**1 What is Website?**

**Ans:**

A **website** is a collection of **web pages** that are accessed through the internet using a browser like Chrome, Firefox, or Safari. Each website has a **domain name** (like www.google.com) and is hosted on a **web server**.

**2. What Is Client-Server Architecture?**

**Ans:**

**Client-Server Architecture** is a system design where one side (the **client**) sends a request, and the other side (the **server**) responds by processing the request and sending back the data.

**3. What Is Web Browser?**

**Ans:**

A **web browser** is a **software application** that allows you to access and view websites on the internet.

**4. What Is Webpage?**

**Ans:**

A **webpage** is a **single document on the internet**, usually written in **HTML**, that is displayed in a **web browser**.

**5. What Is HomPage In HTML?**

**Ans:**

A **homepage** is the **main or first page** of a website — usually named index.html. It is the **starting point** when someone visits your site.

**6. What Is HTML?  
Ans:**

**HTML** stands for **HyperText Markup Language**. It is the **standard language** used to **create webpages** and display content in web browsers.

**HTML** is the code that tells a browser how to structure and display text, images, links, and other content on a webpage.

It is a **markup language** — it **describes** the structure of a webpage but **does not perform logic** like calculations or decisions (unlike JavaScript).

**7. Text Formatting Tags:**

**Ans:**

In HTML, **text formatting tags** are used to style and emphasize text. Here's a list of common formatting tags and what they do:

| **Tag** | **Description** | **Example** |
| --- | --- | --- |
| <b> | Bold text (no semantic meaning) | <b>This is bold</b> |
| <strong> | Important text (bold with semantic meaning) | <strong>Important!</strong> |
| <i> | Italic text (no semantic meaning) | <i>This is italic</i> |
| <em> | Emphasized text (italic with meaning) | <em>Emphasized text</em> |
| <u> | Underlined text | <u>Underlined</u> |
| <mark> | Highlighted/marked text | <mark>Highlighted</mark> |
| <small> | Smaller text | <small>Fine print</small> |
| <del> | Deleted/strikethrough text | <del>Old price</del> |
| <ins> | Inserted/underlined text | <ins>New text</ins> |
| <sub> | Subscript (below line) | H<sub>2</sub>O |
| <sup> | Superscript (above line) | E = mc<sup>2</sup> |
| <abbr> | Abbreviation (with tooltip) | <abbr title="HyperText Markup Language">HTML</abbr> |
| <code> | Monospaced (code) text | <code>console.log("Hello")</code> |
| <pre> | Preformatted text (respects spaces & line breaks) | <pre> Line 1 Line 2 </pre> |
| <q> | Short inline quotation | <q>This is a quote</q> |
| <blockquote> | Long quote block | <blockquote>Quoted paragraph</blockquote> |
| <cite> | Cites a source | <cite>Book Title</cite> |
| <br> | Line break | Line1<br>Line2 |
| <hr> | Horizontal line (breaks content) | <hr> |

**8. List Tags:**

**Ans:**

In HTML, **list tags** are used to group related items. There are three main types of list tags:

**1. Unordered List (<ul>)**

* Displays items with **bullets**

<ul>

<li>HTML</li>

<li>CSS</li>

<li>JavaScript</li>

</ul>

Output:

* HTML
* CSS
* JavaScript

**2. Ordered List (<ol>)**

* Displays items with numbers or letters

<ol>

<li>Wake up</li>

<li>Brush teeth</li>

<li>Eat breakfast</li>

</ol>

Output:

1. Wake up
2. Brush teeth
3. Eat breakfast

**Types:**

* **type="1" (default) → 1, 2, 3**
* **type="A" → A, B, C**
* **type="a" → a, b, c**
* **type="I" → I, II, III**
* **type="i" → i, ii, iii**

**3. Description List (<dl>)**

* Used for terms and their definitions (like a glossary)

<dl>

<dt>HTML</dt>

<dd>HyperText Markup Language</dd>

<dt>CSS</dt>

<dd>Cascading Style Sheets</dd>

</dl>

Output:  
**HTML**  
→ HyperText Markup Language  
**CSS**  
→ Cascading Style Sheets

