JSX:--javascript xml that's allow to write the html inside the java script.

JSX

JavaScript XML (JSX) – Extension to the JavaScript language syntax.

Write XML-like code for elements and components.

JSX tags have a tag name, attributes, and children.

JSX is not a necessity to write React applications.

JSX makes your react code simpler and elegant.

JSX ultimately transpiles to pure JavaScript which is understood by the browsers.

```
import React from 'react';
▲ OPEN EDITORS 1 UNSAVED
                              import logo from './logo.svg';
 X JS App.js src
                  M
                              import './App.css';

    ■ Untitled-1

                              function App() {
return (
 node_modules
                                   <div className="App">
                          6
 public
                                     <header className="App-header">
                                       <img src={logo} className="App-logo" alt="logo" />
 9
                                     <h1>JSX With React</h1>
  # App.css
                                     </header>
                         10
                  M
  JS App.js
                                   div>
                         11
  JS App.test.js
                         12
  JS con.js
                         13
   # index.css
                         14
  JS index.js
                              export default App;
                         15
                         16
   🖆 logo.svg
```

What's the difference between props and state in ReactJS?

•While props and state both hold information relating to the component, they are used differently and should be kept separate. props contains the information set by the parent component (although defaults can be set) and should not be changed. state contains "private" information for the component to initialise, change]

Create a file inside Component folder:-

 Hello.js:--jsx(javascript & xml) code we have to put inside that file

```
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                                                              Hello.is - React - Visual Studio Co
JS App.js
                 JS Hello.js
                               ×
hello-world ▶ src ▶ components ▶ JS Hello.js ▶ ...
        import React from 'react'
        const Hello = () \Rightarrow {
           return (
             <div>
                <h1>Hello Vishwas</h1>
             </div>
  10
        export default Hello
  11
```

```
App.js - React - Visual Studio Code
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      JS App.js
                      JS Hello.js
      hello-world ▶ src ▶ JS App.js ▶ 🎏 App ▶ 🕅 render
              import React, { Component } from 'react';
              import logo from './logo.svg';
              import './App.css';
Y
              import Greet from './components/Greet'
              import Welcome from './components/Welcome'
              import Hello from './components/Hello'
              class App extends Component {
中
                render() {
        10
                  return (
                    <div className="App">
        11
        12
                     {/* <Greet /> */}
                     {/* <Welcome /> */}
        13
                     Hello /
        14
                    </div>
        15
        16
                  );
        17
        18
        19
        20
              export default App:
```

```
File Edit Selection View Go Debug Terminal Help
                                                         Hello.js - React - Visual Studio Code
  JS App.js
                  JS Hello.js
                              ×
   hello-world ▶ src ▶ components ▶ JS Hello.js ▶ 1 Hello
          import React from 'react'
          const Hello = () \Rightarrow \{
                 return (
            11
                <div>
                <h1>Hello Vishwas</h1>
                </div>
            return React.createElement(
    10
               'div',
    11
              null,
              React.createElement('h1', null, 'Hello Vishwas')
    12
            13
    14
    15
          export default Hello
    16
    17
```

Without jsx:-

```
• Hello.js - React - Visual Studio Code
   File Edit Selection View Go Debug Terminal Help
                     JS Hello.js
     JS App.js
hello-world ▶ src ▶ components ▶ JS Hello.js ▶ 🖾 Hello
             import React from 'react'
             const Hello = () \Rightarrow \{
                     return (
               // <div>
               // <h1>Hello Vishwas</h1>
               // </div>
               return React.createElement(
中
        10
                  'div',
                  {id: 'hello', className: 'dummyClass'},
        11
                  React.createElement('h1', null, 'Hello Vishwas')
        12
        13
        14
        15
             export default Hello
```

