**Objective**

**1. Explain Conditional Rendering in React**

**Conditional rendering** in React means showing different UI elements based on certain conditions like user login status, role, state values, etc.

**Ways to conditionally render:**

1. **if-else**

if (isLoggedIn) {

return <UserDashboard />;

} else {

return <LoginPage />;

}

1. **Ternary Operator**

{isLoggedIn ? <UserDashboard /> : <LoginPage />}

1. **Logical AND (&&)**

{isLoggedIn && <WelcomeMessage />}

**2. Define Element Variables**

**Element variables** are used to store JSX blocks and assign different values conditionally before returning them.

**Why use them?**

* Improves readability
* Clean separation of logic and JSX

**Example:**

let content;

if (isLoggedIn) {

content = <UserPage />;

} else {

content = <GuestPage />;

}

return <div>{content}</div>;

**3. How to Prevent Components from Rendering**

React allows you to skip rendering components in two main ways:

1. **Use if or condition in parent component**

{showComponent && <SomeComponent />}

1. **Return null from a component**  
   If you want to completely hide a component, return null:

function Message({ show }) {

if (!show) return null;

return <p>This is a message</p>;

}

Returning null = render nothing = component not shown.





