>
  <a href="another_page.html">Go to Another Page</a>
</body>
</html>
```

[Go to Another Page](#)

4) Write a program that Link that dials a number?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Link to Dial a Number</title>
</head>
<body>

  <a href="tel:+123456789">Call Us: +1 (234) 567-89</a>
</body>
</html>
```

[Call Us: +1 \(234\) 567-89](tel:+123456789)

5) Write a program that links to an email client?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Link to Email</title>
</head>
<body>

  <a href="mailto:info@example.com">Email Us</a>
</body>
```

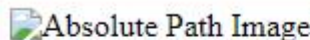
```
</body>
</html>
```

[Email Us](#)

6) Write a program to load the images into a web page using absolute path and relative path?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Image Loading Example</title>
</head>
<body>

  <!-- Absolute Path -->
  
  <!-- Relative Path -->
  
</body>
</html>
```

7) Explain the use of 'alt' attributes in image loading and their benefits?

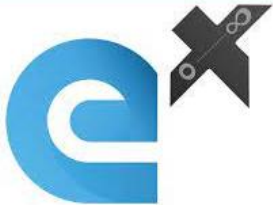
```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Image with Alt Attribute</title>
</head>
<body>

  <!-- Image with Alt Attribute -->
  
  <h1>Benefits of 'alt' attribute:</h1>
  <h2>Accessibility:</h2>
  <p>The primary purpose of the alt attribute is to enhance web accessibility<br> .
  If the image fails to load, the alternative text provides context to users about
the content or function of the image.
  </p>
```

```

<h2>Screen Readers:</h2>
  <p>Screen readers read aloud the content of the alt attribute, allowing visually
impaired users to understand the meaning of the image.</p> Users who rely on screen
readers to navigate the web will benefit from descriptive alternative text.<br>
  <h2> SEO (Search Engine Optimization):</h2>
<p>Search engines use the alt attribute to understand the content of images.<br>
  Providing meaningful an relevant alternative text can contribute to better SEO by
making your content more understandable for search engine algorithms.</p>
</p>
</body>
</html>

```



Benefits of 'alt' attribute:

Accessibility:

The primary purpose of the alt attribute is to enhance web accessibility.
 . If the image fails to load, the alternative text provides context to users about the content or function of the image.

Screen Readers:

Screen readers read aloud the content of the alt attribute, allowing visually impaired users to understand the meaning of the image.
 Users who rely on screen readers to navigate the web will benefit from descriptive alternative text.

SEO (Search Engine Optimization):

Search engines use the alt attribute to understand the content of images.
 Providing meaningful an relevant alternative text can contribute to better SEO by making your content more understandable for search engine algorithms.

8) Write a program to load responsive image using picture element?

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Responsive Image Example</title>
</head>
<body>

  <picture>
    <source srcset="image-large.jpg" media="(min-width: 800px)">
    <source srcset="image-small.jpg" media="(max-width: 799px)">
    
  </picture>
</body>
</html>

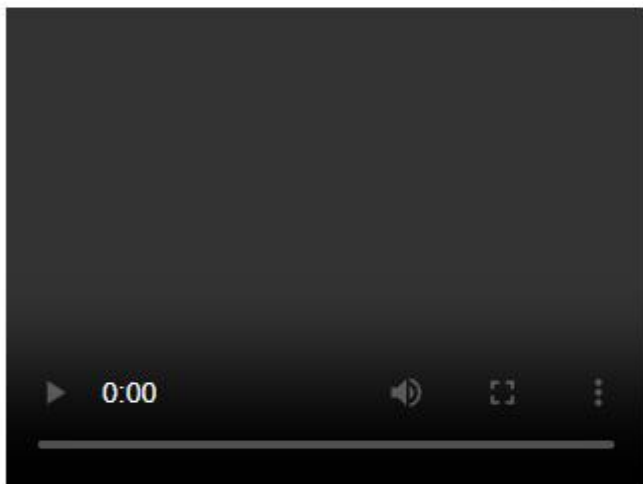
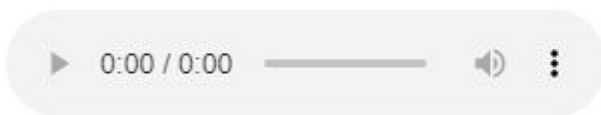
```

9) Write a program to load multimedia content into a webpage?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Multimedia Content Example</title>
</head>
<body>

  <h2>HTML5 Audio and Video</h2>
  <!-- Audio -->
  <audio controls>
    <source src="audio.mp3" type="audio/mp3">
    Your browser does not support the audio tag.
  </audio>
  <br>
  <!-- Video -->
  <video width="320" height="240" controls>
    <source src="video.mp4" type="video/mp4">
    Your browser does not support the video tag.
  </video>
</body>
</html>
```

