Assignment SDE

Use source code from 'aesthisia-demo/' directory & use the src to build docker image for the same. To run the app, use command: 'npm start' Run the docker image on port 3000 & check the output on 'http://localhost:3000'

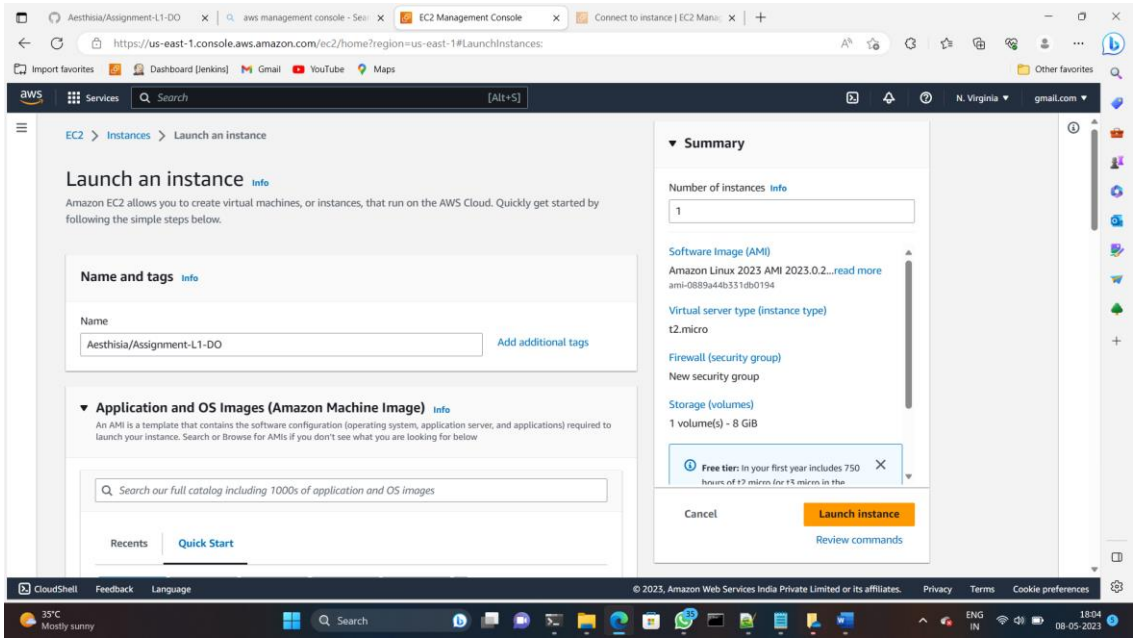
Tools and version required

