Module:4(List and Hooks)

1. **Explain Life cycle in Class Component and functional component with Hooks**

Ans. Every Component in React are created (Mounted on the DOM), change by updating and then removed (Unmounted on DOM). This is mentioned as a component lifecycle.

There are three methods in React that defines three phases of components life:-

1. **Mounting:-** In this phase our react component mounts on the DOM. And there are two methods to do it

   1. **componentWillMount():-** This method is called before the component mounts on DOM or we can say before render method is called.

   2. **componentDidMount():-** This methode is called after the component mounted on DOM or we can say after render method is called.

2. **Updating:-** In this phase our component is already created and mounted on DOM. This phase executes when component's state or props are changes or re-rendering take place. And this will execute by User when they will interact with the component (pressing button ,inputs). There are three methods to do it

   1. **componentShouldUpdate():-** This method is called when you want to re-render the component on some condition. By default, it returns true.

   2. **componentWillUpdate():-** This method is called before re-rendering has done and when you want to do some functionalities just before re-rendering take place.

   3. **componentDidUpdate():-**This method is called after the re-rendering has done or we can say after component mounted on DOM.

3. **Unmounting:-** Last phase of component lifecycle. In this phase our component is removed or unmounted from DOM. Only one method is there

1. **componentWillUnmount():-** This method is called before the component Unmounting on DOM. Denoting that it will Unmounted soon or we can say end of the component life cycle.

Example:- Function Component

```
import React,{useEffect} from "react";
```

Mounting:-

```
useEffect(()=>{
  console.log("DidMount")
},[])
```

Unmountiing:-

```
useEffect(()=>{
    console.log("DidMount")
    return () => console.log("WillUnmount")
},[])
```

Updating:-

```
useEffect(()=>{
    return () => console.log("DidUpdate")
},[data.number])
```

Example:- Class Component

Mounting:-

```
componentDidMount(){
    console.log("DidMount")
}
```

Unmounting:-

```
componentWillUnmount(){
  console.log("WillUnmount")
}
```

Updating:-

```
componentDidUpdate(){
  console.log("DidUpdate")
}
```