```
<!DOCTYPE html>
    <html Lang="en">
        <head>
            <meta charset="UTF-8">
 5
            <meta http-equiv="X-UA-Compatible" content="IE=edge">
 6
            <meta name="viewport" content="width=device-width, initial-scale=1.0">
            <title>React_W2_GuGuDan</title>
8
        </head>
10
        <body>
11
            <div id="root"></div>
12
            <script src = "./dist/app.js"></script>
        </body>
13
    </html>
14
```

```
1
2
      "name": "gugudan",
3
      "version": "1.0.0",
4
      "description": "",
5
      "main": "index.js",
      "scripts": {
6
7
        "dev" : "webpack"
8
9
      "author": "CJH",
10
      "license": "ISC",
      "dependencies": {
11
12
        "react": "^17.0.2",
        "react-dom": "^17.0.2"
13
14
      },
15
      "devDependencies": {
16
        "@babel/core": "^7.15.5",
        "@babel/preset-env": "^7.15.4",
17
        "@babel/preset-react": "^7.14.5",
18
        "babel-loader": "^8.2.2",
19
         "webpack": "^5.52.0",
20
         "webpack-cli": "^4.8.0"
21
22
23
    }
24
```

```
const path = require('path');
    const { webpack } = require('webpack');
    const LoaderOptionsPlugin = require('webpack/lib/LoaderOptionsPlugin');
 4
 5
    module.exports = {
 6
        mode: 'development',
 7
        devtool: 'eval', //서비스시 hidden-source-map
 8
        resolve: {
            extensions: ['.jsx', '.js'],
 9
        },
10
11
12
        entry: {
13
            app: './client',
14
15
        },
        module: {
16
            rules: [{
17
                test: /\.jsx?$/,
18
                loader: 'babel-loader',
19
20
                options: {
                     presets: [
21
                         ['@babel/preset-env',{
22
23
                             targets: {
                                 browsers:['> 5% in KR', 'last 2 chrome versions'],
24
25
                             },
26
                             debug: true,
27
                         }],
                         '@babel/preset-react'
28
29
                     plugins: [],
30
31
32
33
            }],
34
        plugins: [
35
            new LoaderOptionsPlugin({ debug : true }),
36
37
        ],
        output: {
38
            filename: 'app.js',
39
            path: path.join(__dirname, "dist"),
40
41
42
43
        },
44
```

```
const React = require('react');
    const {useRef, useState} = React;
 3
    const GuGuDan = () => {
        const [first, setFirst] = useState(Math.ceil(Math.random() * 9));
 5
        const [second, setSecond] = useState(Math.ceil(Math.random() * 9));
 6
        const [value, setValue] = useState("");
        const [result, setResult] = useState("");
 8
9
        const inputRef = useRef(null);
10
        const onChangeInput = (e) => {
11
12
            setValue(e.target.value)
13
14
        const onSubmitform = (e) => {
15
16
            e.preventDefault();
            if (parseInt(value) === first * second) {
17
                setResult("정답!" + value);
18
                setFirst(Math.ceil(Math.random()*9));
19
                setSecond(Math.ceil(Math.random()*9));
20
                setValue("");
21
22
                inputRef.current.focus();
23
            }else{
                setResult("땡!");
24
25
                setValue("");
26
                inputRef.current.focus();
27
28
29
        return (
30
            <>
31
                <div> {first} X {second} = ? </div>
                <form onSubmit = {onSubmitform}>
32
33
                     <input ref = {inputRef} onChange = {onChangeInput} value = {value} />
                    <button>입력</button>
34
35
                </form>
36
                <div id = "result">{result}</div>
37
            </>
38
        );
39
40
    module.exports = GuGuDan;
41
```

```
const React = require('react');
const ReactDOM = require('react-dom');
const GuGuDan = require('./GuGuDan');
ReactDOM.render(<GuGuDan />, document.querySelector('#root'));
```