**1) What are html forms used for? Describe the purpose of the input, textarea, select, and button elements?**

**Uses of HTML Forms:**

User Registration & Login

Surveys, Feedback & Contact Forms

Event Registrations & Application Forms

* **<input>**

**Purpose:** Captures a single-line piece of user data such as names, emails, passwords, numbers, dates, checkbox selections, and more via the type attribute (e.g., text, email, number, checkbox, radio, submit, etc.).

**Special Features:**

* Type-specific validation (e.g. type="email" ensures a valid email format).
* Supports attributes like name, required, min, max, pattern, and placeholder.
* **<textarea>**

**Purpose:** A multi-line text input field suitable for longer inputs like comments, feedback, or descriptions.

**Key Attributes:**

* Rows, Cols : set the visible size.
  + **Purpose:** A clickable control that can trigger form submission (type="submit"), form reset (type="reset"), or application logic (type="button").

**2) Explain the difference between the GET and POST methods in form submission. When should each be used?**

**GET Method:**

**Purpose:** To **request data** from a server.

**Data location:** Sent as part of the **URL.**

**Visibility:** Data is **visible in the address bar**.

**Security:** Less secure — not suitable for sensitive data like passwords.

**POST Method:**

**Purpose:** To **send data** to the server, often to save or update something.

**Data location:** Sent in the **body** of the request, not in the URL.

**Visibility:** **Hidden from the URL**, so it's better for sensitive data.

**Security:** More secure than GET, especially when used with HTTPS.

**Use GET when:**

 The form submission is **safe and repeatable** (like a search or filter).

 You want the data to be **bookmarkable or shareable** via URL.

 The data is **not sensitive.**

**Example:**

* Search forms (like Google)
* Filter options on a product page

**Use POST when:**

 The form contains **sensitive or private information** (e.g., passwords).

 The data is **large** (file uploads, long messages).

 The action **should not be cached or bookmarked**.

**3) What is the purpose of the label element in a form, and how does it improve accessibility?**

**Purpose of the <label> element**

 **Describes the Input Field**  
It provides a human-readable description for form controls like <input>, <select>, or <textarea>, making it clear what the user should enter.

 **Connects Label and Input**  
It explicitly associates text with a form control using the for attribute (which matches the id of the input), or by nesting the input inside the <label>.

### ****How It Improves Accessibility****

1. **Screen Reader Support**  
   Screen readers announce the label when a user focuses on the corresponding input, helping visually impaired users understand the form field’s purpose.
2. **Clickable Area**  
   Clicking the label moves the cursor/focus to the input field. This is helpful for users with limited mobility, as it increases the clickable area.
3. **Semantic Meaning**  
   Proper use of labels improves the semantic structure of the page, making it easier for assistive technologies to interpret and navigate.