FSD- II (HTML)

3.a) AIM: Write a React program to implement a counter button using React useState hook.

Program:-

```
import React, { useState } from 'react';
function Counter() {
  const [count, setCount] = useState(0);
  return (
    <div>
      <h1>Count: {count}</h1>
      <button onClick={() => setCount(count + 1)}>Increment</button>
    </div>
  );
}
export default Counter;
```

Output:-

3.b) AIM: Write a React program to fetch data from an API using React useEffect hook.

Program:-

```
import React, { useEffect, useState } from 'react';
function FetchData() {
  const [users, setUsers] = useState([]);
  useEffect(() => {
    fetch('https://jsonplaceholder.typicode.com/users')
      .then(res => res.json())
      .then(data => setUsers(data));
  }, []);
  return (
    <div>
      <h1>User List</h1>
```

```
      <ul>
        {users.map(user => <li key={user.id}>{user.name}</li>)}
      </ul>
    </div>
  );
}
export default FetchData;
```

Output:-

3.c) AIM: Write a React program with two React components sharing data using Props.

Program:-

App.js

```
import React from 'react';
import ParentComponent from './ParentComponent';

function App() {
  return (
    <div className="App">
      <ParentComponent />
    </div>
  );
}

export default App;
```

ParentComponent.js:-

```
import React from 'react';
import ChildComponent from './ChildComponent';
function ParentComponent() {
  return (
    <div>
      <ChildComponent name="React Props Example" />
    </div>
  );
```

```
}
export default ParentComponent;
```
ChildComponent.js:-

```
import React from 'react';
function ChildComponent(props) {
  return <h1>Message: {props.name}</h1>;
}
export default ChildComponent;
```
Output:-

3.d) AIM: Write a React program to implement forms in React.

Program:-

```
import React, { useState } from 'react';


function FormExample() {
  const [name, setName] = useState('');
  const handleSubmit = (e) => {
    e.preventDefault();
    alert(`Submitted Name: ${name}`);
  };
  return (
    <form onSubmit={handleSubmit}>
      <label>Name: </label>
      <input value={name} onChange={e => setName(e.target.value)} />
      <button type="submit">Submit</button>
    </form>
  );
}
export default FormExample; //       Moved outside the function
```
Output:-

out put:-

3.e) AIM: Write a React program to implement iterative rendering using map() function.

Program:-

```
import React from 'react';

function ItemList() {
  const items = ['Pen', 'Book', 'Laptop', 'Mouse'];
  return (
    <div>
      <h1>Items:</h1>
      <ul>
        {items.map((item, index) => <li key={index}>{item}</li>)}
      </ul>
    </div>
  );
}

export default ItemList;
```

Output:-