高阶函数

1 普通的高阶函数

```
import React from 'react'
 1
 2
 3
    export default (wrappeCompoent, name) => {
      class NewComponent extends React.Component {
 4
 5
        constructor () {
 6
           super()
 7
          this.state = {
 8
            data: null
 9
          }
10
        }
11
12
        componentWillMount () {
13
          let data = localStorage.getItem(name)
14
          this.setState({data})
15
        }
16
17
        render () {
18
           return <WrappeCompoent data={ this.state.data } />
19
        }
20
      }
21
22
      return NewComponent
23
    }
```

2 复杂的高阶组件

```
import React from 'react';
 2
   import PropTypes from 'prop-types'
   // connect 现在是接受一个参数 mapStateToPRops 然后返回一个函数,这个函数接受一个参数
   为组件
   // 这个返回的函数才是高阶组件
   // eslint-disable-next-line no-undef
   export const connect = (mapStateToProps, mapDispatchToProps) =>
    (WrappedComponent) => {
 8
     class Connect extends React.Component {
9
        static contextTypes = {
10
         store: PropTypes.object
       }
11
12
13
       constructor () {
         super()
15
         this.state = {
16
           allProps: {}
17
         }
18
       }
19
```

```
20
        componentWillMount () {
21
          const { store } = this.context
          this._updateProps()
22
23
          store.subscribe( () => this._updateProps() )
24
        }
25
26
        _updateProps () {
27
          const { store } = this.context
28
         // 额外传入this.props
29
         let stateProps = mapStateToProps
30
           ? mapStateToProps(store.getState(), this.props)
31
            : {} // 防止 mapStateToProps 没有传入
32
          let dispatchProps = mapDispatchToProps
33
           ? mapDispatchToProps(store.dispatch, this.props)
34
            : {} // 防止 mapDispatchToProps 没有传入
35
          this.setState({
36
           // 整合普通的props 和从 state 生成的props
37
           allProps: {
38
             ...stateProps,
39
             ...this.props,
              ...dispatchProps
40
           }
41
42
         })
        }
43
44
       // 接收一个组件作为参数 把此组件当成子组件进行渲染
45
46
        render () {
47
         // { ...stateProps 意思就是把这个对象里面的属性全部通过props方式传递进去 }
48
          return <WrappedComponent {...this.state.allProps} />
49
       }
50
      }
51
     // 返回一个组件
52
53
     return Connect
54
   }
55
```

2.1 使用

```
import React from 'react'
   import PropTypes from 'prop-types'
 2
   import ThemeSwitch from './ThemeSwitch'
   import { connect } from './Connect'
 4
 5
   class Content extends React.Component {
 6
 7
     static propTypes = {
 8
       themeColor: PropTypes.string
9
     }
10
     render () {
11
12
       return (
13
14
           15
            React.js 小书内容
16
           17
           <ThemeSwitch />
18
         </div>
```

```
19 )
20
    }
21 }
22
23 const mapStateToProps = (state) => {
24
   return {
25
      themeColor: state.themeColor
    }
26
27 }
28
29 const mapDispatchToProps = (dispatch) => {
30
    return {
    onSwitchColor: (color) => {
31
       dispatch({ type: 'CHANGE_COLOR', themeColor: color })
32
33
34
    }
   }
35
36
37 export default Content = connect(mapStateToProps, mapDispatchToProps)
   (Content)
38
```