**9. Table Tag:**

**Ans:**

Basic HTML Table Structure:

<table>

<tr>

<th>Name</th>

<th>Age</th>

<th>City</th>

</tr>

<tr>

<td>Rahul</td>

<td>25</td>

<td>Mumbai</td>

</tr>

<tr>

<td>Anjali</td>

<td>23</td>

<td>Delhi</td>

</tr>

</table>

**Tags Used:**

| **Tag** | **Description** |
| --- | --- |
| <table> | Defines the table |
| <tr> | Table row |
| <th> | Table header cell (bold & centered) |
| <td> | Table data cell |

**Table Attributes (HTML or CSS)**

**🔹 HTML Attributes (some are outdated in HTML5, better with CSS):**

| **Attribute** | **Description** | **Example** |
| --- | --- | --- |
| border | Adds border to table | <table border="1"> |
| cellspacing | Space between cells | <table cellspacing="5"> |
| cellpadding | Space inside cells | <table cellpadding="10"> |
| width / height | Size of table | <table width="100%"> |
| align | Alignment of table | <table align="center"> |
| bgcolor | Background color | <table bgcolor="#f0f0f0"> |

**Advanced Table Tags:**

| **Tag** | **Description** |
| --- | --- |
| <thead> | Groups header rows |
| <tbody> | Groups body rows |
| <tfoot> | Groups footer rows |
| <caption> | Adds a title to the table |
| colspan | Merges cells **horizontally** |
| rowspan | Merges cells **vertically** |

**10. Anchor Tag (a):**

**Ans:**

The <a> tag in HTML is called the **Anchor tag**, and it's used to create **hyperlinks** that link to:

* Another webpage
* A section of the same page
* An email address
* A file (e.g., PDF, image)
* A phone number

**Basic Syntax:**

<a href="URL">Link Text</a>

**Common Anchor Tag Uses:**

**1. Link to Another Website**

<a href="https://www.google.com">Visit Google</a>

**2. Open Link in New Tab:**

<a href="https://example.com" target="\_blank">Open in new tab</a>

**3. Link to a Section on the Same Page**

<a href="#about">Go to About Section</a>

<!-- Later in the page -->

<h2 id="about">About Us</h2>

**4. Email Link**:

<a href="mailto:someone@example.com">Send Email</a>

**5. Phone Link (for mobile)**

<a href="tel:+919999999999">Call Us</a>

**6. Download a File**

<a href="files/sample.pdf" download>Download PDF</a>

**Anchor Tag Attributes**

| **Attribute** | **Description** | **Example** |
| --- | --- | --- |
| href | Target URL | href="https://..." |
| target | Where to open the link (\_blank, \_self, etc.) | target="\_blank" |
| download | Downloads the linked file | download="filename" |
| title | Tooltip text | title="Click to visit site" |
| rel | Relationship (used with target="\_blank") | rel="noopener noreferrer" |
| id | Target ID for internal links | id="top" |

**11. Image Tag:**

**Ans:**

The <img> tag in HTML is used to **embed images** on a webpage. It is a **self-closing tag**, meaning it doesn't need a closing tag.

**Basic Syntax:**

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

**Important Attributes of <img>:**

| **Attribute** | **Description** | **Example** |
| --- | --- | --- |
| src | Source of the image (URL or path) | src="images/pic.jpg" |
| alt | Alternative text (shown if image fails or for screen readers) | alt="A sunset view" |
| width | Width of image (in px or %) | width="200" |
| height | Height of image | height="150" |
| title | Tooltip text on hover | title="Beautiful Sunset" |
| loading | Controls lazy loading | loading="lazy" |

**12. Block And Inline Scope :**

**Ans:**

**Block-Level Elements**

* Always start on a **new line**
* Take up the **full width** of the parent container
* Can contain **inline** or **other block** elements