JSX differences

Class -> className

for -> htmlFor

camelCase property naming convention

- onclick -> onClick
- tabindex -> tabindex

```
JS App.js
               JS Greet is
hello-world ▶ src ▶ JS App.js ▶ 🕏 App ▶ 😭 render
       import React, { Component } from 'react';
       import './App.css';
       import Greet from './components/Greet'
       import Welcome from './components/Welcome'
       import Hello from './components/Hello'
       class App extends Component {
         render() {
            return (
  10
              <div className="App">
  11
               <Greet name="Bruce" />
               <Greet name="Clark"
  12
              <Greet name="Diana" />
  13
              { /* < Welcome /> */}
  14
  15
              </div>
  16
  17
```

```
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                                                             Greet.js - React - Visual Studio Code
       JS App.js
                       JS Greet.js
 0
       hello-world ▶ src ▶ components ▶ JS Greet.js ▶ 🖾 Greet
               import React from 'react'
              const Greet = props ⇒ {
          3
                 console.log(props)
                 return <h1>Hello Vishwas</h1>
              Ð
              export default Greet
 中
         Edit
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    Greet.js - React - Visual Stud

       JS App.js
                        JS Greet.js
G
       hello-world ▶ src ▶ components ▶ JS Greet.js ▶ 🖾 Greet
               import React from 'react'
Q
               const Greet = props ⇒ {
                  console.log(props)
                  return <h1>Hello {props.name} / h1
          5
               export default Greet
中
```

```
Edit Selection View Go Debug Terminal Help
                                                        App.is - React - Visual Studio Code
     JS App.js
                    JS Greet.is
O
      import React, { Component } from 'react';
             import './App.css';
             import Greet from './components/Greet'
Ÿ
             import Welcome from './components/Welcome'
             import Hello from './components/Hello'
⑻
             class App extends Component {
               render() {
                 return (
中
                   <div className="App">
       10
                    <Greet name="Bruce" heroName="Batman" />
       11
                   <Greet name="Clark" heroName="Superman" />
       12
                    Greet name="Diana" heroName="Wonder Woman" /
       13
       14
                   {/* <Hello /> */}
       15
                   </div>
                 );
    File Edit Selection View Go Debug Terminal Help
                                                           Greet.js - React - Visual Studio Code
      JS App.js
                     JS Greet.js
ð
       hello-world ▶ src ▶ components ▶ JS Greet.js ▶ 🖾 Greet
              import React from 'react'
              const Greet = props ⇒ {
Y
                console.log(props)
                return <h1>Hello {props.name} a.k.a {|props.heroName}|</h1>
         5
              avant default Greet
```

```
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                                                          App.js - React - Visual Studio Code
     JS App.js
                    JS Greet.js
      hello-world ▶ src ▶ JS App.js ▶ 🍕 App ▶ 🕅 render
             import React, { Component } from 'react'
             import './App.css'
             import Greet from './components/Greet'
             import Welcome from './components/Welcome'
             import Hello from './components/Hello'
         5
             class App extends Component {
               render() {
                 return (
中
       10
                   <div className="App">
                     <Greet name="Bruce" heroName="Batman">
       11
       12
                       This is children props
       13
                     </Greet>
                     <Greet name="Clark" heroName="Superman" />
       14
                     <Greet name="Diana" heroName="Wonder Woman" />
       15
                     {/* <Welcome /> */}
       16
                      /* <Hello /> */}
       17
```

```
hello-world ▶ src ▶ components ▶ JS Greet.js ▶ 🖭 Greet
       import React from 'react'
  1
  3
       const Greet = props \Rightarrow {
         console.log(props)
  4
  5
         return (
  6
            <div>
              <h1>
  8
                Hello {props.name} a.k.a {props.heroName}
  9
              </h1>
              {props.children}
 10
            div>
 11
 12
 13
```

```
JS App.js
          ×
              JS Greet is
hello-world ▶ src ▶ JS App.js ▶ 🏘 App ▶ 🕅 render
       import React, { Component } from 'react'
       import './App.css'
       import Greet from './components/Greet'
       import Welcome from './components/Welcome'
       import Hello from './components/Hello'
       class App extends Component {
         render() {
           return (
 10
             <div className="App">
 11
               <Greet name="Bruce" heroName="Batman">
 12
                 This is children props
 13
               </Greet>
               <Greet name="Clark" heroName="Superman">
 14
                 <button>Action / button>
 15
               </Greet>
 16
               <Greet name="Diana" heroName="Wonder Woman" />
```

```
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    App.is - React - Visual Studio Coc

     JS App.js
                     JS Greet.is
      hello-world ▶ src ▶ JS App.js ▶ 4 App ▶ 1 render
             import Welcome from './components/Welcome
             import Hello from './components/Hello'
             class App extends Component {
               render() {
                  return (
                    <div className="App">
        10
        11
                      <Greet name="Bruce" heroName="Batman">
        12
                        This is children props
中
        13
                      </Greet>
        14
                      <Greet name="Clark" heroName="Superman">
                        <button>Action/button>
        15
        16
                      </Greet>
                      <Greet name="Diana" heroName="Wonder Woman" />
        17
                      <Welcome name="Bruce" heroName="Batman" />
        18
                      <Welcome name="Clark" heroName="Superman" />
                      | Welcome name="Diana" heroName="Wonder Woman" / |
        20
```

```
File Edit Selection View Go Debug Terminal Help Welcome.js - React - Visual Studio Code —

JS App.js JS Welcome.js × JS Greet.js

hello-world > src > components > JS Welcome.js > * Welcome > * render

import React, { Component } from '.react'

class Welcome extends Component {

render() {

return <h1>Welcome {this.props.name} a.k.a {this.props.heroName} / h1
}
```

Thanks