HTML5 Audio and Video



10) Write a program to create a video header or background?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Video Header</title>
  <style>
    body {
      margin: 0;
      overflow: hidden;
    }

    video {
      width: 100%;
      height: 100vh;
      object-fit: cover;
      position: fixed;
      top: 0;
      left: 0;
      z-index: -1;
    }

    header {
      text-align: center;
      padding: 50px;
      color: #e70914;
      font-size: 2em;
      position: relative;
      z-index: 1;
    }
  </style>
</head>
<body>
  <video autoplay loop muted>
    <source src="time_circles_-_15086 (540p).mp4" type="video/mp4">
    Your browser does not support the video tag.
  </video>
  <header>
    <h1>Your Video Header</h1>
    <p>counting.....in reverse</p>
  </header>
</body>
</html>
```

Your Video Header



11) Write a program to embed youtube videos and google maps into a web page?

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

<head>
  <meta charset="UTF-8">
  <meta name="viewport"
    content="width=device-width, initial-scale=1.0">
  <title>Adding Youtube Video</title>
</head>

<body>

  <iframe height="480" width="500"
    src="https://www.youtube.com/embed/il_t1WVLNvk">
  </iframe>

  <h2>Google Maps Embed</h2>
  <iframe
src="https://www.google.com/maps/embed?pb=!1m14!1m12!1m3!1d124379.339555223!2d80.199679999
99999!3d13.0449408!2m3!1f0!2f0!3f0!3m2!1i1024!2i768!4f13.1!5e0!3m2!1sen!2sin!4v17060816533
34!5m2!1sen!2sin" width="600" height="450" style="border:0;" allowfullscreen=""
loading="lazy" referrerpolicy="no-referrer-when-downgrade"></iframe>

</body>

</html>
```




Google Maps Embed



12) Differentiate between 'embed' and 'iframe' tag?

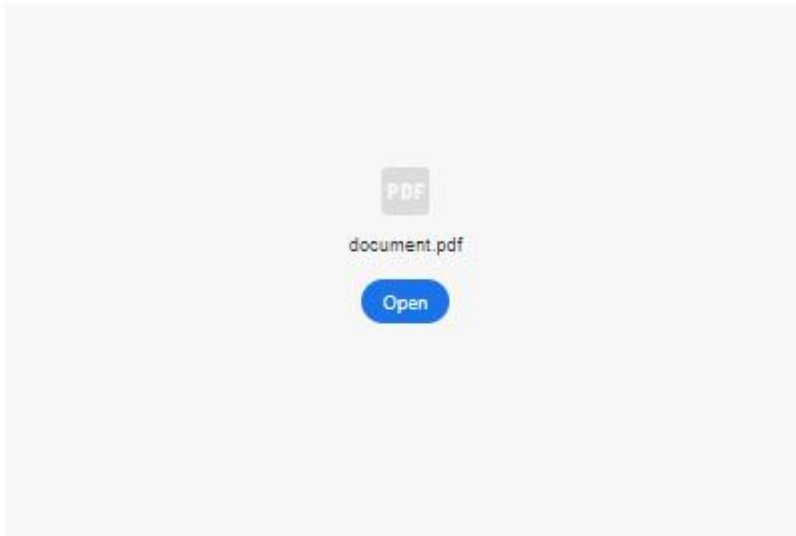
```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Embed vs Iframe Example</title>
</head>
<body>
```

```

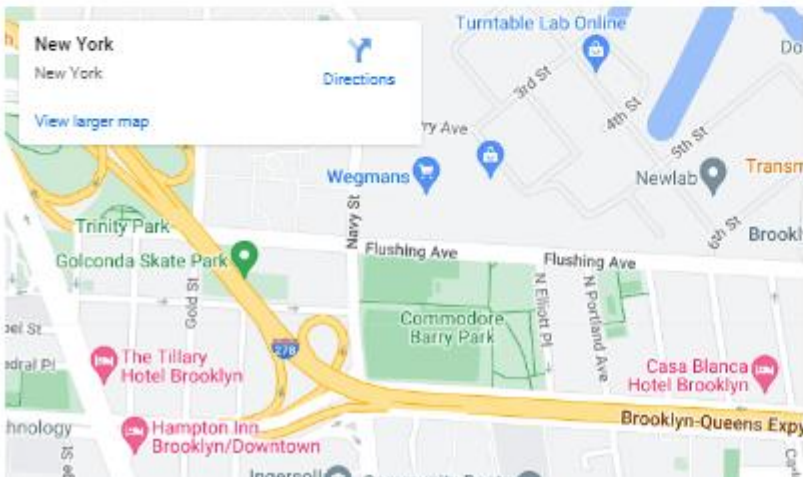
<h2>Embed Tag Example</h2>
<!-- Embedding a PDF file using the embed tag -->
<embed src="document.pdf" width="600" height="400" type="application/pdf">
<h2>Iframe Tag Example</h2>
<!-- Embedding a Google Map using the iframe tag -->
<iframe src="https://www.google.com/maps/embed?pb=!1m18!1m12!1m3!1d3056.911980156416!2d-74.00594148428106!3d40.71277654208969!2m3!1f0!2f0!3f0!3m2!1i1024!2i768!4f13.1!3m3!1m2!1s0x89c25902ca0d1b45%3A0x32efba5e995254f!2sNew%20York%2C%20NY!5e0!3m2!1sen!2sus!4v1620793600102!5m2!1sen!2sus" width="600" height="450" style="border:0;" allowfullscreen="" loading="lazy"></iframe>
</body>
</html>

