**10. ReactJS – HOL**

**1. Define JSX**

* JavaScript XML syntax that looks like HTML but is transpiled to React.createElement()
* Makes React code readable

**2. Explain about ECMA Script**

* A standard for scripting languages (like JavaScript)
* ES6 is a major update with modern features

**3. Explain React.createElement()**

React.createElement('h1', null, 'Hello')

* Manual way to create a React element
* JSX compiles to this behind the scenes

**4. How to create React nodes with JSX**

const element = <h1>Hello World</h1>;

**5. How to render JSX to DOM**

* Via ReactDOM:

ReactDOM.render(element, document.getElementById('root'));

**6. Use JavaScript expressions in JSX**

const name = "React";

<p>Hello, {name}</p>

**7. Use inline CSS in JSX**

<h1 style={{ color: 'blue', fontSize: '20px' }}>Styled Heading</h1>

**10. Create a React Application named “officespacerentalapp” which uses React JSX to create elements, attributes and renders DOM to display the page.**

**Create an element to display the heading of the page.**

**Attribute to display the image of the office space**

**Create an object of office to display the details like Name, Rent and Address.**

**Create a list of Object and loop through the office space item to display more data.**

**To apply Css, Display the color of the Rent in Red if it’s below 60000 and in Green if it’s above 60000.**

**Step 1**: Open Terminal and create a new react project

***npx create-react-app officespacerentalapp***

***cd officespacerentalapp***

**Step 2:** Modify App.js

**App.js**

import React from 'react';

function App() {

  const heading = <h1>Office Space Rental</h1>;

  const officeImage = "https://via.placeholder.com/300x200?text=Office+Space";

  const office1 = {

    name: "CoWork Hub",

    rent: 55000,

    address: "MG Road, Bangalore"

  };

  const officeList = [

    { name: "TechSpace", rent: 75000, address: "Koramangala, Bangalore" },

    { name: "InnoHub", rent: 48000, address: "HSR Layout, Bangalore" },

    { name: "StartupNest", rent: 62000, address: "Whitefield, Bangalore" },

  ];

  return (

    <div>

      {heading}

      <img src={officeImage} alt="Office" style={{ width: "300px", height: "200px" }} />

      <div style={{ border: "1px solid black", padding: "10px", margin: "10px" }}>

        <h3>{office1.name}</h3>

        <p style={{ color: office1.rent < 60000 ? "red" : "green" }}>

          Rent: ₹{office1.rent}

        </p>

        <p>Address: {office1.address}</p>

      </div>

      <h2>Available Office Spaces</h2>

      {officeList.map((office, index) => (

        <div key={index} style={{ border: "1px solid gray", padding: "10px", margin: "10px" }}>

          <h3>{office.name}</h3>

          <p style={{ color: office.rent < 60000 ? "red" : "green" }}>

            Rent: ₹{office.rent}

          </p>

          <p>Address: {office.address}</p>

        </div>

      ))}

    </div>

  );

}

export default App;

**Step 3:** In terminal, type ***npm start*** and this will run your code.

**OUTPUT:**

