**Question :Functional and class components:**

**Codes:**

**App.js**

import React from 'react';

import FunctionalComponent from './FunctionalComponent';

import ClassComponent from './ClassComponent';

function App() {

  return (

    <div style={{ padding: '20px' }}>

      <h1>React Components Demo</h1>

      <FunctionalComponent />

      <ClassComponent />

    </div>

  );

}

export default App;

**index.js**

import React from 'react';

import ReactDOM from 'react-dom/client';

import './index.css';

import App from './App';

import reportWebVitals from './reportWebVitals';

const root = ReactDOM.createRoot(document.getElementById('root'));

root.render(

  <React.StrictMode>

    <App />

  </React.StrictMode>

);

reportWebVitals();

**class component:**

import React, { Component } from 'react';

class ClassComponent extends Component {

  constructor(props) {

    super(props);

    this.state = { name: "Bhavana" };

  }

  changeName = () => {

    this.setState({ name: "Pillutla" });

  }

  render() {

    return (

      <div style={{ background: '#ffe0e0', padding: '10px' }}>

        <h2>Class Component</h2>

        <p>Welcome, {this.state.name}!</p>

        <button onClick={this.changeName}>Change Name</button>

      </div>

    );

  }

}

export default ClassComponent;

**Fuctional Component:**

import React, { useState } from 'react';

function FunctionalComponent() {

  const [name, setName] = useState("Bhavana");

  return (

    <div style={{ background: '#e0ffe0', padding: '10px', marginBottom: '20px' }}>

      <h2>Functional Component</h2>

      <p>Welcome, {name}!</p>

      <button onClick={() => setName("Pillutla")}>Change Name</button>

    </div>

  );

}

export default FunctionalComponent;

**output:**