```

Embed Tag Example



Iframe Tag Example



13) How to create Audio tag in Html?

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Audio Tag Example</title>

```

```

</head>
<body>

  <audio controls>
    <source src="audio.mp3" type="audio/mp3">
    Your browser does not support the audio tag.
  </audio>
</body>
</html>

```



14) What are several HTML5 Web APIs?

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>HTML5 Web APIs</title>
</head>
<body>

  <h2>HTML5 Web APIs</h2>
  <ul>
    <li><a href="https://developer.mozilla.org/en-US/docs/Web/API/Geolocation_API"
target="_blank">Geolocation API</a></li>
    <li><a href="https://developer.mozilla.org/en-US/docs/Web/API/Canvas_API"
target="_blank">Canvas API</a></li>
    <li><a href="https://developer.mozilla.org/en-US/docs/Web/API/Web_Storage_API"
target="_blank">Web Storage API</a></li>
    <li><a href="https://developer.mozilla.org/en-US/docs/Web/API/Web_Workers_API"
target="_blank">Web Workers API</a></li>
    <li><a href="https://developer.mozilla.org/en-US/docs/Web/API/Web_Audio_API"
target="_blank">Web Audio API</a></li>
    <li><a href="https://developer.mozilla.org/en-US/docs/Web/API/File_API"
target="_blank">File API</a></li>
    <li><a href="https://developer.mozilla.org/en-US/docs/Web/API/IndexedDB_API"
target="_blank">IndexedDB API</a></li>
    <li><a href="https://developer.mozilla.org/en-US/docs/Web/API/Drag_and_Drop_API"
target="_blank">Drag and Drop API</a></li>
  </ul>
</body>
</html>

```

HTML5 Web APIs

- [Geolocation API](#)
- [Canvas API](#)
- [Web Storage API](#)
- [Web Workers API](#)
- [Web Audio API](#)
- [File API](#)
- [IndexedDB API](#)
- [Drag and Drop API](#)

15) Types of storage in HTML?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Types of Storage in HTML</title>
</head>
<body>

  <h2>LocalStorage Example</h2>
  <button onclick="storeDataLocally()">Store Data Locally</button>
  <p id="localStorageData"></p>
  <h2>SessionStorage Example</h2>
  <button onclick="storeDataSession()">Store Data Session</button>
  <p id="sessionStorageData"></p>
  <h2>Cookies Example</h2>
  <button onclick="storeDataInCookie()">Store Data in Cookie</button>
  <p id="cookieData"></p>
</body>
</html>
```

LocalStorage Example

Store Data Locally

SessionStorage Example

Store Data Session

Cookies Example

Store Data in Cookie

16) Write a program to create Drag and Drop using HTML and JavaScript?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Drag and Drop Example</title>
  <style>
    #dragElement {
      width: 100px;
      height: 100px;
      background-color: #4CAF50;
      color: white;
      text-align: center;
      line-height: 100px;
      cursor: move;
    }
  </style>
</head>
<body>

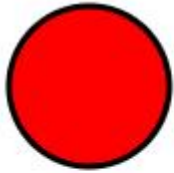
  <div id="dragElement" draggable="true" ondragstart="drag(event)">Drag Me</div>
  <div id="dropTarget" ondrop="drop(event)" ondragover="allowDrop(event)">Drop Here</div>
</body>
</html>
```



