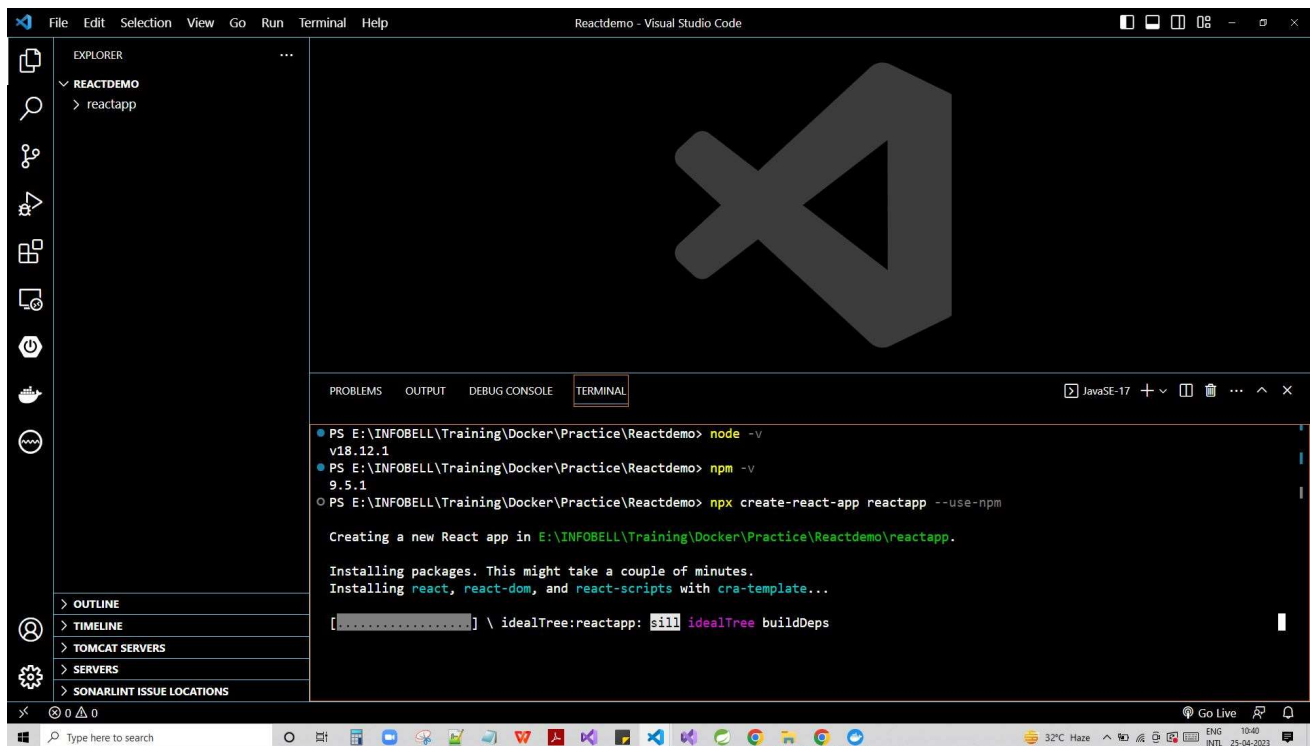


- Docker with React Application

// Creating a React Application (npx create react-app)



The screenshot shows the Visual Studio Code interface with the Explorer sidebar on the left displaying the file structure of a project named 'REACTDEMO' with a subdirectory 'reactapp'. The main editor area is empty, showing the VS Code logo. The bottom panel contains the 'TERMINAL' tab, which shows the following commands and output:

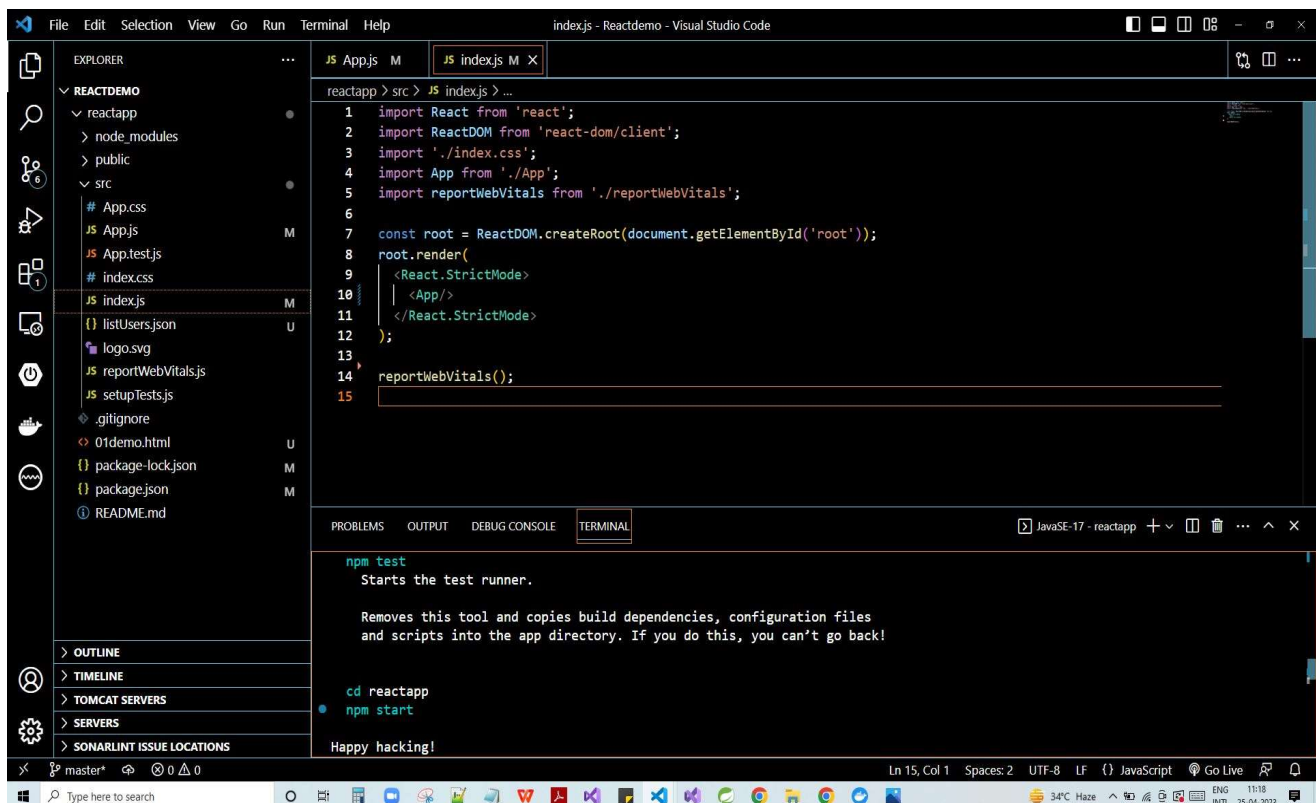
```
PS E:\INFOBELL\Training\Docker\Practice\Reactdemo> node -v
v18.12.1
PS E:\INFOBELL\Training\Docker\Practice\Reactdemo> npm -v
9.5.1
PS E:\INFOBELL\Training\Docker\Practice\Reactdemo> npx create-react-app reactapp --use-npm

Creating a new React app in E:\INFOBELL\Training\Docker\Practice\Reactdemo\reactapp.

Installing packages. This might take a couple of minutes.
Installing react, react-dom, and react-scripts with cra-template...

[.....] \ idealTree:reactapp: sill idealTree buildDeps
```

// React Application created with index.js and App.js



The screenshot shows the Visual Studio Code interface with the Explorer sidebar on the left displaying the file structure of a project named 'REACTDEMO' with a subdirectory 'reactapp'. The main editor area shows the 'index.js' file with the following code:

```
1 import React from 'react';
2 import ReactDOM from 'react-dom/client';
3 import './index.css';
4 import App from './App';
5 import reportWebVitals from './reportWebVitals';
6
7 const root = ReactDOM.createRoot(document.getElementById('root'));
8 root.render(
9   <React.StrictMode>
10     <App />
11   </React.StrictMode>
12 );
13
14 reportWebVitals();
15
```

The bottom panel contains the 'TERMINAL' tab, which shows the following commands and output:

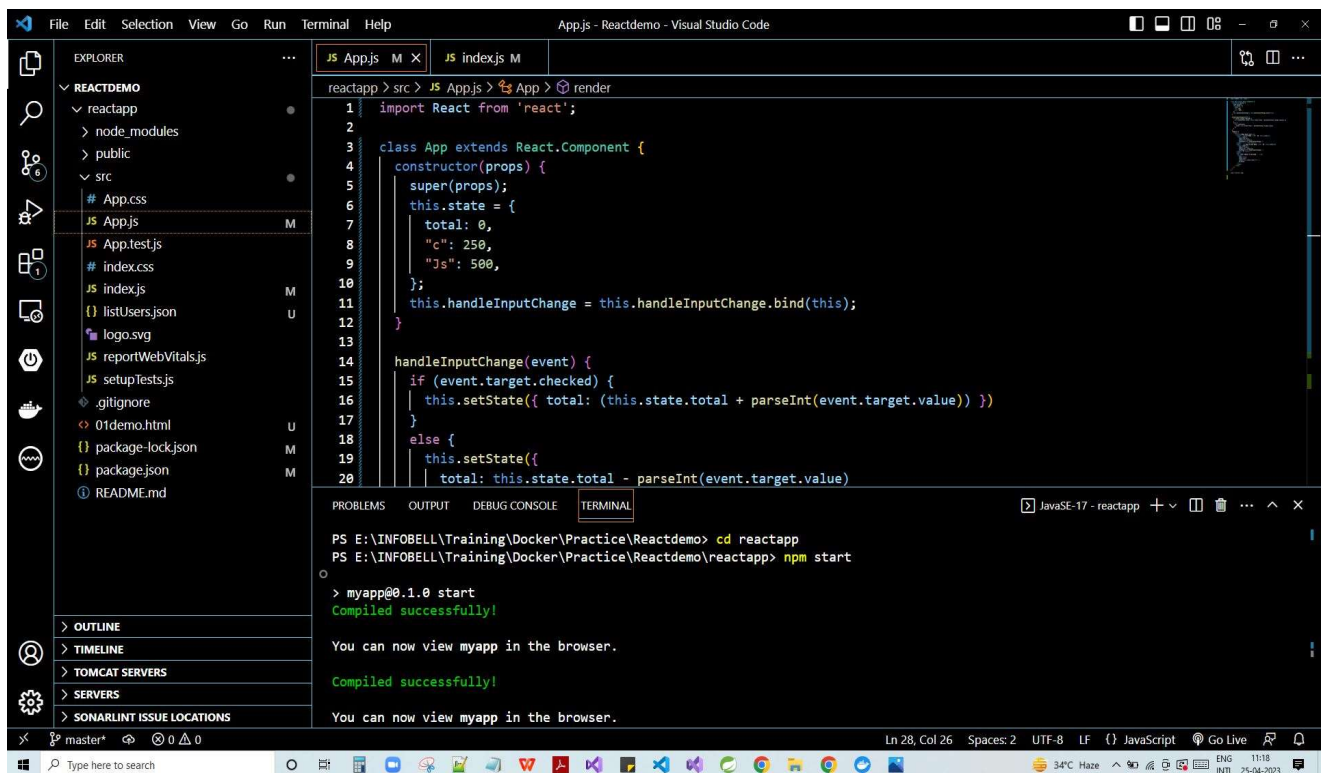
```
npm test
Starts the test runner.

Removes this tool and copies build dependencies, configuration files
and scripts into the app directory. If you do this, you can't go back!

cd reactapp
npm start

Happy hacking!
```

