HTML

1. What is HTML? Explain Itsstructure.

ANS > **HTML (HyperText Markup Language)** is the standard language used to create web pages. It tells a web browser how to display text, images, and other content on a webpage.

(Structure 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>

2.Describe the purpose of HTML tags and provide examples of commonly used tags.

Ans. **Purpose of HTML Tags:**  
HTML tags are used to **define elements** in a web page. They tell the browser **how to display content** like text, images, links, etc.

1. <h1>Hello</h1>
2. <p>This is a paragraph.</p>
3. <a href="https://example.com">Visit</a>
4. <img src="image.jpg" alt="Image">
5. Line 1<br>Line 2
6. <ul><li>Item</li></ul>
7. <div>Content here</div>
8. What are the differences between block-level and inline elements? Give examples of each.

Ans. **1: Block-Level Elements**

**Definition:**

**Block-level elements occupy the full width available and start on a new line.**

**They often contain other block-level or inline elements.**

**Characteristics:**

**- Always start on a new line.**

**- Take up the full width of their container (by default).**

**- Can contain both inline and other block-level elements.**

**- Useful for structuring the layout of a webpage.**

**Common Examples:**

**- `<div>` – generic container**

**- `<p>` – paragraph**

**- `<h1>` to `<h6>` – headings**

**- `<ul>` / `<ol>` – unordered/ordered lists**

**- `<li>` – list items**

**- `<section>`, `<article>`, `<header>`, `<footer>` – semantic layout elements**

**2: Inline Elements**

**Definition:**

**Inline elements do not start on a new line and only take up as much width as necessary.**

**They are typically used to style parts of text.**

**Characteristics:**

**- Do not start on a new line.**

**- Only occupy space needed by their content.**

**- Can only contain other inline elements or text.**

**- Useful for formatting text inside block-level elements.**

**Common Examples:**

**- `<span>` – generic inline container**

**- `<a>` – anchor (link)**

**- `<strong>` – bold text**

**- `<em>` – italicized text**

**- `<img>` – image**

**- `<br>` – line break (technically an inline-level tag that forces a break)**

**Example to Illustrate:**

**html**

**<div>**

**<p>This is a block-level paragraph.</p>**

**<p>This <strong>word</strong> is bold using an inline element.</p>**

**</div>**

**- <div> and <p> are block-level (they stack vertically).**

**- <strong> is inline (used inside the paragraph, doesn’t break layout).**

**4.** **Explain the concept of semantic HTML and why it is important.**

ans. What is Semantic HTML?

1)

Semantic HTML refers to using HTML elements that convey meaning about

the structure and content of a webpage, rather than just defining presentation.

These elements describe the purpose of the content, making it more understandable for

both browsers and developers.

Why is Semantic HTML Important?

1) Accessibility:

Screen readers and assistive technologies rely on semantic markup to interpret and navigate

content properly.

Helps users with disabilities understand the page structure.

2) SEO (Search Engine Optimization):

Search engines prioritize well-structured content, improving rankings.

Semantic tags help crawlers identify key sections (e.g., <article> for blog posts).

3) Maintainability & Readability:

Makes code easier to understand for developers.

Encourages consistent structure across projects.

4) Future-Proofing:

Ensures compatibility with evolving web standards and technologies.

Reduces reliance on non-semantic <div> and <span> tags.

5) Better Styling & Responsiveness:

Provides meaningful hooks for CSS and JavaScript.

Helps in creating responsive designs by logically grouping content.