HTML TAGS

What is HTML tags?

- HTML (Hypertext Markup Language) tags are the building blocks of web pages.
- They are used to structure and format the content on a web page and provide instructions to web browsers on how to display that content.
- HTML tags are written using angle brackets ("<" and ">") and come in pairs: an opening tag and a closing tag.

Example:

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

- In this example, <p> is the opening tag, and </p> is the closing tag. The content between these tags, "This is a paragraph of text," is enclosed and treated as a paragraph by the web browser.

How many types of html tags are available?

- HTML provides a wide range of tags, each serving a specific purpose for structuring and formatting content on a web page.
- These tags can be categorized into several main groups based on their functionality.
- Here are some common categories of HTML tags along with examples:

1. **Text Formatting Tags**:
   - `<strong>`: Makes text bold.
   - `<em>`: Emphasizes text.
   - `<u>`: Underlines text.
   - `<del>`: Represents deleted text.
   - `<ins>`: Represents inserted text.
   - `<sub>`: Subscript text.
   - `<sup>`: Superscript text.
2. **Headings**:
   - `<h1>`, `<h2>`, `<h3>`, `<h4>`, `<h5>`, `<h6>`: Headings of varying levels.
3. **Paragraph and Text Tags**:
   - `<p>`: Defines a paragraph.
   - `<br>`: Inserts a line break.
   - `<hr>`: Inserts a horizontal rule.
4. **Lists**:
   - `<ul>`: Defines an unordered (bulleted) list.
   - `<ol>`: Defines an ordered (numbered) list.
   - `<li>`: Defines a list item.
5. **Links**:
   - `<a>`: Creates hyperlinks.
   - `<link>`: Specifies external resources like stylesheets.

6. **Images**:
   - `<img>`: Embeds images.
7. **Tables**:
   - `<table>`: Defines a table.
   - `<tr>`: Defines a table row.
   - `<td>`: Defines a table data cell.
   - `<th>`: Defines a table header cell.
   - `<caption>`: Adds a table caption.
8. **Forms**:
   - `<form>`: Creates a form.
   - `<input>`: Defines an input field.
   - `<textarea>`: Defines a multiline text input.
   - `<select>`: Creates a dropdown menu.
   - `<button>`: Defines a clickable button.
   - `<label>`: Labels form elements.
   - `<fieldset>`: Groups related form elements.
   - `<legend>`: Provides a caption for a `<fieldset>`.
9. **Semantic HTML5 Tags**:
   - HTML5 introduced semantic tags for better document structure, including `<header>`, `<nav>`, `<main>`, `<section>`, `<article>`, `<aside>`, `<footer>`, etc.
10. **Meta Information**:
    - `<meta>`: Provides metadata about the document.
    - `<title>`: Sets the title of the web page.
11. **Scripting**:
    - `<script>`: Embeds JavaScript code.
    - `<noscript>`: Provides content for browsers with disabled or unsupported scripting.
12. **Audio and Video**:
    - `<audio>`: Embeds audio content.
    - `<video>`: Embeds video content.
13. **Frames and Embedding**:
    - `<iframe>`: Embeds external content or another web page.
    - `<embed>`, `<object>`, `<canvas>`: Used for various types of media embedding and interaction.

These are just some of the most common HTML tags. HTML is extensible and allows for the creation of custom tags as well. The choice of tags depends on the content and structure of the web page you are creating, and using them correctly is essential for proper web development.