1.What is Redux?

Ans. Redux is a JavaScript library for managing the state of an application in a predictable way. It is commonly used with React, but it can be used with any JavaScript framework or library. Redux follows the principles of a unidirectional data flow and is often used to manage the state of larger and more complex applications.

2 What is Redux Thunk used for?

Redux Thunk is a middleware for the Redux library in JavaScript, particularly popular with React applications. It allows you to write action creators that return functions instead of plain action objects. This is useful for handling asynchronous operations, such as making API calls, before dispatching the actual action.

3. What is Pure Component? When to use Pure Component over Component?

In the context of React, a "Pure Component" refers to a specific type of component provided by React that inherits from React.PureComponent class. The main feature of a Pure Component is that it performs a shallow comparison of its props and state to determine whether it should re-render.

 **Use Pure Component When:**

* You want to optimize performance by reducing unnecessary re-renders.
* Your component's render method is a pure function of its props and state, meaning the output is solely determined by the input.
* You have a relatively simple state or props structure, and a shallow comparison is sufficient to determine changes.

4. What is the second argument that can optionally be passed tosetState and what is

its purpose?

In React, the setState function is used to update the state of a component. The setState function can take two arguments:

1. **Partial State Object:**
   * This is the first argument and is typically an object that represents the partial state changes you want to make. When the state change is asynchronous (which is usually the case), React will merge this object with the current state.
2. **Callback Function (Optional):**
   * The second argument to setState is an optional callback function that will be executed once the state is updated. It is invoked after the component re-renders due to the state change. This can be useful if you want to perform some action after the state has been successfully updated.