// Starting the app on localhost (npm start)



```
reactapp > src > JS App.js > App > render
1  import React from 'react';
2
3  class App extends React.Component {
4    constructor(props) {
5      super(props);
6      this.state = {
7        total: 0,
8        "c": 250,
9        "js": 500,
10     };
11   }
12   this.handleChange = this.handleChange.bind(this);
13
14   handleChange(event) {
15     if (event.target.checked) {
16       this.setState({ total: (this.state.total + parseInt(event.target.value)) })
17     }
18     else {
19       this.setState({
20         total: this.state.total - parseInt(event.target.value)
```

PS E:\INFOBELL\Training\Docker\Practice\Reactdemo> cd reactapp  
PS E:\INFOBELL\Training\Docker\Practice\Reactdemo\reactapp> npm start

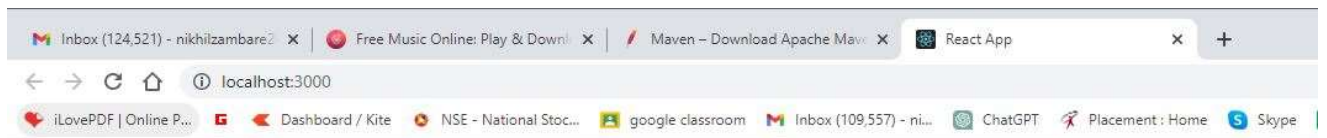
> myapp@0.1.0 start  
Compiled successfully!

You can now view myapp in the browser.

Compiled successfully!

You can now view myapp in the browser.

// Running React Application on web browser (localhost:3000)



## Book Store Cart

**C++ Book :**

Rs. 250 ☒

**Java Script Book :**

Rs. 500 ☐

**Total amount to be paid :**

250

// Docker file created in reactapp directory

```
1 FROM node:alpine
2 WORKDIR /reactapp
3 COPY package.json ./
4 COPY package-lock.json ./
5 RUN npm install
6 COPY . .
7 EXPOSE 3000
8 CMD [ "npm", "start" ]
```

reactapp > Dockerfile > ...

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

#5 52.79 npm ERR! path /reactapp/package.json  
#5 52.79 npm ERR! errno -2  
#5 52.79 npm ERR! enoent ENOENT: no such file or directory, open '/reactapp/package.json'  
#5 52.79 npm ERR! enoent This is related to npm not being able to find a file.  
#5 52.79 npm ERR! enoent  
#5 52.79  
#5 52.79 npm ERR! A complete log of this run can be found in: /root/.npm/\_logs/2023-04-25T06\_13\_59\_681Z-debug-0.log  
-----  
executor failed running [/bin/sh -c npm install]: exit code: 254  
PS E:\INFOBELL\Training\Docker\Practice\Reactdemo\reactapp>

