### What is HTML?

HTML (HyperText Markup Language) is the standard markup language used to create and design web pages. It structures content on the web using elements and tags.

### Structure of HTML

```html

<!DOCTYPE html>

<html>

<head>

<title>Page Title</title>

</head>

<body>

<h1>This is a Heading</h1>

<p>This is a paragraph.</p>

</body>

</html>

- `<!DOCTYPE html>`: Declares the document type and version (HTML5).

- `<html>`: Root element of the HTML document.

- `<head>`: Contains meta-information about the document (e.g., title, styles, scripts).

- `<body>`: Contains the visible content of the webpage.

### How to Insert an Image in HTML

Use the `<img>` tag with the `src` attribute to specify the image path and `alt` for alternative text.

```html

<img src="image.jpg" alt="Description of the image">

```

### What are Tags in HTML?

Tags are the building blocks of HTML. They define the structure and content of a webpage. Tags are enclosed in angle brackets (`< >`).

#### How Many Tags are There in HTML?

There are over 100 HTML tags, but not all are commonly used. Examples include `<h1>`, `<p>`, `<a>`, `<div>`, `<img>`, etc.

### How to Insert a Video in HTML

Use the `<video>` tag with the `src` attribute or `<source>` tag for multiple formats.

```html

<video width="320" height="240" controls>

<source src="video.mp4" type="video/mp4">

Your browser does not support the video tag.

</video>

```

### Difference Between Elements and Tags

- \*\*Tag\*\*: The opening and closing parts of an HTML element (e.g., `<p>` and `</p>`).

- \*\*Element\*\*: The entire structure, including the opening tag, content, and closing tag (e.g., `<p>This is a paragraph.</p>`).

### Do All HTML Tags Have an End Tag?

No, some tags are self-closing and do not require an end tag. Examples:

- `<img>`

- `<br>`

- `<input>`

- `<meta>`

### What is HTML5?

HTML5 is the latest version of HTML. It introduces new elements, attributes, and APIs for modern web development, such as `<header>`, `<footer>`, `<canvas>`, and support for audio/video.

### Most Commonly Used Lists in HTML

1. \*\*Ordered List (`<ol>`)\*\*:

```html

<ol>

<li>Item 1</li>

<li>Item 2</li>

</ol>

```

2. \*\*Unordered List (`<ul>`)\*\*:

```html

<ul>

<li>Item 1</li>

<li>Item 2</li>

</ul>

```

3. \*\*Definition List (`<dl>`)\*\*:

```html

<dl>

<dt>Term 1</dt>

<dd>Definition 1</dd>

</dl>

```

### What are HTML Attributes?

Attributes provide additional information about HTML elements. They are placed inside the opening tag and usually come in name/value pairs (`name="value"`). Example:

```html

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

```

Here, `href` is an attribute.

### What is Semantic HTML?

Semantic HTML uses meaningful tags to describe the content's purpose, making it easier for search engines and screen readers to understand. Examples:

- `<header>`: Represents the header of a section.

- `<footer>`: Represents the footer of a section.

- `<article>`: Represents independent content.

- `<section>`: Defines a section of the document.

### How to Use the `<iframe>` Tag in HTML

The `<iframe>` tag embeds another document within the current HTML document. Example:

```html

<iframe src="https://example.com" width="600" height="400"></iframe>

### Difference Between `<div>` and `<span>` Tags

- \*\*`<div>`\*\*: A block-level element used to group larger sections of content.

```html

<div style="background-color: lightblue;">

This is a div block.

</div>

```

- \*\*`<span>`\*\*: An inline element used to style smaller portions of text.

```html

<p>This is a <span style="color: red;">span</span> example.</p>

```

### Example Questions and Answers with Code

#### Q1: How to create a hyperlink in HTML?

```html

<a href="https://example.com">Click here</a>

```

#### Q2: How to add a background color to a paragraph?

```html

<p style="background-color: yellow;">This is a paragraph.</p>

```

#### Q3: How to create a table in HTML?

```html

<table border="1">

<tr>

<th>Name</th>

<th>Age</th>

</tr>

<tr>

<td>John</td>

<td>25</td>

</tr>

</table>

```

#### Q4: How to add a comment in HTML?

```html

<!-- This is a comment -->

```

#### Q5: How to create a form in HTML?

```html

<form action="/submit" method="post">

<label for="name">Name:</label>

<input type="text" id="name" name="name">

<input type="submit" value="Submit">

</form>

Q5. Which HTML tags are used while displaying the data in the tabular form?

Ans. The following HTML tags are used to display the data in tabular form:

1 <table> Defines a table.

2 <tr> Defines a row in a table.

3 <th> It defines a header cell in a table.

4 <td> Defines a cell in a table.

5 <caption> This tag defines the table caption.

6 <colgroup> This tag specifies a group of one or more columns in a table for formatting.

7 <col> It is used with <colgroup> element to specify column properties for each column.

8 <tbody> This tag groups the body content in a table.

9 <thead> It groups the header content in a table.

10 <tfooter> It groups the footer content in a table.

Q6. Write the basic structure of the HTML template.

Ans. The basic structure of the HTML template is:

<html>

<head>

<title>Title of the page</title>

</head>

<body>content of the page</body>

</html>