Experiment 1

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Subject Name: Full Stack
Subject Code: 23CSH-309

1. **Aim:** To design and implement the foundational frontend architecture of the EcoTrack application using modern React practices, vite tooling and ES6+ JS features.

2. **Objective:**
   - To set up a modern React project using Vite for efficient development
   - To design a clean and scalable frontend architecture using React best practices
   - To implement reusable and modular components for the EcoTrack application
   - To apply ES6+ JavaScript features for efficient and maintainable code
   - To establish a strong frontend foundation for future enhancements and integrations

3. **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 },
];
```

- dashboard.jsx

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

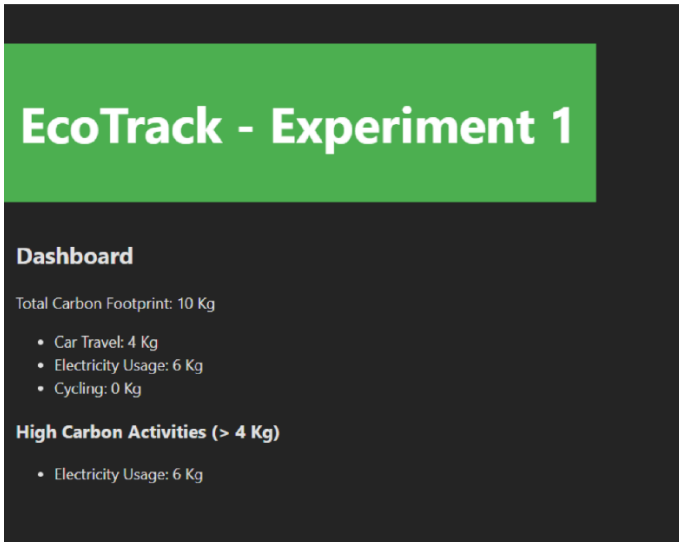
```
const Dashboard = () => {
  const totalCarbon = logs.reduce((sum, log) => sum + log.carbon, 0);

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

      <ul>
        {logs.map((log) => (
          <li key={log.id}>
            {log.activity} = {log.carbon} kg
          </li>
        ))}
      </ul>
    </div>
  );
};

export default Dashboard;
```

4) Output:



5)Learning Outcomes:

- Understand how to create and configure a React application using Vite tooling
- Gain proficiency in applying modern React concepts and best practices
- Develop the ability to build reusable and modular frontend components
- Learn to use ES6+ JavaScript features effectively in real-world applications
- Acquire skills to design a scalable and maintainable frontend architecture