Question 1:

What are HTML forms used for? Describe the purpose of the input, text area, select, and button elements.

- → HTML **forms** are used to **collect user input** on a webpage.
- → For example: login pages, sign-up forms, search boxes, feedback forms, etc.

Purpose of Key Form Elements

• 1. <input>

- \rightarrow Used to take **single-line input** from the user.
- → Can change its type using the type attribute (e.g., text, email, password, number, radio, checkbox, etc.).
- \rightarrow Example:
 - <input type="text" placeholder="Enter your name">
- → **Purpose:** To capture different types of user data like text, numbers, emails, passwords, etc.

• 2. <textarea>

- → Used to take **multi-line input** (larger text).
- \rightarrow Example:
 - <textarea rows="5" cols="30" placeholder="Write your message"></textarea>
- → **Purpose:** For long answers such as messages, comments, addresses, feedback, etc.

• 3. <select> (Dropdown)

- → Used to let users choose one (or sometimes multiple) options from a list.
- \rightarrow Works with <option> tags.
- \rightarrow Example:
 - <select>
 - <option value="general">General Inquiry
 - <option value="support">Support
 - <option value="feedback">Feedback
 - </select>
- → **Purpose:** To give users a predefined list of choices (e.g., country list, subjects, categories).

• 4. <button>

- → Used to create clickable buttons.
- → Commonly used to **submit** or **reset** a form.
- \rightarrow Example:
 - <button type="submit">Submit</button>

→ **Purpose:** To perform an action, such as sending the form data to the server or resetting the input fields.

Question 2:

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

- → Difference Between GET and POST Methods in Form Submission.
- ➤ When you submit a form in HTML, the data is sent to the server using a method. The two most common methods are **GET** and **POST**.

• 1. GET Method

- o Sends form data by **appending it to the URL** as query parameters.
- o Example:

https://example.com/search?name=Bhavika&age=20

Features:

- O Data is visible in the address bar.
- Has a **size limit** (around 2048 characters).

• 2. POST Method

o Send form data **inside the HTTP request body** (not visible in the URL).

Features:

- o Data is hidden from the URL.
- o More secure for sensitive information.
- o For sensitive data (passwords, personal info).
- o Has no limit.

\rightarrow Question 3:

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

→ Purpose of the <label> Element in a Form

➤ The <label> element is used to **define a caption for an input element** in a form (like text box, checkbox, radio button, etc.).

Main Purposes:

- 1. Connects text to form inputs:
- Example: when you click on the label "Email", the cursor automatically goes into the email input box.
- 2. Improves user experience:
- ➤ Makes forms easier to use since users can click on the label instead of just the small input field.
- 3. Accessibility (for screen readers):
- > Screen readers read the label text along with the input, so visually impaired users know what information to enter.
- 4. Clear form structure:
- Labels make the form self-explanatory and organized.

Example:

```
<form>
<label for="fullname">Full Name:</label>
<input type="text" id="fullname" name="fullname" required><br><br><label for="email">Email Address:</label>
<input type="email" id="email" name="email" required>
</form>
```

- Here, the for="fullname" in the label matches the id="fullname" of the input.
- Clicking the word "Full Name" will focus the input box.