**Ex 1**

**1. What is SPA?**

SPA stands for **Single-Page Application**. It is a web application that interacts with the user by dynamically rewriting the current page rather than loading entire new pages from the server.

**Benefits of SPA**

* Faster navigation and better user experience
* Less data transfer between client and server
* Easier to convert into a mobile app (using frameworks like React Native)

**2. What is MPA?**

MPA stands for **Multi-Page Application**. In MPAs, each interaction loads a new page from the server.

**Differences: SPA vs MPA**

| **Feature** | **SPA** | **MPA** |
| --- | --- | --- |
| Page Reload | No | Yes |
| Speed | Faster after first load | Slower due to full page reload |
| SEO Support | Less optimal | Better |
| Example | Gmail, Facebook | Amazon, Flipkart |

**3. What is React?**

React is a **JavaScript library** developed by Facebook for building **user interfaces**, especially SPAs. It helps create **reusable UI components**.

**4. What is Virtual DOM?**

The **Virtual DOM** is a lightweight copy of the real DOM. React uses it to:

* Detect changes
* Minimize direct DOM manipulation
* Update only what’s necessary in the real DOM

**5. Features of React**

* **Component-based**
* **Virtual DOM**
* **Declarative UI**
* **Unidirectional Data Flow**
* **Fast Rendering**
* **JSX Syntax**

**Code :**

function App() {

return (

<div style={{ display: 'flex', justifyContent: 'center', alignItems: 'center', height: '100vh' }}>

<h1>Welcome to the first session of React</h1>

</div>

);

}

export default App;

**Output** :

