

HOC :Higher-order-components

A higher-order component (HOC) is an advanced technique in React for reusing component logic. HOCs are not part of the React API, per se. They are a pattern that emerges from React's compositional nature.

Concretely, a higher-order component is a function that takes a component and returns a new component.

Whereas a component transforms props into UI, a higher-order component transforms a component into another component.

Hoc is a pure function with zero side effects and does not modify the input component

Hoc.js

```
import React from 'react'

const Hoc=(Component)=> {
  return (
    class extends React.Component{
      state={
        auth:false
      }
      render(){
        return (
          <div>
            {this.state.auth ? <Component/>:<h1>Please Login</h1>}
          </div>
        )
      }
    }
  )
}

export default Hoc
```

APP.JS

```
import React from 'react'
import Hoc from './Hoc';

const App=()=>> {
  return (
```

```

<div>
  <h1>Hello welcome to Tuplescale</h1>
</div>
)
}

```

```
export default Hoc(App);
```

output

Please Login

```

import React from 'react'
import Hoc from './Hoc';

```

```

const App=(props)=> {
  return (
    <div>
      <h1>Hello welcome to Tuplescale {props.name}</h1>
    </div>
  )
}

```

```
export default Hoc(App);
```

```
import React from 'react'
```

```

const Hoc=(Component)=> {
  return (
    class extends React.Component{
      state={
        auth:true
      }
      render(){
        return (
          <div>
            {this.state.auth ? <Component name="sai"/>:<h1>Please Login</h1>}
          </div>
        )
      }
    }
  )
}

```

```
}
```

```
export default Hoc
```

output

Hello Welcome to Tuplescale sai