**Babel: React code is written with ES6 Javascript and as we know very few browsers are supporting it. So babel will compile our ES6 code to ES5 bundles, so that it will support in all browsers**

**Webpack: Webpack generates all of our code to bundle so that JSX code that we write with react will get converted to browser compatible ES5 code. Then it will run our bundle file with appropriate code.**

**Instll Create –ract-app node pakage using npm:**

**npm install -g create-react-app**

**create react project:**

**create-react-app rayan\_react**

**React DOM : It is responsible for rendering our webpage.**

**React scripts: Will install babel & webpack for us. And it will give webpack node server also**

**Not we will start react application :**

**Npm start**

Remove all the files of **src** folder except index.js file. And clear the content of indexjs file

React make use of elements to describe the user interface about our application

React.createElement('h1',null,'Welcome to React App!');

Firstt tag is html element, 2nd tag is prop and thir tag is content

React elements only describe how the web page is going to look but in real what actually renders our webspage is the DOM

Components: Components are the min building blocks of an application to help us to break down the UI component into small reusable pieces.By combiling all these UI components into a single Main component that’s going to form all of the UI required. And this is called compositional model.

Class way of creating component:

class List extends Component{

render(){

return (

<ol>

{tasks.map((task,index) => <li key={index}>{task}</li>)}

</ol>

)

}

}

class Title extends Component{

render(){

return <h1>Task List</h1>

}

}

class Main extends Component{

render(){

return <div>

<Title/>

<List/>

<List/>

</div>

}

}

ReactDom.render(<Main/>,document.getElementById('root'));

Component models with props:

import React, {Component} from 'react';

import ReactDom from 'react-dom';

class List extends Component{

render(){

console.log('items', this.props.taks);

return (

<ol>

{this.props.tasks.map((task,index) => <li key={index}>{task}</li>)}

</ol>

)

}

}

class Title extends Component{

render(){

return <h1>{this.props.title}</h1>

}

}

class Main extends Component{

render(){

return <div>

<Title title={'To Do List'}/>

<List tasks = {['Anil','Sunil']}/>

<List tasks = {['Nancy','Neha']}/>

</div>

}

}

ReactDom.render(<Main/>,document.getElementById('root'));