Lab Report-01

Web Engineering Lab

Course Code: CSE416

Instructor: Nishat Sadaf Lira

Name	Mehedi Hasan Saim
ID	221-15-4844
Section	61-J1
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Tag 1: \<html\>

Description: Root element of an HTML document.
Common Attributes: lang
Code Snippet:

```html
<html lang="en"></html>
```

Output: Defines the start and end of an HTML document.
Influence: Serves as the container for all HTML content.

Tag 2: \<head\>

Description: Contains meta-information about the HTML document.
Common Attributes: None
Code Snippet:

```html
<head><title>My Page</title></head>
```

Output: Doesn't appear visually; used for metadata.
Influence: Helps browsers and search engines understand the page.

Tag 3: \<title\>

Description: Sets the title of the HTML document (browser tab).
Common Attributes: None
Code Snippet:

```html
<title>My Website</title>
```

Output: Shows "My Website" on the browser tab.

Influence: Improves SEO and user experience.

Tag 4: <body>

Description: Contains the visible contents of the webpage.
Common Attributes: bgcolor, background, style
Code Snippet:

```html
<body style="background-color: lightblue;"></body>
```

Output: Applies background color to the whole page.
Influence: Everything the user sees is inside <body>.

Tag 5: <h1>

Description: Defines the largest heading.
Common Attributes: id, class, style
Code Snippet:

```html
<h1>Welcome to My Website</h1>
```

Output: Big bold "**Welcome**" heading

Welcome to My Website

Influence: Marks the main heading of the page, improves structure.

Tag 6: <h2>

Description: Sub-heading, smaller than <h1>.
Code Snippet:

```html
<h2>Introduction</h2>
```

Output: Medium-size "**Introduction**" heading

Introduction

Influence: Organizes content hierarchically.

Tag 7: <p>

Description: Defines a paragraph.
Code Snippet:

```
<p>This is a paragraph to demonstrate basic HTML structure.</p>
```

Output: Displays the text in block format

```
This is a paragraph to demonstrate basic HTML structure.
```

Influence: Adds readable text sections.

Tag 8: <a>

Description: Defines a hyperlink.
Common Attributes: href, target, title
Code Snippet:

```
<a href="https://example.com" target="_blank">Visit Example.com</a>
```

Output: Clickable link

```
Visit Example.com
```

Influence: Allows navigation between pages.

Tag 9: <img>

Description: Embeds an image.
Common Attributes: src, alt, width, height
Code Snippet:

```
<img src="https://via.placeholder.com/150" alt="Placeholder Image">
```

Output: Displays the image

```
Placeholder Image
```

Influence: Adds visuals to the webpage.

Tag 10:

Description: Inserts a line break.
Code Snippet:

```
Hello<br>World
```

Output:
Hello
World
Influence: Helps in line formatting.

Tag 11: <hr>

Description: Inserts a horizontal line.
Code Snippet:

```
<hr>
```

Output: A horizontal rule
Influence: Visually separates content.

Tag 12: <div>

Description: Container for block-level content.
Code Snippet:

```
<div style="color:red;">Red Text</div>
```

Output: "Red Text" in red color

Red Text

Influence: Helps in layout and styling.

Tag 13: <span>

Description: Inline container for styling.
Code Snippet:

```
<span style="color:🟦 blue;">Blue</span>
```

Output: "Blue" in blue color
Influence: Applies styles without breaking lines.

Tag 14:

Description: Unordered list
Code Snippet:

```
<ul>
    <li>Unordered Item 1</li>
    <li>Unordered Item 2</li>
</ul>
```

Output:

- Unordered Item 1
- Unordered Item 2

Influence: Used for lists with no order.

Tag 15:

Description: Ordered list
Code Snippet:

```
<ol>
    <li>Ordered Item 1</li>
    <li>Ordered Item 2</li>
</ol>
```

Output: Numbered list

1. Ordered Item 1
2. Ordered Item 2

Influence: Helpful in instructions/steps.

Tag 16:

Description: List item
Code Snippet:

```html
<li>Item</li>
```

Output: Item in a list
Influence: Makes up list content.

Tag 17: <form>

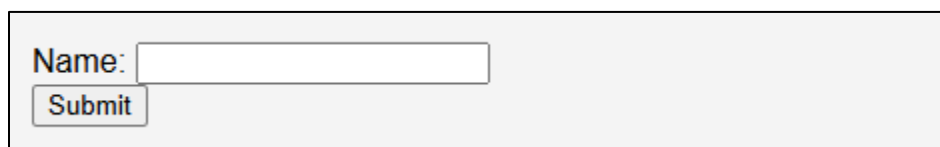**Description**: Creates a form
Attributes: action, method
Code Snippet:

```html
<form action="#" method="post">
    <label for="name">Name:</label>
    <input type="text" id="name" name="name">
    <br>
    <button type="submit">Submit</button>
</form>
```

Output: Form container

Name: [   ]
[Submit]

Influence: Accepts user input.

