- 1. Create a simple React component called Counter that displays a number and has two buttons: "Increment" and "Decrement." The number should start at 0 and change when the buttons are clicked. [HARD]
  - a. -Use state to manage the number.
  - b. -Pass the initial number as a prop to the Counter component.
- Build a multi-page React application that includes two pages: "Home" and "About."[HARD]
  - a. Create a navigation bar with links to the "Home" and "About" pages.
  - b. Implement routing using a library like React Router.
  - c. Each page should have a unique URL and content(any).
- 3. Create a basic todo list application: (use useState()) [MEDIUM]
  - a. Build a component for adding, displaying, and deleting tasks.
  - b. Use state to manage the list of tasks.
  - c. Add a form for users to input new tasks.
  - d. Display the list of tasks and provide a button to remove them.
  - e. Add a counter for the total number of tasks.
- 4. Create two components[EASY]

ParentComponent

ChildComponent

- a. ParentComponent passes prop as name to ChildComponent
- b. ChildComponent Displays name e.g. "Hi <name>"
- 5. Print below array elements using map into the screen **[EASY]** 
  - a. const weekDays = ["Monday", "Tuesday", "Wednesday", "Thursday", "Friday", "Saturday", "Sunday"]
- 6. Create two components **[EASY]**

ParentComponent

ChildComponent

- a. ParentComponent passes prop as name to ChildComponent
- b. ChildComponent Displays converting name to uppercase and print
- c. E.g ParentComponent passes John ChildComponent prints My name is JOHN
- 7. Implement useEffect hook and print all three lifecycle state [EASY]
  - a. E.g Inside mount
  - b. E.g Inside update
  - c. E.g Inside unmount
- 8. Print below array elements using map into the screen **[EASY]** 
  - a. const fruits = ["apple", "banana", "cherry", "bat"]
  - b. Only print fruits it should remove bat and print it
- 9. Print below array elements using map into the screen [EASY]
  - a. let fruits1 = ["apple", "banana"];
  - b. let fruits2 = ["cherry", "orange"];

- c. Merge both fruits array and print it
- 10. Create a basic todo list application: (use useReducer()) [HARD]
  - a. Build a component for adding, displaying, and deleting tasks.
  - b. Use state to manage the list of tasks.
  - c. Add a form for users to input new tasks.
  - d. Display the list of tasks and provide a button to remove them.
  - e. Add a counter for the total number of tasks.
- 11. Design login form which accepts username and password(Two text box) and submit button **[MEDIUM]** 
  - a. On submit button click it should validate username and password and console log if its valid
  - b. Validity check should be simple like username: Admin & password: Pass123
  - c. If any other credentials it should say unauthorized