17) Write a program to create 'SVG' inline graphics?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>SVG Inline Graphics Example</title>
</head>
<body>

  <svg width="100" height="100">
    <circle cx="50" cy="50" r="40" stroke="black" stroke-width="3" fill="red" />
  </svg>
</body>
</html>
```



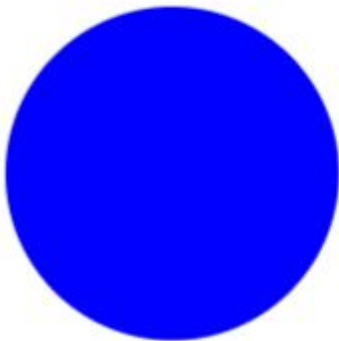
18) Write a program to embed external SVG file in to html?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Embed External SVG</title>
</head>
<body>

  <!-- Embed External SVG using <object> -->
  <h2>Embedded SVG using <object></h2>
  <object type="image/svg+xml" data="external.svg" width="200" height="200">
    Your browser does not support SVG.
  </object>
</body>
</html>
```

```
<!-- external.svg -->
<svg xmlns="http://www.w3.org/2000/svg" viewBox="0 0 24 24" width="24" height="24">
  <circle cx="12" cy="12" r="10" fill="blue"/>
</svg>
```

Embedded SVG using <object>



19) Write a program to create a 'Canvas' graphics?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Canvas Graphics</title>
</head>
<body>

  <h1>Canvas Graphics</h1>
  <canvas id="myCanvas" width="400" height="200" style="border:1px solid
#000;"></canvas>
  <script>
    // Get the canvas element
    var canvas = document.getElementById("myCanvas");
    if (canvas.getContext) {
      // Get the 2D rendering context
      var ctx = canvas.getContext("2d");
      // Draw a filled rectangle
      ctx.fillStyle = "green";
      ctx.fillRect(50, 50, 200, 100);
      // Draw a stroked circle
      ctx.beginPath();
      ctx.arc(300, 100, 30, 0, 2 * Math.PI, false);
      ctx.strokeStyle = "blue";
      ctx.lineWidth = 2;
      ctx.stroke();
    }
  </script>
</body>
</html>
```

20) How to give information about the web page to the search engines?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Your Page Title</title>
  <meta name="description" content="Description of your webpage">
  <meta name="keywords" content="keyword1, keyword2, keyword3">
  <link rel="canonical" href="https://www.example.com/your-page">
  <meta name="robots" content="index, follow">
</head>
<body>
  <h1>Hi, Manjula</h1>
</body>
</html>
```

21) Write a program to redirect automatically after 5 seconds into another website?

```
<<!DOCTYPE html>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="refresh" content="5;url=https://www.newwebsite.com">
  <title>Redirecting...</title>
</head>
<body>
  <h1>Redirecting to Another Website</h1>
  <a href="https://www.example.com">click here</a>
  <p>This page will redirect to another website in 5 seconds...</p>
</body>
</html>
```

Redirecting to Another Website

[click here](#)

This page will redirect to another website in 5 seconds...

22) How to load special characters into web page such

- a) Dollar
- b) Pound
- c) Rupee
- d) Ampersand
- e) Copyright
- f) Etc..

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Special Characters</title>
</head>
<body>

  <h1>Special Characters</h1>
  <p>a) Dollar: $10.99</p>
  <p>b) Pound: £50.00</p>
  <p>c) Rupee: ₹200.00</p>
  <p>d) Ampersand: This is an & symbol</p>
  <p>e) Copyright: &copy; 2024</p>
  <p>f) Etc.: &hellip; (ellipsis)</p>
</body>
</html>
```

Special Characters

- a) Dollar: \$10.99
- b) Pound: £50.00
- c) Rupee: ₹200.00
- d) Ampersand: This is an & symbol
- e) Copyright: © 2024
- f) Etc.: ... (ellipsis)