**B1)** **What is React Js?**

* React is a free and open-source front-end JavaScript library for building user interfaces based on UI components.

**B2) What is NPM in React Js?**

* NPM is short for **node package manager**, an online directory that contains the various already registered open-source packages.

**B3) What is Role of Node Js in react Js ?**

* Node JS is known to be **the most suitable platform for hosting and running web servers for applications built on React**. The two primary reasons for this are; Node uses a node package manager or an NPM to install all new updates and packages.

**B4) What is CLI command In React Js ?**

* ReactCLI is a ReactJS component that provides a simple way to present a command line interface to your user in your web app.

**B5) What is Components In React Js ?**

* Components are **independent and reusable bits of code**. They serve the same purpose as JavaScript functions, but work in isolation and return HTML. Components come in two types, Class components and Function components

**B6) What is Header and Content Components in React Js?**

* The Header is an important element of a website’s design. It’s the first impression of the website. It provides useful links to other areas of the website that the user may want to visit.

**I1) How to install React Js on Windows, linux Operating System?**

### **Installation Reactjs on Windows:**

**Step 1**: Install Node.js installer for windows.

**Step 2**: Open command prompt  to check whether it is completely installed or not type the command:

node -v

If the installation went well it will give you the version you have installed

**Step 3**: Now in the terminal run the below command:

npm install -g create-react-app

It will globally install react app for you. To check everything  went well run the command

create-react-app --version

If everything went well it will give you the installed version of react app.

For Linux OS,

**1.Install nodejs - Setup PPA**

* To get you a more recent version of Node.js installed on ubuntu is to add a PPA (personal package archive) maintained by NodeSource. Open terminal and run below commands

cd ~

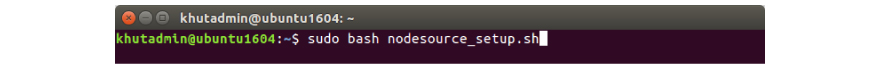
curl -sL https://deb.nodesource.com/setup\_10.x -o nodesource\_setup.sh



* Run the downloaded script using below command

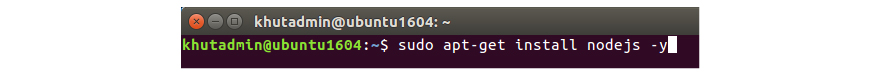
sudo bash nodesource\_setup.sh

The PPA will be added to your configuration and your local package cache will be updated automatically



### **2.Install**

* Run sudo apt-get install nodejs -y to install



### **3.Testing nodejs Installation**

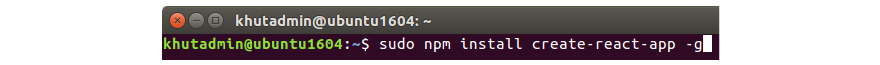
* On terminal run below command to test node

node -v

Now,

We will install create-react-app using npm. On terminal run the install command shown below

npm install -g create-react-app

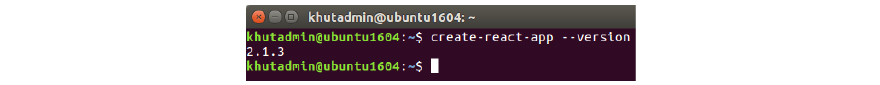


On successful installation you should see the output like above (note your angular/cli version may be different by the time you run this install command)

## Test create-react-app

To test the create-react-app, run below command

create-react-app --version



Congratulations, you have successfully installed create-react-app.

**I2) How to install NPM and How to check version of NPM ?**

you must install Node.js and the npm command line interface using either a Node version manager or a Node installer.

to download the latest version of npm, on the command line, run the following command:

npm install -g npm

To see if you already have Node.js and npm installed and check the installed version, run the following commands:

node -v

npm -v

**I3)** How to Check version of React Js ?

1. Using package.json file
2. Using command line
3. Using version property of default import from React

**I5)** How to change in components of React Js ?  
To change in component we can use lifecycle methods. Each component in React has a lifecycle which you can monitor and manipulate during its three main phases.

The three phases are: **Mounting**, **Updating**, and **Unmounting**.

**I6)** How to Create a List View In React Js?

In React, you will render lists with some type of loop.

The JavaScript map() array method is generally the preferred method.

**I7)** How to Create a Text Input in React Js ?

* Make a component: Form that holds the data for all input fields.
* Share field data through the context API.
* Add methods in the Form component to update(setField) and add new fields(addField).
* Add a method to validate fields and provide few pre-defined validation rules.

**Then,** make a text-input field: TextInput. This component will:

* **Accept initial value and configs from the developer and register itself to the Form.**
* **Be rendered as text-input or textarea based on the props value.**
* **Call custom onChange function after saving its value to the Form(optional).**
* **Validate itself on the field value change(optional).**

**A1)** Write an Command of Update NPM in React Js ?

**Syntax:**

npm update [-g] [<pkg>...]

Here, -g refers to global and pkg refers to package.

**A2)** Write all Command To create Directory and First app In React JS?

Open up your terminal and move to the directory where you want to install the React App. Run the following command in the terminal to get started:

npx create-react-app my-first-react-app

It will take some time to install, and after completion you'll get some information on how to use the application:

npm start  
 Starts the development server.  
 npm run build  
 Bundles the app into static files for production.  
 npm test  
 Starts the test runner.  
 npm run eject  
 Removes this tool and copies build dependencies, configuration files  
 and scripts into the app directory. If you do this, you can’t go back!  
 We suggest that you begin by typing:  
 cd my-first-react-app  
 npm start  
 Happy hacking!

Move to the directory you just created by executing the following command in the terminal:

cd my-first-react-app

**A3)** Write an Command of How to create a your First App as brijesh-app in React js and jay-app in React JS?

* For brijesh-app,

npx create-react-app brijesh-app

* For brijesh-app,

npx create-react-app jay-app

**A4)** Write an Examples How to Change in React JS as Following Output?

import logo from './logo.svg';

import './App.css';

function App() {

  return (

    <div className="App">

    <header className="App-header">

      <img src={logo} className="App-logo" alt="logo" />

      <h1>

        Hello world: Welcome To React Js!!!

      </h1>

      <a

        className="App-link"

        href="https://topsint.com/"

        target="\_blank"

        rel="noopener noreferrer"

      >

        Learn React : Tops Technology Pvt Ltd By Certified Trainer

      </a>

    </header>

  </div>

  );

}

export default App;