연습문제 04-1 풀이

index.js

```
import React from 'react';
import ReactDOM from 'react-dom/client';
import App from './App';
import { BrowserRouter } from 'react-router-dom';

const root = ReactDOM.createRoot(document.getElementById('root'));
root.render(
    <React.StrictMode>
        <BrowserRouter>
            <App />
        </BrowserRouter>
    </React.StrictMode>
);
```

App.js

```
import React from 'react';
import { Link, Routes, Route } from 'react-router-dom';

import GradeTable from './pages/GradeTable';
import Meta from './components/Meta';

const App = () => {
    return (
        <div>
            <Meta />
            <h1>성적표</h1>
            <nav>
                <Link to="/grade_table/1">1학년</Link> | 
                <Link to="/grade_table/2">2학년</Link> | 
                <Link to="/grade_table/3">3학년</Link> | 
                <Link to="/grade_table/4">4학년</Link>
            </nav>
            <hr />

            <Routes>
                <Route path="/grade_table/:level" element={<GradeTable/>}
/>
            </Routes>
        </div>
    );
};

export default App;
```

/pages/GradeTable.js

```
import React from 'react';

import { useParams } from 'react-router-dom';
import GradeItem from '../components/GradeItem';
import Meta from '../components/Meta';
import GradeData from '../GradeData';

const GradeTable = () => {

    // URL을 통해 전달된 path 파라미터 추출
    const {level} = useParams();

    // 파라미터를 활용하여 JSON의 key이름 조합
    const key = `${level}학년`;

    // JSON에서 필요한 데이터 추출
    const currentData = GradeData[key];

    return (
        <div>
            <Meta title={`${key} ::: React 연습문제`} />

            <h2>{key}</h2>
            <table border="1" cellPadding="7">
                <thead>
                    <tr align="center">
                        <th>이름</th>
                        <th>성별</th>
                        <th>국어</th>
                        <th>영어</th>
                        <th>수학</th>
                        <th>과학</th>
                        <th>총점</th>
                        <th>평균</th>
                    </tr>
                </thead>
                <tbody>
                    {currentData.map((v, i) => {
                        return (<GradeItem
                            key={i}
                            name={v.이름}
                            sex={v.성별}
                            kor={v.국어}
                            eng={v.영어}
                            math={v.수학}
                            sinc={v.과학} />)
                    })}
                </tbody>
```

```
                    </table>
                </div>
            );
        };


        export default GradeTable;
```

/components/Meta.js

```jsx
import React from 'react';
import { Helmet } from 'react-helmet';

const Meta = (props) => {
    return (
        <Helmet>
            <meta charset='utf-8' />
            <title>{props.title}</title>
            {/* SEO 태그 */}
            <meta name='description' content={props.description} />
            <meta name='keywords' content={props.keywords} />
            <meta name='author' content={props.author} />
            <meta property='og:type' content='website' />
            <meta property='og:title' content={props.title} />
            <meta property='og:description' content={props.description} />
            <meta property='og:url' content={props.url} />
        </Helmet>
    );
};

Meta.defaultProps = {
    title: 'React 연습문제',
    description: 'React 연습문제 입니다.',
    keywords: 'React',
    author: '호쌤',
    url: window.location.href
};

export default Meta;
```

/components/GradeItem.js

```jsx
import React from 'react';

import PropTypes from 'prop-types';

const GradeItem = ({name, level, sex, kor, eng, math, sinc}) => {
    const sum = parseInt(kor + eng + math + sinc);
    const avg = parseInt(sum / 4);
```

```jsx
    return (
        <tr align="center">
            <td><strong>{name}</strong></td>
            <td>{sex}</td>
            <td>{kor}</td>
            <td>{eng}</td>
            <td>{math}</td>
            <td>{sinc}</td>
            <td><strong>{sum}</strong></td>
            <td><strong>{avg}</strong></td>
        </tr>);
};

GradeItem.propTypes = {
    name: PropTypes.string.isRequired,
    sex: PropTypes.string.isRequired
};

GradeItem.defaultProps = {
    kor: 0,
    eng: 0,
    math: 0,
    sinc: 0
};

export default GradeItem;
```