1. Explain About Conditional Rendering in React

Conditional rendering in React refers to displaying different UI elements based on specific conditions (usually state or props). It's similar to how conditionals work in JavaScript (if, else, ternary operator, etc.).

React uses JSX to render UI, and since JSX supports JavaScript expressions, we can use conditional logic directly in our render methods or return statements.

Common Techniques:

a. Using if statement (inside a function)

b. Using ternary operator (inline)

c. Using && operator for conditional output (short-circuit evaluation)

d. Using switch statement

Sometimes multiple conditions are best handled using switch

2. Define Element Variables

Element variables are variables used to store JSX elements. You can assign a JSX block to a variable and use it conditionally, which helps in organizing complex render logic.

3. Explain How to Prevent Components from Rendering

There are several ways to prevent a component or part of UI from rendering in React:

a. Return null

If you don't want anything rendered at all, return null from the component.

b. Use conditional rendering in the parent

Instead of rendering the component at all, skip calling **it:**

c. Use CSS to hide (not recommended for logic)