**Question 1: Answer The Following Questions:**

1. HTML elements that aren't meant to store content or other elements are called **empty** elements.
2. **What are the difference between em, rem vs px**

* **px:** Fixed size, does not scale with user settings or context.
* **em:** Scales relative to the font-size of its parent element, can compound with nesting.
* **rem:** Scales relative to the root element's font-size, providing consistent scaling without compounding.

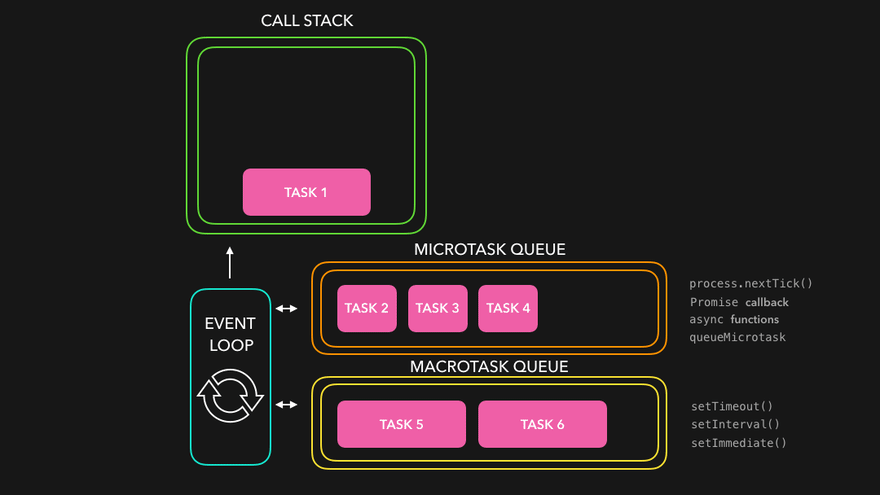
1. What is the difference between <input type="submit" value="click me"> and

<button type="submit">Click me</button>?

* **<input type="submit">:** Simpler, limited to plain text, and generally less flexible for styling and content.
* **<button type="submit">:** More versatile, can contain various types of content, and offers greater flexibility for styling and customization.

1. Explain Hoisting and Event loop in JavaScript

* **Hoisting:** Moves variable and function declarations to the top of their scope during compilation. Variables declared with **var are initialized to undefined,** while **let and const are not initialized.** Function declarations are hoisted entirely.
* **Event Loop:** Manages asynchronous operations by handling the **Call Stack, Web APIs, Callback Queue, and Microtask Queue,** ensuring non-blocking I/O in JavaScript.



1. What is the difference between **for … of**, **for … in** loop and Which JavaScript **loop ensures that at least a singular iteration** will happen?

* **for...of Loop**

**Purpose**: Iterates over the values of replicable objects like **arrays, strings, maps, sets, and more.**

**Usage**: Extracts the actual values from a replicable object.

* **for...in Loop**

**Purpose**: Iterates over the enumerable properties of an object **(including arrays, but it also iterates over the indices).**

**Usage**: Extracts the keys or property names from an object.

* **JavaScript Loop that Ensures At Least One Iteration**

The **do...while** loop in JavaScript ensures that at least one iteration will occur regardless of the condition being true or false at the beginning.

**Question 2: What is the output:**

1. Hello – 50
2. 101
3. 20 – NaN
4. 30 – ReferenceError: Cannot access 'diff' before initialization
5. Object – number

**Question 3: Answer The Following Questions:**

1. **which elements will the styles be applied to?**

* **The Adjacent Sibling Combinator (+):**

(**h2 + p) background: beige;** to

**<p>paragraph 2</p>**

* **The General Sibling Combinator (~):**

**(h2 ~ p) color: blue;** to both

**<p>paragraph 2</p> and <p>paragraph 3</p>**

1. In VS Code
2. In VS Code
3. In VS Code
4. In VS Code
5. In VS Code
6. In VS Code
7. In VS Code

**Question 4: Make This Possible**

In VS Code