<div>, <p>, <h1> to <h6>, <ul>, <ol>, <li>, <section>, <article>, <table>, <footer>

**Inline Elements**

* Do **not** start on a new line
* Only take up **as much width** as needed
* Can **only contain** text or other **inline** elements

<span>, <a>, <img>, <strong>, <em>, <label>, <abbr>, <code>

**CSS Control: display Property**

You can change element behavior using display:

| **CSS Value** | **Description** |
| --- | --- |
| block | Forces an element to behave like a block |
| inline | Forces an element to behave like inline |
| inline-block | Behaves like inline, but allows setting width/height |
| none | Hides the element |

**13. Form Tag:**

**Ans:**

The <form> tag in HTML is used to create an **HTML form** for **user input** — like login, registration, contact, feedback, etc.

<form action="submit.php" method="post">

<!-- Form elements go here -->

</form>

**Common Form Elements Inside <form>**:

| **Element** | **Description** |
| --- | --- |
| <input> | For text, password, checkbox, etc. |
| <textarea> | Multi-line text input |
| <select> | Dropdown list |
| <option> | Options inside <select> |
| <button> / <input type="submit"> | Submit button |
| <label> | Label for inputs |

**Important Attributes of <form>:**

| **Attribute** | **Description** |
| --- | --- |
| action | URL to send form data to |
| method | HTTP method: "get" or "post" |
| target | Where to display response: \_self, \_blank |
| enctype | Data encoding type (for file upload) |
| autocomplete | Suggest saved values: "on" or "off" |
| novalidate | Disables form validation |

**Example:**

<form action="submit.php" method="post" autocomplete="on">

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

<input type="text" id="name" name="username" required><br><br>

<label for="email">Email:</label>

<input type="email" id="email" name="email" required><br><br>

<label for="msg">Message:</label><br>

<textarea id="msg" name="message" rows="4" cols="30"></textarea><br><br>

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

</form>

**method Explained:**

| **Method** | **Use When** | **Data Sent** |
| --- | --- | --- |
| GET | Non-sensitive, like search | In URL (?name=value) |
| POST | Sensitive info, login, files | In request body (hidden) |

**enctype Usage (for file uploads):**

<form action="upload.php" method="post" enctype="multipart/form-data">

<input type="file" name="myfile">

<input type="submit">

</form>

**14. Form Input Types:**

**Ans:**

HTML <input> elements support many **types**, each used for a specific kind of data input.

Here's a complete list of **<input> types**, with descriptions and examples:

**Basic Input Types:**

| **Type** | **Description** | **Example** |
| --- | --- | --- |
| text | Single-line text input | <input type="text"> |
| password | Password (hidden text) | <input type="password"> |
| email | Email format validation | <input type="email"> |
| number | Numeric input only | <input type="number"> |
| tel | Telephone number | <input type="tel"> |
| url | URL format validation | <input type="url"> |
| search | Search field | <input type="search"> |
|  |  |  |

**Selection Inputs**:

| **Type** | **Description** | **Example** |
| --- | --- | --- |
| checkbox | Multiple selections | <input type="checkbox"> |
| radio | One option from group | <input type="radio"> |
| range | Slider input | <input type="range" min="0" max="100"> |
| color | Color picker | <input type="color"> |

**Date and Time Inputs**:

| **Type** | **Description** | **Example** |
| --- | --- | --- |
| date | Date picker | <input type="date"> |
| month | Month picker | <input type="month"> |
| week | Week picker | <input type="week"> |
| time | Time picker | <input type="time"> |
| datetime-local | Local date & time | <input type="datetime-local"> |

**File & Button Inputs:**

| **Type** | **Description** | **Example** |
| --- | --- | --- |
| file | Upload file(s) | <input type="file"> |
| submit | Submit button | <input type="submit"> |
| reset | Reset form values | <input type="reset"> |
| button | Custom button | <input type="button" value="Click Me"> |
| image | Submit using an image | <input type="image" src="btn.png"> |
| hidden | Hidden field (not visible) | <input type="hidden" name="userid" value="123"> |