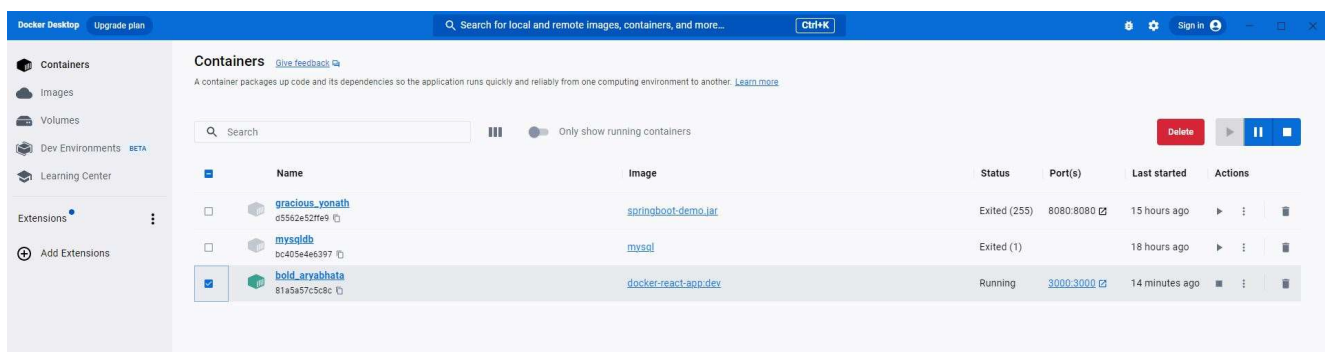
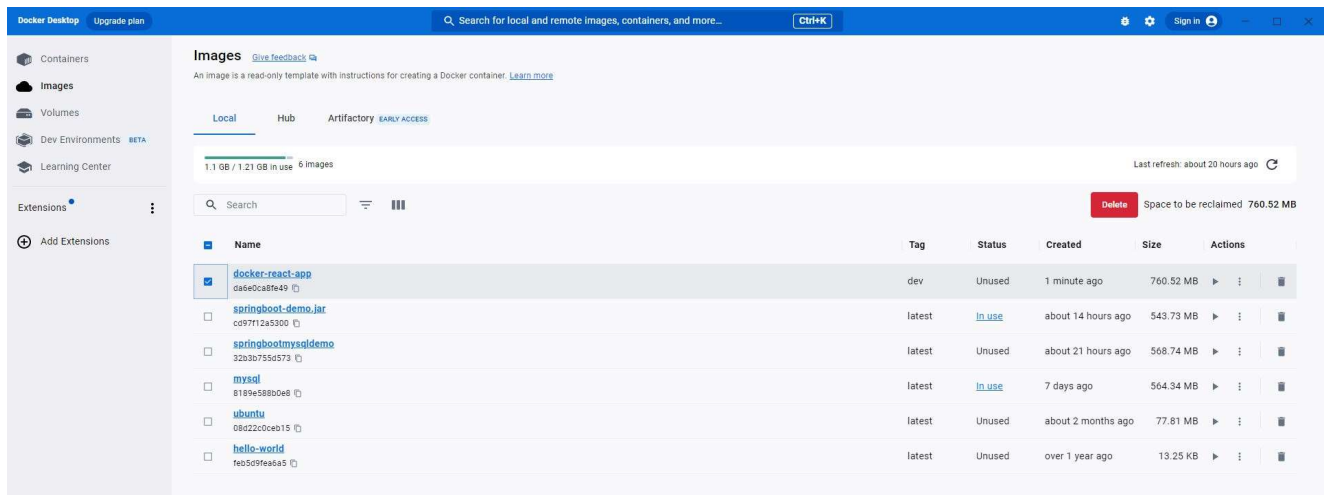
// Building an image and Container docker-react-app

```
1 FROM node:alpine
2 WORKDIR /reactapp
3 COPY package.json ./
4 COPY package-lock.json ./
5 RUN npm install
6 COPY . .
7 EXPOSE 3000
8 CMD [ "npm", "start" ]
```

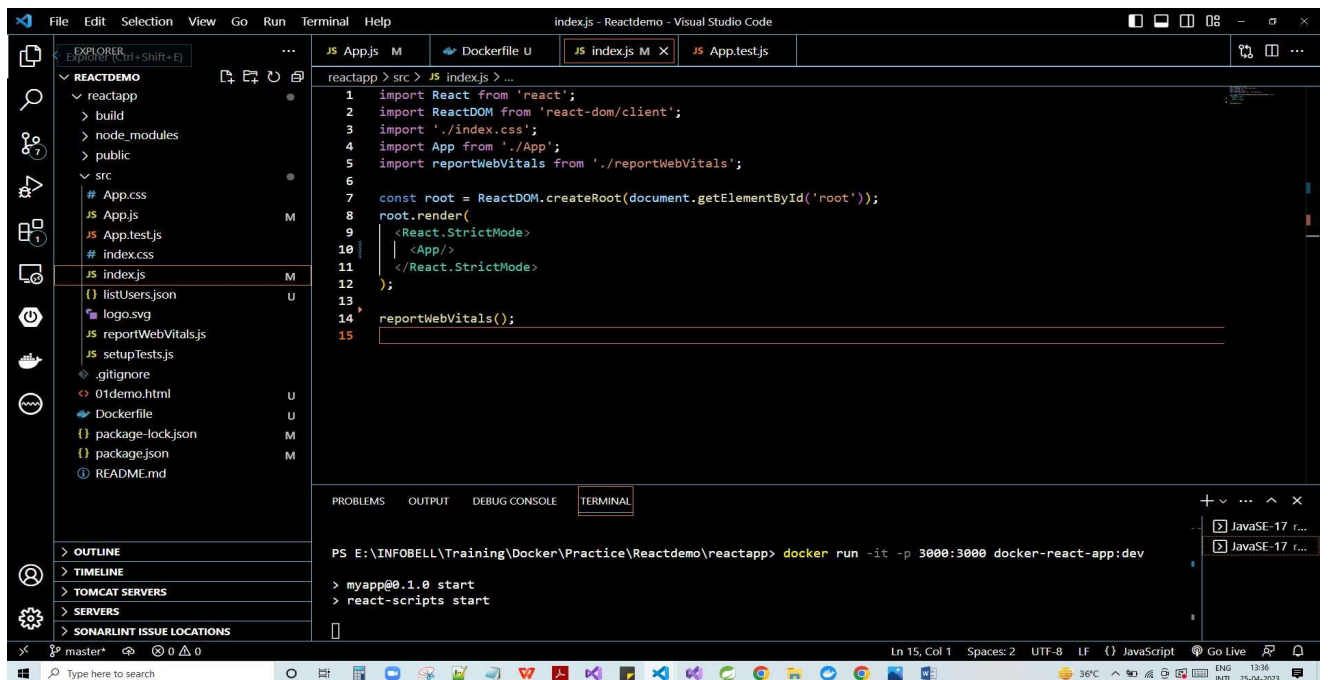
reactapp > Dockerfile > ...

