**1.Explain what the simple list component does?**

**Ans:** In React js, Lists can be created in a similar way as we create lists in JavaScript. The list component allows us to display a list of pages or links.

**2.What problems/warnings are there in the given code.**

**Ans:** In this piece of code, I added an arrow function to Onclickhandler and changed the syntax from SetSelectedIndex, SelectedIndex to SelectedIndex, SetSelectedIndex and added a? marks in the items list to check and added a key function and then === operator to check the items removed the Of function for array and added the Of function to the shape.

**3.Please fix, optimize, and/or modify the component as much as you think is necessary.**

**Ans:** import React, { useState, useEffect, memo } from "react";import PropTypes from "prop-types";// Single List Itemconst WrappedSingleListItem = ({ index, isSelected, onClickHandler, text }) => { return ( <li style={{ backgroundColor: isSelected ? "green" : "red" }} onClick={() => onClickHandler(index)} > {text} </li> );};WrappedSingleListItem.propTypes = { index: PropTypes.number, isSelected: PropTypes.bool, onClickHandler: PropTypes.func.isRequired, text: PropTypes.string.isRequired,};const SingleListItem = memo(WrappedSingleListItem);// List Componentconst WrappedListComponent = ({ items }) => { const [SelectedIndex, setSelectedIndex] = useState(); useEffect(() => { setSelectedIndex(null); }, [items]); const handleClick = (index) => { setSelectedIndex(index); }; return ( <ul style={{ textAlign: "left" }}> {items?.map((item, index) => ( <SingleListItem key={item.id} onClickHandler={() => handleClick(index)} text={item.text} index={index} isSelected={selectedIndex === index} /> ))} </ul> );};WrappedListComponent.propTypes = { items: PropTypes.arrayOf( PropTypes.shape({ text: PropTypes.string.isRequired, }) ),};WrappedListComponent.defaultProps = { items: null,};const List = memo(WrappedListComponent);export default List;

**Root file:**

import { appendFile } from "fs";import React from "react";import List from "./";const App = () => { const items = [ { id: 1, text: "one" }, { id: 2, text: "two" },