- Docker
- Git
- Port: 3000

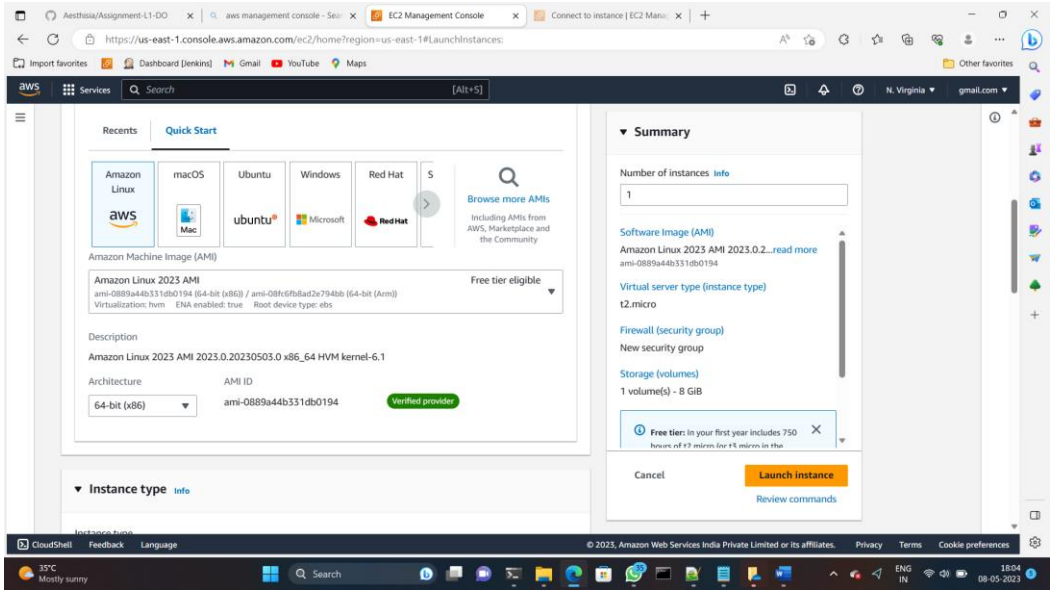
Lab – 1: Creating an EC2 Instance

1.To create your EC2 instance, go to Amazon EC2 in the AWS console.

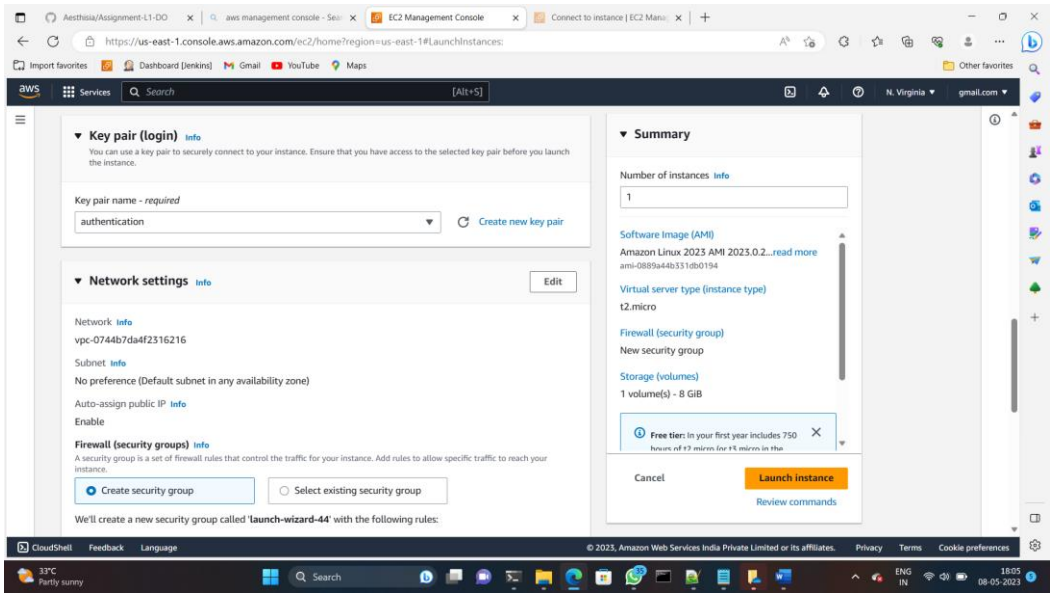
Click the button that says Launch instance to open the instance creation.