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

PS E:\INFOBELL\Training\Docker\Practice\Reactdemo> cd reactapp  
PS E:\INFOBELL\Training\Docker\Practice\Reactdemo\reactapp> docker build -t docker-react-app:dev .  
[+] Building 11.8s (2/3)  
=> [internal] load build definition from Dockerfile 2.1s  
[+] Building 12.4s (2/3)  
=> [internal] load build definition from Dockerfile 2.1s  
[+] Building 404.9s (7/8)  
=> [internal] load build definition from Dockerfile 2.1s  
=> transferring dockerfile: 136B 1.3st  
=> [internal] load .dockerignore 1.0s  
=> transferring context: 2B 0.0st



// Running the Container docker-react-app:dev





## Book Store Cart

**C++ Book :**

Rs. 250 ☒

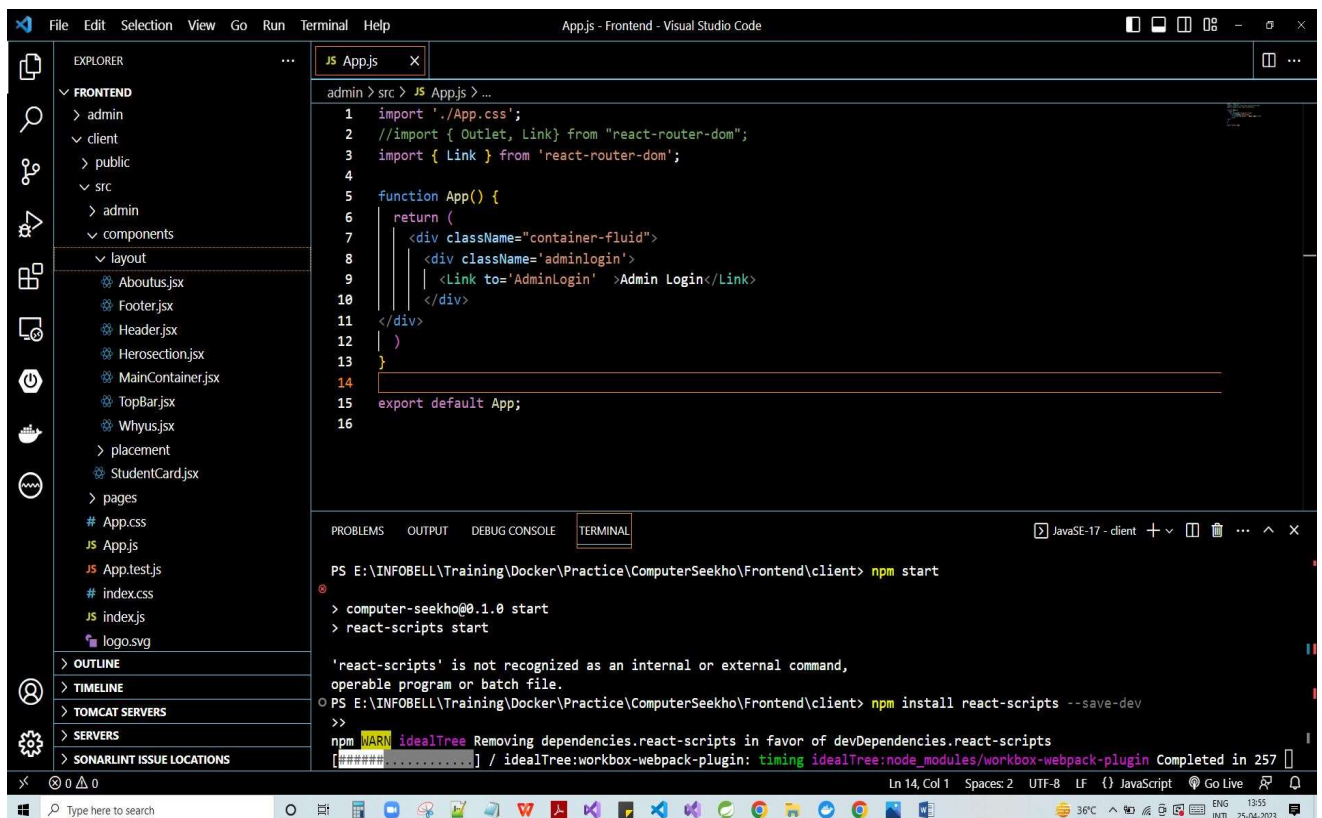
**Java Script Book :**

Rs. 500 ☒

**Total amount to be paid :**

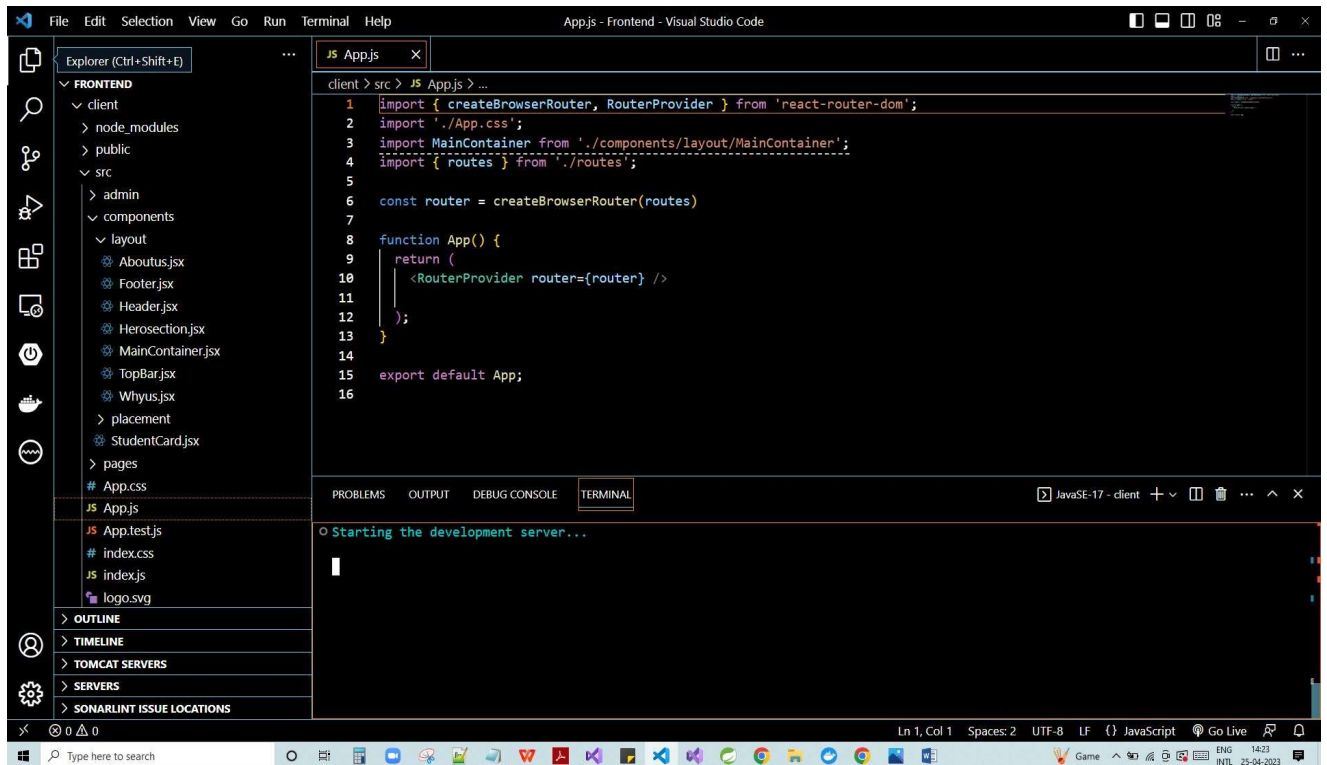
- Docker with React Project

// Installed react-scripts required to start react-app

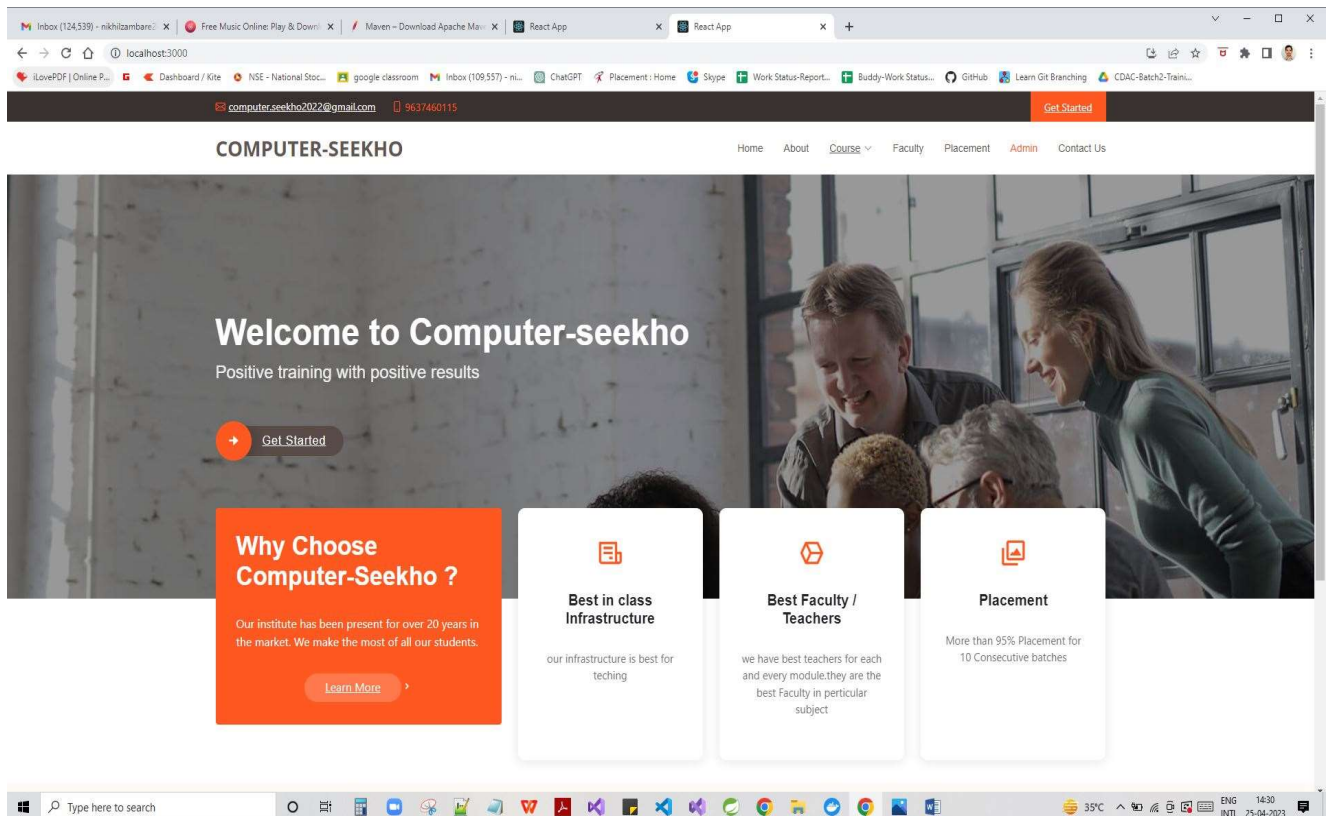




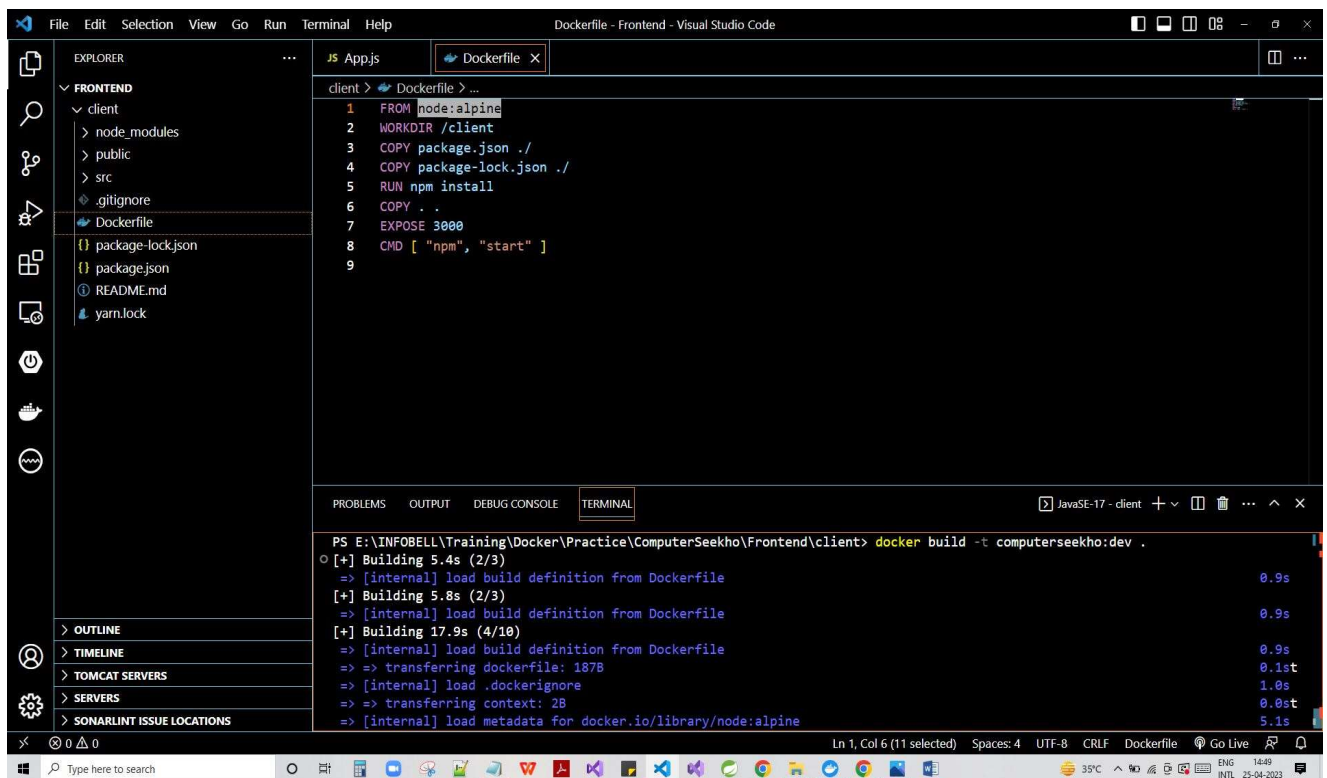
