**Practical No.: 07-B**

**Aim: Use the useContext hook to share the shopping cart state across component.**

a)Create CartProvider() Parent component to manage the state of the shopping cart. Create addToCart() and removeFromCart() functions to add and remove items from the cart, respectively.

b) Create Child component Cart() which will use useContext hook to access the context provided by parent component. It should render the list of items in the cart along with remove buttons for each item. The removeFromCart() function is invoked when the user clicks on the remove button, updating the cart state accordingly.

c) Create Child component ProductList() which will use useContext hook to access the the context provided by parent component. When a user clicks on the "Add to Cart" button, it should display a list of products with buttons to add them to the cart. The addToCart() function is called to add the selected product to the cart.

import React, { createContext, useState, useContext } from 'react';

const CartContext = createContext();

export function CartProvider() {

const [cart, setCart] = useState([]);

const addToCart = (item) => {

setCart([...cart, item]);

};

const removeFromCart = (index) => {

const updatedCart = [...cart];

updatedCart.splice(index, 1);

setCart(updatedCart);

};

return (

<CartContext.Provider value={{ cart, addToCart, removeFromCart }}>

<Cart/>

<ProductList/>

</CartContext.Provider>

);

}

function Cart() {

const { cart, removeFromCart } = useContext(CartContext)

return (

<div className="cart">

<h2>Shopping Cart</h2>

<ul>

{cart.map((item, index) => (

<li key={index}>

{item.name} - ${item.price}

<button onClick={() => removeFromCart(index)}>Remove</button>

</li>

))}

</ul>

</div>

);

}

function ProductList() {

const { addToCart } = useContext(CartContext)

const products = [

{ id: 1, name: 'Product 1', price: 10 },

{ id: 2, name: 'Product 2', price: 20 },

{ id: 3, name: 'Product 3', price: 30 },

];

return (

<div>

<h2>Products</h2>

<ul>

{products.map(product => (

<li>

{product.name} - ${product.price}

<button onClick={() => addToCart(product)}>Add to Cart</button>

</li>

))}

</ul>

</div>

);

}

**Output:**