I have given the instance name Aesthisia/Assignment-L1-DO

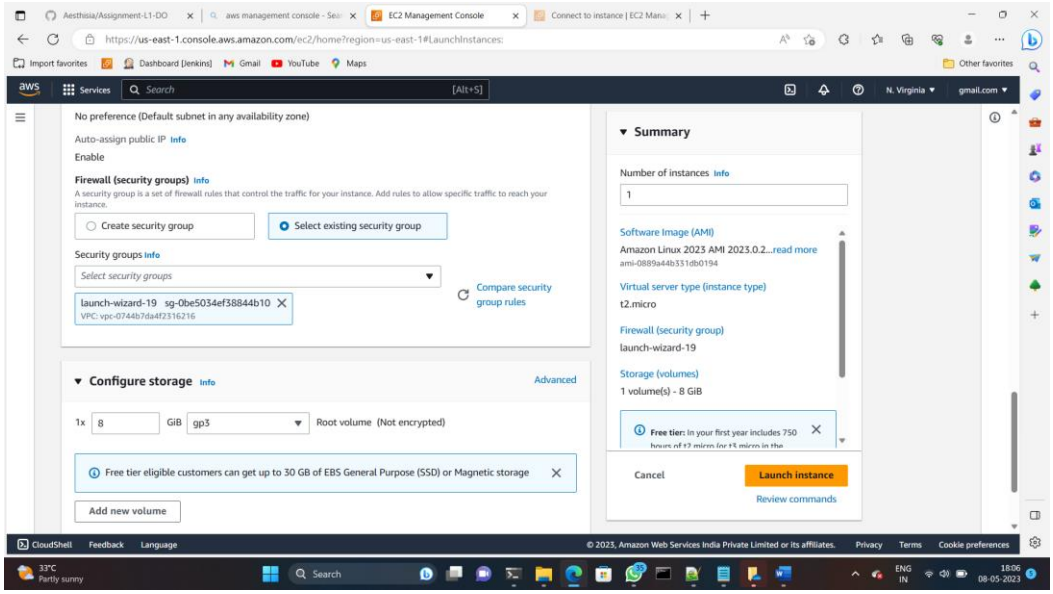


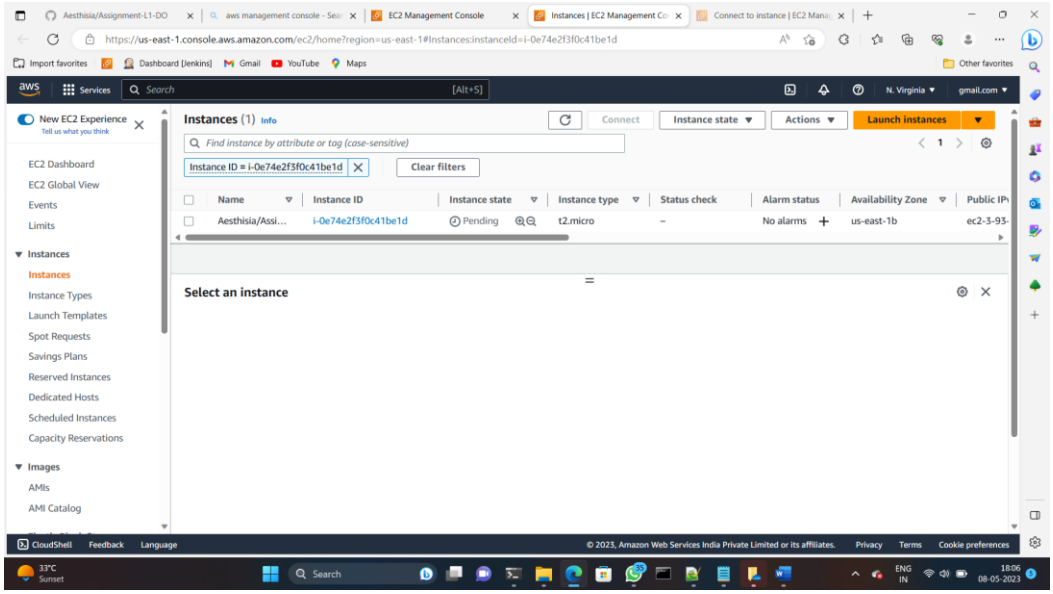
3. For this I choose the amazon linux operating system