// Started the developing server using npm start



// Running the React frontend project (Computer seekho Institute)



// Created Docker file & Building an image computerseekho:dev(tag)



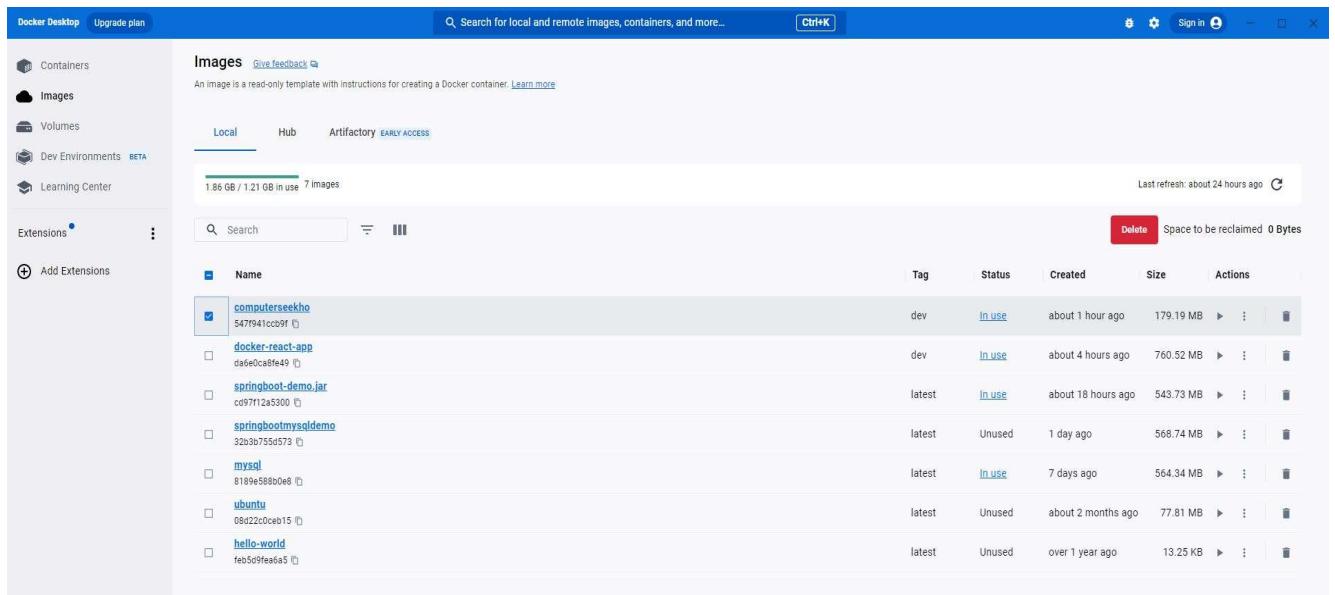
The screenshot shows the Visual Studio Code interface with a Dockerfile open in the editor. The Dockerfile contains the following instructions:

```
1 FROM node:alpine
2 WORKDIR /client
3 COPY package.json ./
4 COPY package-lock.json ./
5 RUN npm install
6 COPY . .
7 EXPOSE 3000
8 CMD [ "npm", "start" ]
9
```

