**12.React-HOL**

**1. Explain about conditional rendering in React.**Conditional rendering in React means displaying UI elements based on certain conditions. It works the same way conditions work in JavaScript. You can use if, else, ternary operators, or && to render different components or elements depending on application state.

**Example:**

{isLoggedIn ? <UserPage /> : <GuestPage />}

**2. Define element variables.**  
Element variables in React are used to store elements in variables so you can conditionally render them later.

**Example:**

let button;

if (isLoggedIn) {

button = <LogoutButton />;

} else {

button = <LoginButton />;

}

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

**3. Explain how to prevent components from rendering.**  
To prevent a component from rendering, return null from its render() method or function body. This tells React to render nothing.

Example:

function WarningBanner(props) {

if (!props.warn) {

return null;

}

return <div className="warning">Warning!</div>;

}

**Hands-On**

**Code: App.js**

import React, { useState } from 'react';

import GuestPage from './GuestPage';

import UserPage from './UserPage';

function App() {

  const [isLoggedIn, setIsLoggedIn] = useState(false);

  const handleLogin = () => setIsLoggedIn(true);

  const handleLogout = () => setIsLoggedIn(false);

  return (

    <div style={styles.container}>

      <h1>Ticket Booking App</h1>

      {isLoggedIn ? (

        <div>

          <UserPage />

          <button onClick={handleLogout}>Logout</button>

        </div>

      ) : (

        <div>

          <GuestPage />

          <button onClick={handleLogin}>Login</button>

        </div>

      )}

    </div>

  );

}

const styles = {

  container: {

    textAlign: 'center',

    marginTop: '60px',

  },

};

export default App;

**GuestPage.js**

import React from 'react';

function GuestPage() {

  return (

    <div>

      <h2>Welcome, Guest!</h2>

      <p>You can browse available flight details below:</p>

      <ul>

        <li>Flight 1: Chennai → Delhi</li>

        <li>Flight 2: Mumbai → Bangalore</li>

        <li>Flight 3: Hyderabad → Kolkata</li>

      </ul>

    </div>

  );

}

export default GuestPage;

**UserPage.js**

import React from 'react';

function UserPage() {

  return (

    <div>

      <h2>Welcome, User!</h2>

      <p>You are logged in. Book your tickets below:</p>

      <ul>

        <li>

          Flight 1: Chennai → Delhi

        </li>

        <li>

          Flight 2: Mumbai → Bangalore

        </li>

        <li>

          Flight 3: Hyderabad → Kolkata

        </li>

      </ul>

    </div>

  );

}

export default UserPage;

**OUTPUT**