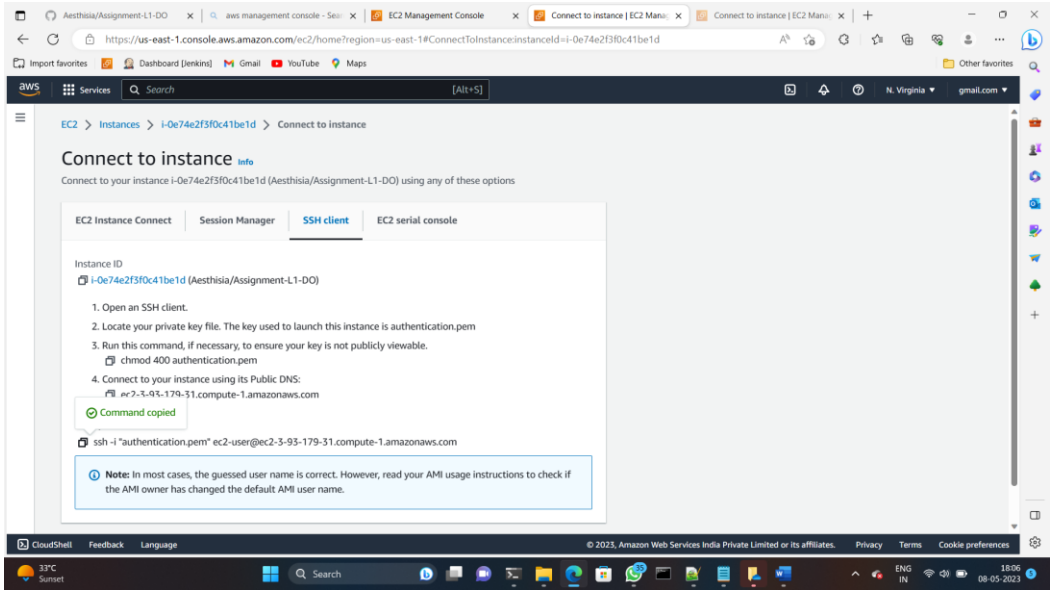
4. I have taken my existing key pair that is **authentication.pem**

5. Selected the existing security group with allowing port **3000**.





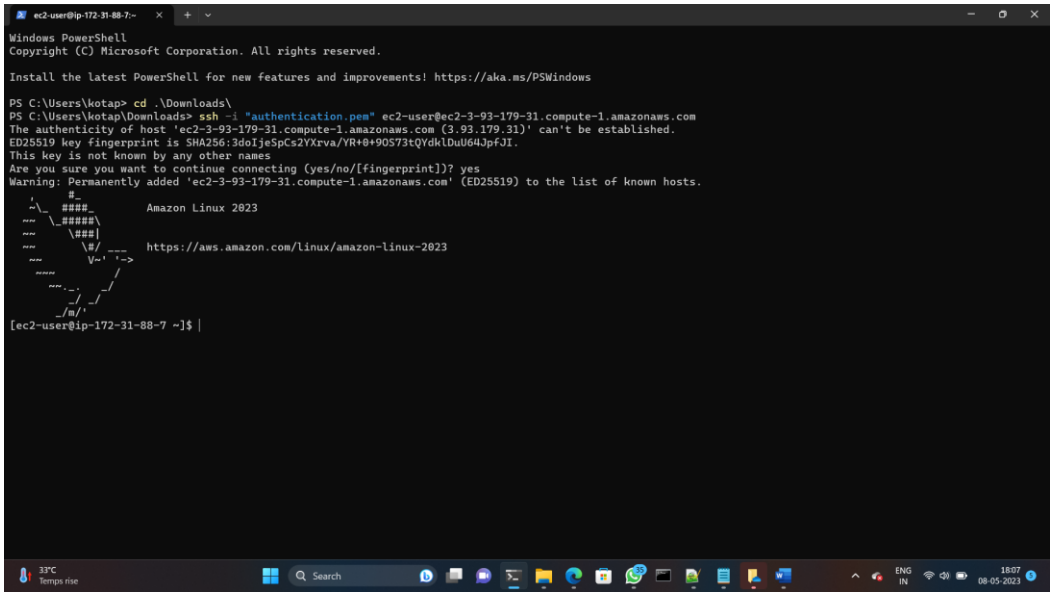
Successfully launched the ec2 instance.



