브라우저에서 4000번 포트로 접근했을 때(localhost:4000) 도커 컨테이너 안에서 3000번 포트를 이용해서 실행되고 있는 리액트 앱에 접근 할 수 있게 해주세요. (도커 파일과 그 파일을 이용해서 리액트 앱을 실행하는 명령어를 작성해주세요.)

```
1. 도커파일 작성
2. 명령어를 이용한 이미지 빌드 및 컨테이너 실행
```

1. 도커 파일 작성

dockerfile

```
FROM node:16-alpine
WORKDIR /usr/src/app
COPY package.json ./
RUN npm install
COPY ./ ./
CMD ["npm", "run", "start"]
```

2. 명령어를 이용한 이미지 빌드 및 컨테이너 실행

```
docker build ./
docker run -p 4000:3000 sha256:02e3d5ee7b5fbe761d488274f6945701dace42a076947
```

```
react-basic-app — -zsh — 80×24

nojinhyeon@nojinhyeon-ui-MacBookPro react-basic-app % docker build ./

[+] Building 126.0s (10/10) FINISHED

=> [internal] load build definition from Dockerfile 0.0s
=> => transferring dockerfile: 159B 0.0s
=> [internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [internal] load metadata for docker.io/library/node:16-alpine 2.3s
=> [internal] load build context 5.5s
=> => transferring context: 97.30MB 5.3s
=> [1/5] FROM docker.io/library/node:16-alpine@sha256:2c6c59cf4d34d4f937 0.0s
=> CACHED [2/5] WORKDIR /usr/src/app 0.0s
=> [3/5] COPY package.json ./ 0.5s
=> [4/5] RUN npm install 94.5s
=> [5/5] COPY ./ 9.9s
=> exporting to image 13.2s
=> => exporting layers 13.2s
=> => writing image sha256:02e3d5ee7b5fbe761d488274f6945701dace42a076947 0.0s

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
nojinhyeon@nojinhyeon-ui-MacBookPro react-basic-app %
```

```
    e = 0 = 1 react-basic-app - com.docker.cli docker run -p 4000:3000 sha256:02e3...

> react-basic-app@0.1.0 start
> react-scripts start
 (node:26) [DEP_WEBPACK_DEV_SERVER_ON_AFTER_SETUP_MIDDLEWARE] DeprecationWarning:
  'onAfterSetupMiddleware' option is deprecated. Please use the 'setupMiddlewares
(Use `node --trace-deprecation ...` to show where the warning was created) (node:26) [DEP_WEBPACK_DEV_SERVER_ON_BEFORE_SETUP_MIDDLEWARE] DeprecationWarning : 'onBeforeSetupMiddleware' option is deprecated. Please use the 'setupMiddleware'
Starting the development server...
Compiled successfully!
 You can now view react-basic-app in the browser.
   Local:
                             http://localhost:3000
   On Your Network: http://172.17.0.2:3000
Note that the development build is not optimized.
To create a production build, use npm run build.
assets by path static/ 1.49 MiB
   asset static/js/bundle.js 1.48 MiB [emitted] (name: main) 1 related asset
   asset static/js/node_modules_web-vitals_dist_web-vitals_js.chunk.js 6.94 KiB
emitted] 1 related asset
   asset static/media/logo.6ce24c58023cc2f8fd88fe9d219db6c6.svg 2.57 KiB [emitted
] (auxiliary name: main)
asset index.html 1.67 KiB [emitted]
asset asset-manifest.json 546 bytes [emitted] runtime modules 31.3 KiB 15 modules
modules by path ./node_modules/ 1.35 MiB 99 modules modules by path ./src/ 18 KiB
   modules by path ./src/*.css 8.82 KiB
modules by path ./src/*.css o.oz kib
    ./src/index.css 2.72 kiB [built] [code generated]
    ./node_modules/css-loader/dist/cjs.js??ruleSet[1].rules[1].oneOf[5].use[1]!./
/node_modules/postcss-loader/dist/cjs.js??ruleSet[1].rules[1].oneOf[5].use[2]!./
node_modules/source-map-loader/dist/cjs.js!./src/index.css 1.37 KiB [built] [cod
e generated]
 ./src/App.css 2.72 KiB [built] [code generated]
./node_modules/css-loader/dist/cjs.js??ruleSet[1].rules[1].oneOf[5].use[1]!./node_modules/postcss-loader/dist/cjs.js??ruleSet[1].rules[1].oneOf[5].use[2]!./
node_modules/source-map-loader/dist/cjs.js!./src/App.css 2 KiB [built] [code gen
erated1
   modules by path ./src/*.js 5.56 KiB
    ./src/index.js 1.74 KiB [built] [code generated]
./src/App.js 2.45 KiB [built] [code generated]
./src/reportWebVitals.js 1.37 KiB [built] [code generated]
./src/logo.svg 3.61 KiB [built] [code generated]
 webpack 5.69.0 compiled successfully in 13279 ms
Compiling..
Compiled successfully!
assets by status 9.51 KiB [cached] 2 assets
assets by status 1.48 MiB [emitted]
assets by chunk 1.48 MiB [emitted]
asset static/js/bundle.js 1.48 MiB [emitted] (name: main) 1 related asset
asset main.b608cda0c78e3a912e8d.hot-update.js 366 bytes [emitted] [immutable
   [hmr] (name: main) 1 related asset
assets by path *.json 699 bytes
  asset asset-manifest.json 671 bytes [emitted]
  asset main.b608cda0c78e3a912e8d.hot-update.json 28 bytes [emitted] [immutabl]
e] [hmr]
asset index.html 1.67 KiB [emitted]
Entrypoint main 1.48 MiB (1.5 MiB) = static/js/bundle.js 1.48 MiB main.b608cda0c
78e3a912e8d.hot-update.js 366 bytes 3 auxiliary assets cached modules 1.37 MiB [cached] 107 modules runtime modules 31.3 KiB 15 modules
webpack 5.69.0 compiled successfully in 319 ms
```

