**Question 1: What are props in React.js? How are props different from state?**

**Ans**:- Props in React.js:

* Props" stands for properties.
* They are read-only pieces of data passed from parent component to child component.
* Think of props like arguments to a function — they allow one component to send data to another**.**

State is data that a component owns and manages by itself. It's mutable — meaning it can change over time (example: when a user clicks a button) Changing the state causes the component to re-render.

**Question 2: Explain the concept of state in React and how it is used to manage componentdata.**

**Ans:-** **** When a component needs to remember something (like user input, button clicks, or data fetched from an API), we use state.

* State allows the component to react (update itself) when the data changes.
* We manage state in React using the useState() hook (for functional components).
* State is the heart of a React component — it controls what you see on the screen by managing the component's data dynamically
* **State** is a built-in object in React that holds **dynamic data** or **information** about a component.
* It represents the **current situation** of a component.
* When the **state changes**, the **component re-renders** automatically to reflect the new data on the screen.

**Question 3: Why is this.setState() used in class components, and how does it work?**

**Ans:-**  In React class components, this.setState() is used to update the component's state.

Directly modifying state (like this.state.count = 5) won’t re-render the component.

this.setState() tells React, "Hey, I changed something — please re-render the UI."

this.setState() = update the state + re-render the component.

 setState() is asynchronous — it may batch multiple updates together for performance.

 If you need to update based on the previous state, you should use a function form of setState:

**Task 1**

**Github:- https://github.com/sagarlakhnotra/task-1**

**Task 2**

**Github:-** **https://github.com/sagarlakhnotra/task-2**