Name :- Manav Pahilwani
Roll No :- 37
Class :- D11AD

Experiment 4b

Aim :- To understand Basic state and events in React

Theory :-
The React component has a built-in state object.
The state object is where you store property values that belong to the component
When the state object changes, the component renders.
this.setstate() is used to change the state object
State is initialised using a constructor
In a functional based component it is easier to define and change state using a usestate hook.

Events
React has its own event handling system which is very similar to handling events on DOM elements. The react event handling system is known as Synthetic Events. The synthetic event is a cross-browser wrapper of the browser's native event. With JSX you pass a function as the event handler rather than a string. Another difference is that you cannot return false to prevent default behaviour in React. You must call prevent Default explicitly.

Conclusion :- Thus we successfully learned state and events in react and implemented a random number generator app in react.

Code :-

```jsx
import React, { useState, useEffect } from "react";
export default function App() {
    const [sampleNumber, setSampleNumber] = useState(null);
    const getRandomNumber = () => {
        let min = 1;
        let max = 99;
        setSampleNumber(Math.round(Math.random() * (max - min) + min))
    }
  return (
    <div className="App">
      <h1>{`Generate random number on click of the button`}</h1>
      <button onClick={() => getRandomNumber()}>{'Generate'}</button>
      <p>{sampleNumber}</p>
    </div>
  );
}
```

Output :-

◁ ▷ C   🔖   ⊘ localhost:3000

Generate random number on click of the button

Generate

53