Copied the ssh address to connect to the terminal

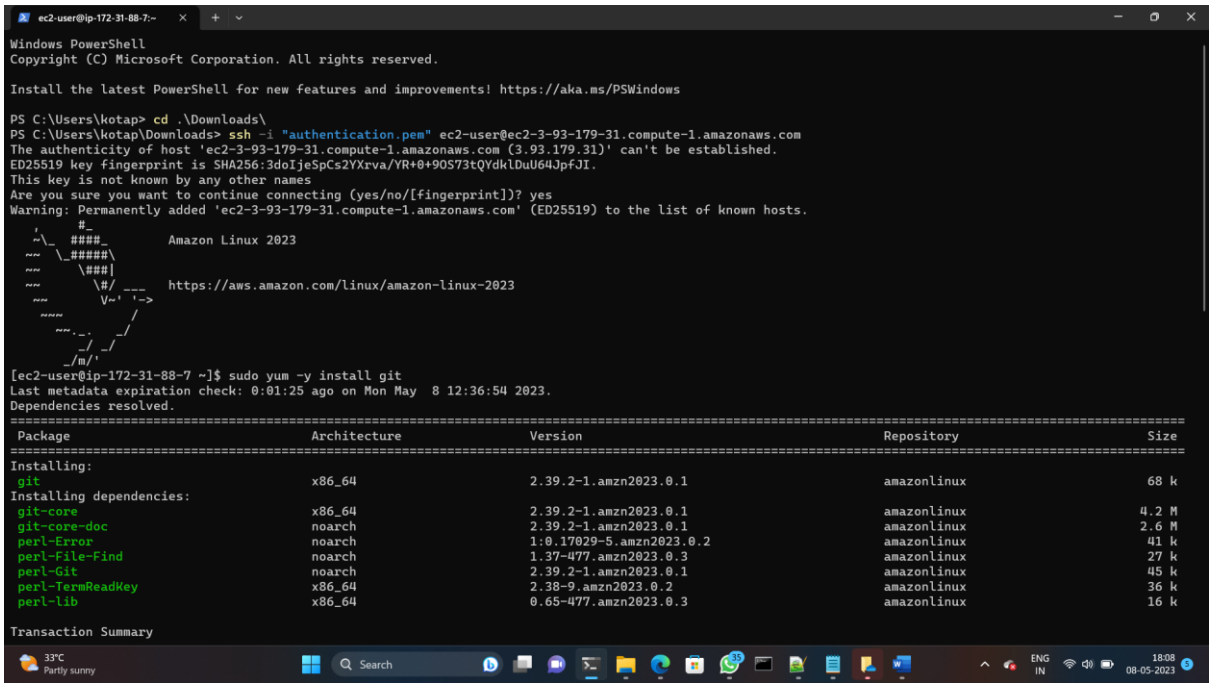
SSH into your EC2 Instance

1. We are accessing the command line interface with ssh command



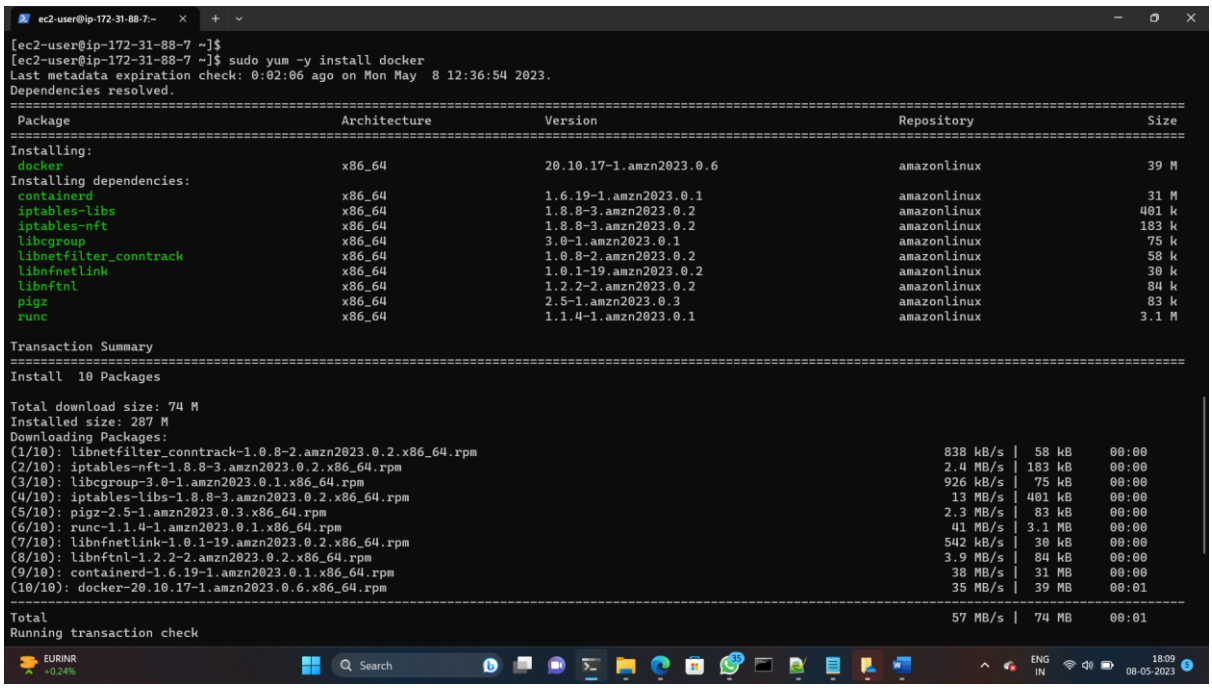
Module – 2: Installing GIT, Docker, and related repos

