DEPARTMENT OF
COMPUTER SCIENCE & ENGINEERING

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EXPERIMENT- 1

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Semester: 6th

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Date of Performance: 14/01/26

Branch: BE CSE AIML

Subject Name: FULLSTACK-II

Section/Group: 23AIT_KRG-G1

Subject Code: 23CSH-382

AIM:

To design and implement the foundational frontend architecture of the EcoTrack application using modern React practices, Vite tooling, and ES6+ JavaScript features.

OBJECTIVES:

- To set up a React project using Vite with proper project structure
- To understand component-based architecture in React
- To apply ES6 array methods (map, filter, reduce) for data-driven UI rendering
- To separate concerns using components, pages, and data modules

IMPLEMENTATION/CODE:

Logs.js

```
export const logs = [
  { id: 1, activity: "Car Travel", carbon: 4 },
  { id: 2, activity: "Electricity Usage", carbon: 6 },
  { id: 3, activity: "Cycling", carbon: 0 },
];
```

1)SUM :

Dashboard.jsx-

```
import { logs } from "../data/logs";

console.log("Dashboard loaded", logs);

const Dashboard = () => {
  const totalCarbon = logs.reduce(
    (sum, log) => sum + log.carbon,
    0
  );

  return (
    <div>
      <h2>Dashboard</h2>
      <p>Total Carbon Footprint: {totalCarbon} Kg</p>
    </div>
  );
};

export default Dashboard;
```

App.jsx

```
import "./App.css";
import Log from "./pages/Logs";

function App() {
  return <Log />;
}

export default App;
```

2)COUNT>=4

Logs.jsx

```
import { logs } from "../data/logs";

const Log = () => {
  const filteredLogs = logs.filter((log) => log.carbon >= 4);

  return (
    <div>
      <h2>Logs (Carbon ≥ 4)</h2>

      <ul>
        {filteredLogs.map((log) => (
```

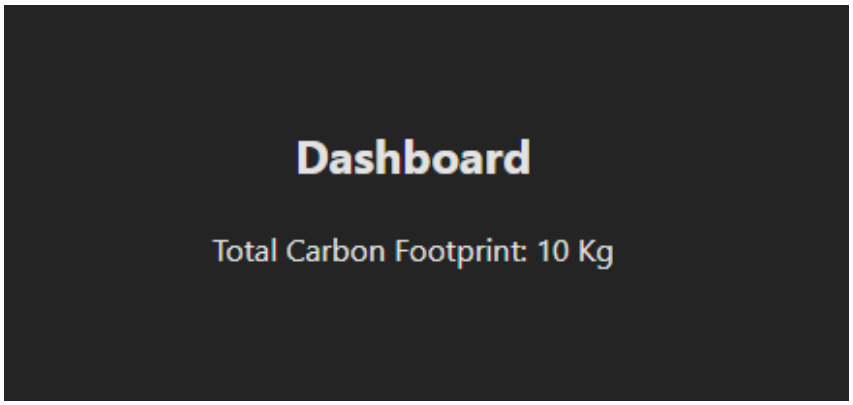
```
            <li key={log.id}>
              ID: {log.id} - Activity: {log.activity}
            </li>
          ))}
        </ul>
      </div>
    );
};

export default Log;
```

App.jsx

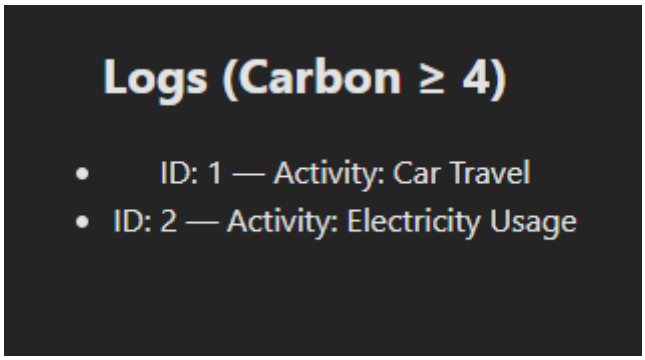
```
import "./App.css";
import Dashboard from "./pages/Dashboard";

function App() {
  return <Dashboard />;
}

export default App;
```

OUTPUT:

1)SUM



2)COUNT>=4



LEARNING OUTCOMES:

1. Set up a modern frontend application using Vite with React and organize the project structure effectively.
2. Apply component-based architecture in React to separate data, logic, and UI concerns.
3. Use ES6 array methods such as map, filter, and reduce for data-driven rendering and computations.
4. Implement functional React components to dynamically display and process application data.
5. Demonstrate clean and modular coding practices suitable for real-world frontend applications.