(1.) What is HTML?

Ans. HTML stands for Hyper Text Markup Language

- => HTML is the standard markup language for creating Web pages.
- => HTML describes the structure of a Web page.
- => HTML consists of a series of elements.
- => HTML elements tell the browser how to display the content.
- => We can use CSS to style HTML pages.
- => We can use JavaScript to add functionality to the HTML pages.

HyperText: HyperText simply means "Text within Text." A text which contains links to other text. **Markup language**: A markup language is a computer language that is used to apply layout and formatting conventions to a text document.

(2.) Comments in HTML: The comment tag is used to insert comments in the source code.

- => Comments are not displayed by the browser, but they can help document your HTML source code.
- => HTML comments are a way to add notes and explanations to your HTML code without them being visible to users when the page is rendered in a web Browser.
- => You can add comments to your HTML code by enclosing them within the <!-- and --> tags.

Syntax: <!-- Write your comments here -->

Example: <!-- This is a comment. It will not be displayed in the browser. -->



(3.) HTML Tags: In HTML, tags are used to define the structure and layout of a webpage.

- => Tags are the starting and ending parts of an HTML element. They begin with < symbol and end with > symbol. Whatever written inside < > are called tags.
- => They are the basic building blocks that are used to create elements on a page.
- => The tag may appear in pairs, with an opening tag and a closing tag, like this: <tag>Content</tag> or sometimes self-closing like: <tag />.

Syntax: <tag> </tag> or <tag/>

Example : A tag is used to create a paragraph element, while the <h1> tag is used to create a heading element.

- **(4.) HTML Elements :** Elements are the individual components of an HTML document, such as headings, paragraphs, and images.
- => An HTML element is defined by a start tag, some content, and an end tag.
- => Each element is represented by a corresponding HTML tag.
- => The element content is between the opening and closing tags.

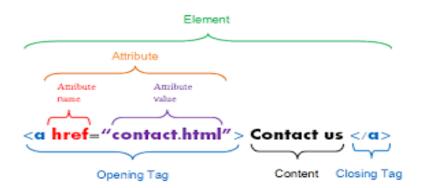
Syntax : <tagname>Content goes here...</tagname>

Example: A paragraph element is represented by the tag, and a heading element is represented by the <h1>, <h2>, etc. tags.

- (5.) HTML Attributes: Attributes are used to provide additional information about an element.
- => All HTML elements can have attributes.
- => Attributes are always specified in the start tag.
- => Attributes are added to the opening tag of an element and they always come in the form of name-value pairs like name="value".

Syntax: <tag name="value"> Some Text </tag>

Example: src attribute is used to specify the source of an image, and the href attribute is used to specify the destination of a link.



- **(6.) HTML Entities :** Reserved characters in HTML must be replaced with character entities.
- => If you use the less than (<) or greater than (>) signs in your text, the browser might mix them with tags.
- => Character entities are used to display reserved characters in HTML.
- => A character entity looks like this: &entity_name; OR &#entity_number;

Syntax: &entity_name; OR &#entity_number;

Example: < OR <

Note: Entity names are case sensitive.

Non-breaking Space :

- A commonly used entity in HTML is the non-breaking space:
- A non-breaking space is a space that will not break into a new line.
- Two words separated by a non-breaking space will stick together (not break into a new line). This is handy when breaking the words might be disruptive.

Note: Another common use of the non-breaking space is to prevent browsers from truncating spaces in HTML pages. If you write 10 spaces in your text, the browser will remove 9 of them. To add real spaces to your text, you can use the character entity.

Examples:

- § 10
- 10 km/h
- 10 PM

Result	Description	Entity name	Entity number	
	non-breaking space			
<	less than	<	<	
>	greater than	>	& #62;	
<u>&</u>	ampersand	&	& #38;	
***	double quotation mark	"	"	
	single quotation mark/ apostrophe	'	'	
¢	cent	¢	& #162;	
£	pound	£	£	
¥	yen	¥	¥	
€	euro	€	€	
©	copyright	&сору;	©	
®	registered trademark	®	®	

Combining Diacritical Marks:

- A diacritical mark is a "glyph" added to a letter.
- Some diacritical marks, like grave (`) and acute (`) are called accents.
- Diacritical marks can appear both above and below a letter, inside a letter, and between two letters.
- Diacritical marks can be used in combination with alphanumeric characters to produce a character that is not present in the character set (encoding) used in the page.

Example:

Mark	Character	Construct	Result
•	а	à	à
-	а	á	á
•	а	â	â
~	а	ã	ã
•	0	Ò	Ò
•	0	Ó	Ó
•	0	Ô	ô
~	0	Õ	Õ