Tag 18: <input>

Description: Input field
Attributes: type, name, value
Code Snippet:

```
<input type="text" name="username">
```

Output: Text input box
Influence: Allows user to enter data.

Tag 19: <button>

Description: Clickable button
Code Snippet:

```
<button>Submit</button>
```

Output:

Submit

Influence: Triggers actions.

Tag 20: <label>

Description: Label for input fields
Code Snippet:

```
<label for="name">Name:</label>
<input id="name" type="text">
```

Output:

Name:

Influence: Improves accessibility.

Tag 21: <table>

Description: Defines a table.
Common Attributes: border, cellpadding, cellspacing
Code Snippet:

```
<table>
    <tr>
        <th>Header 1</th>
        <th>Header 2</th>
    </tr>
    <tr>
        <td>Data 1</td>
        <td>Data 2</td>
    </tr>
</table>
```

Output: A bordered table with one cell

Header 1	Header 2
Data 1	Data 2

Influence: Organizes data in rows and columns.

Tag 22: <tr>

Description: Table row
Code Snippet:

```
<tr><td>Row 1</td></tr>
```

Output: One row in a table
Influence: Used to define each row in a table.

Tag 23: <td>

Description: Table data/cell
Code Snippet:

```
<td>Cell 1</td>
```

Output: A single table cell
Influence: Holds the actual data inside a table.

Tag 24: <th>

Description: Table header cell
Code Snippet:

```html
<th>Header 1</th>
<th>Header 2</th>
```

Output: A bold, centered table header

Header 1	Header 2

Influence: Labels columns/rows, improves readability.

Tag 25: <iframe>

Description: Embeds another webpage
Common Attributes: src, width, height
Code Snippet:

```html
<iframe src="https://example.com" width="300" height="100"></iframe><br><br>
```

Output: Shows the embedded page

Influence: Used to display external content like maps or videos.

Tag 26: <strong>

Description: Makes text bold with emphasis
Code Snippet:

```html
<strong>This is strong text.</strong>
```

Output: Bold text "Important"

> **This is strong text.**

Influence: Adds semantic importance to content.

Tag 27: <em>

Description: Emphasizes text (usually italic)
Code Snippet:

```html
<em>This is emphasized text.</em>
```

Output: Italic "Note this"

> *This is emphasized text.*

Influence: Highlights key phrases semantically.

Tag 28: <meta>

Description: Provides metadata about the document
Common Attributes: name, content, charset
Code Snippet:

```html
<meta charset="UTF-8">
```

Output:
Not visible in browser
Influence: Helps with SEO, encoding, and page behavior.

Tag 29: <link>

Description: Links external resources (like CSS)
Common Attributes: rel, href, type
Code Snippet:

```html
<link rel="stylesheet" href="styles.css">
```

Output: Not visible; applies CSS
Influence: Adds styling to the website via external files.

Tag 30: <script>

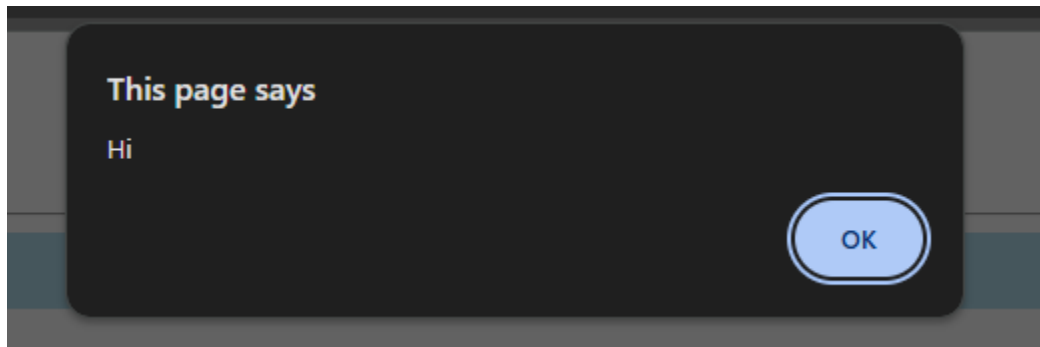**Description**: Embeds JavaScript code
Common Attributes: src, type
Code Snippet:

```
<script>
    function showAlert() {
        alert('Hi');
    }
</script>
```

Output: Popup alert saying "Hi"

Influence: Adds interactivity and dynamic behavior.