

# HTML Notes

## 1. Introduction to HTML

HTML (Hypertext Markup Language) is the standard language for creating web pages. It defines the structure of a webpage and consists of a series of elements.

### Basic Structure of an HTML Document:

```
html
Copy code
<!DOCTYPE html>
<html>
<head>
  <title>Page Title</title>
</head>
<body>
  <h1>This is a heading</h1>
  <p>This is a paragraph.</p>
</body>
</html>
```

### Explanation:

- `<!DOCTYPE html>`: Defines the document type (HTML5).
- `<html>`: The root element of the HTML page.
- `<head>`: Contains meta information about the HTML document.
- `<title>`: Defines the title of the webpage.
- `<body>`: Contains the visible content of the web page.

## 2. HTML Elements and Tags

HTML elements are the building blocks of HTML. They are written with a start tag, content, and an end tag.

### Example of an HTML Element:

```
html
Copy code
<p>This is a paragraph.</p>
```

- Start tag: `<p>`
- Content: This is a paragraph.
- End tag: `</p>`

### 3. Common HTML Tags

Tag	Description	Example
<b>&lt;h1&gt; to &lt;h6&gt;</b>	Headings (h1 is the largest, h6 is the smallest)	<b>&lt;h1&gt;This is Heading 1&lt;/h1&gt;</b>
<b>&lt;p&gt;</b>	Paragraph	<b>&lt;p&gt;This is a paragraph.&lt;/p&gt;</b>
<b>&lt;a&gt;</b>	Anchor (for links)	<b>&lt;a href="https://www.example.com"&gt;Link&lt;/a&gt;</b>
<b>&lt;img&gt;</b>	Image	<b>&lt;img src="image.jpg" alt="Description"&gt;</b>
<b>&lt;ul&gt;</b>	Unordered List	<b>&lt;ul&gt;&lt;li&gt;Item 1&lt;/li&gt;&lt;li&gt;Item 2&lt;/li&gt;&lt;/ul&gt;</b>
<b>&lt;ol&gt;</b>	Ordered List	<b>&lt;ol&gt;&lt;li&gt;Item 1&lt;/li&gt;&lt;li&gt;Item 2&lt;/li&gt;&lt;/ol&gt;</b>
<b>&lt;table&gt;</b>	Table	<b>&lt;table&gt;&lt;tr&gt;&lt;td&gt;Data&lt;/td&gt;&lt;/tr&gt;&lt;/table&gt;</b>
<b>&lt;span&gt;</b>	Inline section of text	<b>&lt;span style="color: red;"&gt;Red text&lt;/span&gt;</b>
<b>&lt;form&gt;</b>	Form for user input	<b>&lt;form&gt;&lt;input type="text" name="name"&gt;&lt;/form&gt;</b>

### 5. HTML Images

Images in HTML are defined with the `<img>` tag.

#### Syntax:

```
html
Copy code

```

- `src`: Specifies the image path.
- `width` and `height`: Define the size of the image.

### 6. HTML Links

Links are created using the `<a>` tag.

#### Syntax:

```
html
Copy code
<a href="https://www.example.com" target="_blank">Click here</a>
```

- href: The URL the link points to.
- target="\_blank": Opens the link in a new tab.

## 7. HTML Forms

Forms are used to collect user input. A form element contains various input types, such as text, radio buttons, checkboxes, and submit buttons.

### Example of a Basic Form:

```
html
Copy code
<form action="/submit-form" method="post">
  <label for="name">Name:</label>
  <input type="text" id="name" name="name"><br><br>
  <input type="submit" value="Submit">
</form>
```

## 8. HTML Tables

Tables are used to organize data in rows and columns.

### Example:

```
html
Copy code
<table border="1">
  <tr>
    <th>Name</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>John</td>
    <td>25</td>
  </tr>
  <tr>
    <td>Jane</td>
    <td>30</td>
  </tr>
</table>
```

## 9. HTML Lists

There are two types of lists in HTML:

- **Ordered List** (<ol>): Displays items in a numbered list.
- **Unordered List** (<ul>): Displays items with bullet points.

### Example of an Unordered List:

```
html
```

Copy code

```
<ul>
  <li>Item 1</li>
  <li>Item 2</li>
  <li>Item 3</li>
</ul>
```

### **Example of an Ordered List:**

html  
Copy code

```
<ol>
  <li>First</li>
  <li>Second</li>
  <li>Third</li>
</ol>
```

## **10. HTML Comments**

Comments are used to explain code and are not displayed in the browser.

### **Syntax:**

html  
Copy code

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

### **Practice Questions:**

1. **Write the HTML code to create an ordered list of your three favorite books.**
2. **Create a form that asks for the user's email and password, and includes a submit button.**
3. **Design an HTML table that displays the names and ages of three friends.**
4. **Write the HTML to display an image height=300 & width= 300 .**