

Introduction to HTML

What is HTML?

- HTML is the standard markup language for creating Web pages.
- HTML stands for Hyper Text Markup Language.
- HTML describes the structure of Web pages using markup.
- HTML elements are the building blocks of HTML pages.
- HTML elements are represented by tags.
- HTML tags label pieces of content such as "heading", "paragraph", "table", and so on.
- Browsers do not display the HTML tags, but use them to render the content of the page.

HTML Tags

HTML tags are element names surrounded by angle brackets:

```
<tagname> content goes here... </tagname>
```

HTML tags normally come **in pairs** like <p> and </p>

- The first tag in a pair is the **start/opening tag**, the second tag is the **end/closing tag**.
- The end/closing tag is written like the start/opening tag, but with a forward slash inserted before the tag name

Example

<p> My first paragraph </p>

Start tag	Element content	End tag
<h1>	My First Heading	</h1>
<p>	My first paragraph.	</p>

HTML elements with no content are called empty elements. Empty elements do not have an end tag, such as the
 element (which indicates a line break).

Use Lowercase Tags

HTML tags are not case sensitive: <P> means the same as <p>.

Write HTML Using Visual Studio Code (VS Code)

Step 1: Download and install VS Code from the official website

Step 2: Open VS Code and click on the Extensions icon (or press Ctrl+Shift+X).

Step 3: Search for and install Live Server

Step 4: Open Visual Studio Code

Step 5: Write the HTML coding

Step 6: Right-click on index.html and select Open with Live Server.

HTML Documents

- All HTML documents must start with a document type declaration: `<!DOCTYPE html>`.
- The HTML document itself begins with `<html>` and ends with `</html>`.
- The visible part of the HTML document is between `<body>` and `</body>`.

LAB 1

Lab 1 (a) : Basic HTML Tags

1. Create a New HTML File named basic-tags.html
2. Copy the Code
3. Open in Browser

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>Basic HTML Tags</title>
</head>
<body>
  <h1>Welcome to HTML Basics</h1>
  <p>This document introduces basic HTML tags.</p>
</body>
</html>
```

Explanation of Basic Tags

`<!DOCTYPE html>`: Declares the document type and version of HTML.

`<html>`: The root element of the HTML document .

`<head>`: Contains metadata, including the character set and viewport settings.

`<title>`: Sets the title of the page, displayed in the browser tab.

`<body>`: Contains the visible content of the web page .

`<h1>`: A heading tag indicating the main title.

`<p>`: A paragraph tag for text content.

Lab 1 (b) : HTML Headings

HTML headings are defined with the <h1> to <h6> tags. <h1> defines the most important heading. <h6> defines the least important heading.

1. Create a New HTML File named headings.html
2. Copy the Code
3. Open in Browser

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>HTML Headings</title>
</head>
<body>
  <h1>Main Heading</h1>
  <h2>Subheading Level 2</h2>
  <h3>Subheading Level 3</h3>
  <h4>Subheading Level 4</h4>
  <h5>Subheading Level 5</h5>
  <h6>Subheading Level 6</h6>
</body>
</html>
```

Lab 1 (c) : HTML Paragraphs

HTML paragraphs are defined with the <p> tag.

1. Create a New HTML File named paragraphs.html
2. Copy the Code
3. Open in Browser

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>HTML Paragraphs</title>
</head>
<body>
  <h1>My Introduction</h1>
```

```
<p>Hello! My name is John Doe. I am learning HTML to build web
pages.</p>
<p>In this paragraph, I will discuss my interests.</p>
<p>I enjoy coding, reading, and exploring new
technologies.</p>
</body>
</html>
```

Lab 1 (d): HTML Combining Headings and Paragraphs

1. Create a New HTML File named profile.html
2. Copy the Code
3. Open in Browser

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>My Profile</title>
</head>
<body>
  <h1>About Me</h1>
  <p>My name is John Doe, and I am passionate about web
development.</p>

  <h2>My Hobbies</h2>
  <p>I enjoy various hobbies, including:</p>
  <ul>
    <li>Coding</li>
    <li>Reading</li>
    <li>Traveling</li>
  </ul>

  <h2>Contact Information</h2>
  <p>If you would like to contact me, please email me at <a
href="mailto:johndoe@example.com">johndoe@example.com</a>.</p>
</body>
</html>
```