* **Define HTML & State its Purpose in Web Development.**
* The Full Form of HTML is Hyper Text Markup Language.
* It is useful in developing Web Pages & Websites.
* **Explain the Basic Structure of an HTML Document & Identify the mandatory tags & their Purposes.**
* The basic structure of an HTML Document is built up from a few essential tags and the content in them.
* **Mandatory Tags and their Purpose :**

1. **<!DOCTYPE html> :** This isn’t a tag but a declaration that tells the browser that the document is an HTML5 Document.
2. **<html> :** This is the root element that contains all other HTML content. It’s the top level container for everything on the page.
3. **<head> :** This section contains metadata about the page, such as title, character set, and links to external files like CSS stylesheets. Information within this tag isn’t visible on the page.
4. **<body> :** All the visible content of the webpage goes to it. Everything we see—text, images, links & more—is placed inside this tag.

* **Difference between Block-Level & Inline tags :**

1. **Block-Level Tags :**

* The Content in these tags always start from a new line.
* These tags take up the full width available.
* **Examples :-**
* <h1> to <h6>, <p>, <div>, etc.

1. **Inline Tags :**

* The Content doesn’t start on a new line.
* These tags only take up the width of their content.
* **Examples :**
* <a>, <em>, <img>, etc.
* **Discuss the role of semantic HTML. Why is it important for accessibility & SEO?**
* Semantic html is like using the right labels for things on a webpage.

Instead of saying ‘box’, we say ‘header’, ‘menu’, etc. so everyone knows what each part is.

* It makes websites easier for blind users or those using screen readers. They can understand and move around the page better.
* **What are html forms used for? Describe function of input, textarea, select and button elements .**
* HTML forms are used to collect user input on websites—like signing up, logging in, giving feedback, or placing orders.
* **<input> :** Used for single-line input like text, email, password, or numbers. It can also be used for checkboxes, radio buttons, and file uploads depending on the **type** attribute.
* **<textarea> :** Lets users enter multi-line text, like comments or messages. It’s great for longer input.
* **<select> :** Creates a dropdown menu. Users can choose one (or more) options from a list.
* **<button> :** Triggers an action—like submitting the form or resetting it. It can also be styled and programmed for custom behavior.
* **Explain the difference between the GET and POST methods in form submission.**
* **GET method :**
* Data is sent in the url.
* It is visible to everyone, including in browser history.
* Good for simple searches or bookmaking.
* Limited data size.
* **POST method :**
* Data is sent in the body of the request
* More secure for sensitive info like password
* Used for login forms, payments, or uploading files
* Can handle larger amounts of data
* **What is purpose of label element ? How does it improve accessibility ?**
* It tells users what the input field is for.
* It links descriptive text to a form control, making the form easier to understand and use.
* **Screen readers** read the label aloud when the user focuses on the input, helping visually impaired users know what they’re interacting with.
* **Clickable labels** make it easier to select checkboxes or radio buttons, especially for users with motor impairments.
* **Explain Structure of an html table & purpose of table, tr, th, td, thead elements**
* An HTML table is used to display data in rows and columns, like a spreadsheet.
* <table> is the container that holds all the table content
* <tr> defines a row in the table. It contains cells
* <th> is a cell that contains a heading. Usually bold & centered. Helps describe the data in the column or row
* **Difference between colspan & rowspan in Tables**
* **Colspan :**
* Merges columns across a row
* Used when one cell spans multiple columns
* **Example :** <td colspan=”2”>Merged Columns</td>
* **Rowspan :**
* Merges rows down a column
* Used when one cell spans multiple rows
* **Example :** <td rowspan=”2”>Merged Rows</td>
* **Why should tables be used sparingly for layout purposes ? What is a better alternative ?**
* Tables have **Poor Accessibility** which confuses the user, making websites less accessible
* Tables are **Rigid & Hard to Maintain**
* **Better Alternative : CSS with Divs**
* CSS allows for fluid layouts, which adapt to various devices & screen sizes
* Separating content(HTML) from presentation(CSS) makes code easier to read, maintain, & update.