The terminal at the bottom shows the output of the `docker build -t computerseekho:dev .` command:

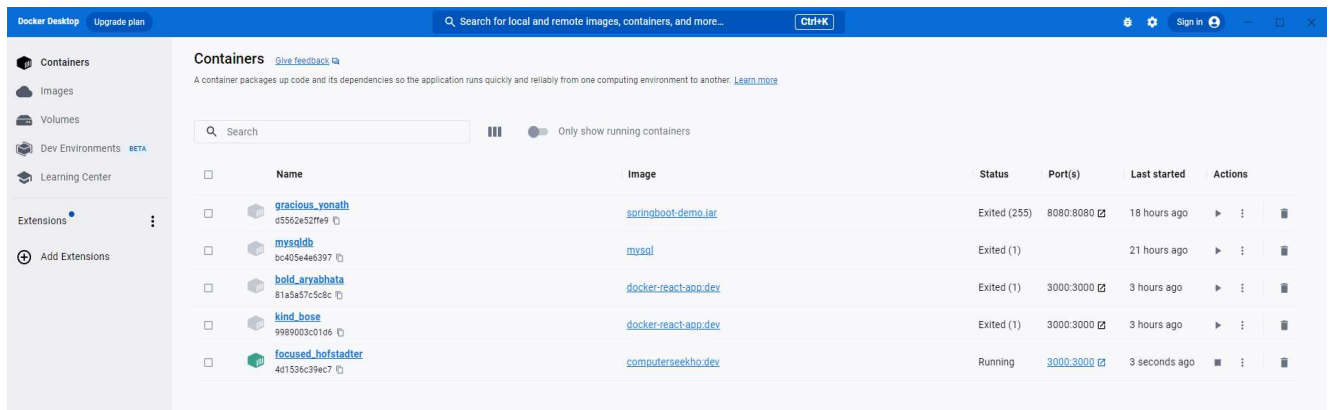
```
PS E:\INFOBELL\Training\Docker\Practice\ComputerSeekho\Frontend\client> docker build -t computerseekho:dev .
[+] Building 5.4s (2/3)
=> [internal] load build definition from Dockerfile 0.9s
[+] Building 5.8s (2/3)
=> [internal] load build definition from Dockerfile 0.9s
[+] Building 17.9s (4/10)
=> [internal] load build definition from Dockerfile 0.9s
=> => transferring dockerfile: 187B 0.1st
=> [internal] load .dockerignore 1.0s
=> => transferring context: 2B 0.0st
=> [internal] load metadata for docker.io/library/node:alpine 5.1s
```

// Docker image & created on Docker desktop (computerseekho:dev)



The screenshot shows the Docker Desktop interface with the 'Images' tab selected. The table below lists the Docker images stored locally:

Name	Tag	Status	Created	Size	Actions
<input checked="" type="checkbox"/> computerseekho 547f941ccb9f	dev	<a href="#">In use</a>	about 1 hour ago	179.19 MB	<a href="#">Delete</a>
<input type="checkbox"/> docker-react-app da6e0ca8fe49	dev	<a href="#">In use</a>	about 4 hours ago	760.52 MB	<a href="#">Delete</a>
<input type="checkbox"/> springboot-demo.jar cd97112a5300	latest	<a href="#">In use</a>	about 18 hours ago	543.73 MB	<a href="#">Delete</a>
<input type="checkbox"/> springbootmysqldemo 32b3b755d573	latest	Unused	1 day ago	568.74 MB	<a href="#">Delete</a>
<input type="checkbox"/> mysql 8189e58800e8	latest	<a href="#">In use</a>	7 days ago	564.34 MB	<a href="#">Delete</a>
<input type="checkbox"/> ubuntu 08d22c0eb15	latest	Unused	about 2 months ago	77.81 MB	<a href="#">Delete</a>
<input type="checkbox"/> hello-world feb5d9fe5a5	latest	Unused	over 1 year ago	13.25 KB	<a href="#">Delete</a>



// Running React Application from docker