1. we have to install the git and docker in our instance by using below commands.
   - **sudo yum -y install git**



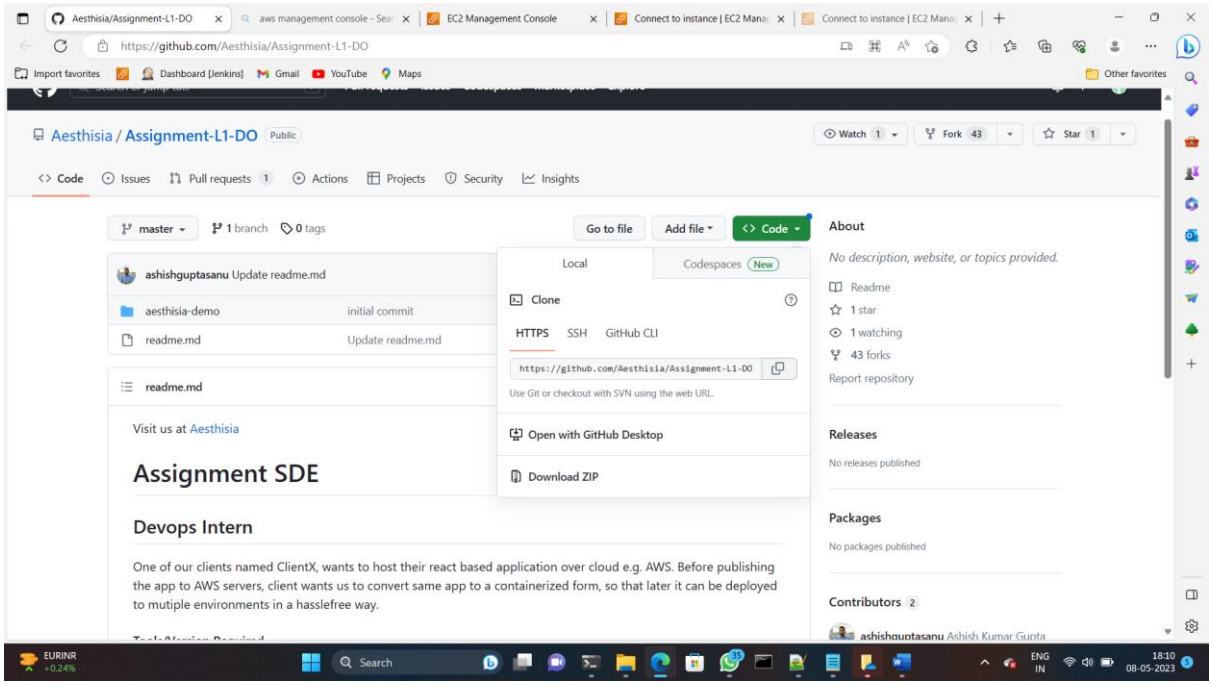
Installed the docker by using the below command.

- **sudo yum -y install docker**



Cloning project source code from github:

- I copied the code from from github



1. Cloned the project source code using the command.

   - **git clone https://github.com/Aesthisia/Assignment-L1-DO.git**

2. change the directory to the project directory where your application code is located.

3. **cd Aesthisia/**
4. **cd aesthisia-demo/**

start the docker service:

5. After installing docker , start the docker service by running the following command .

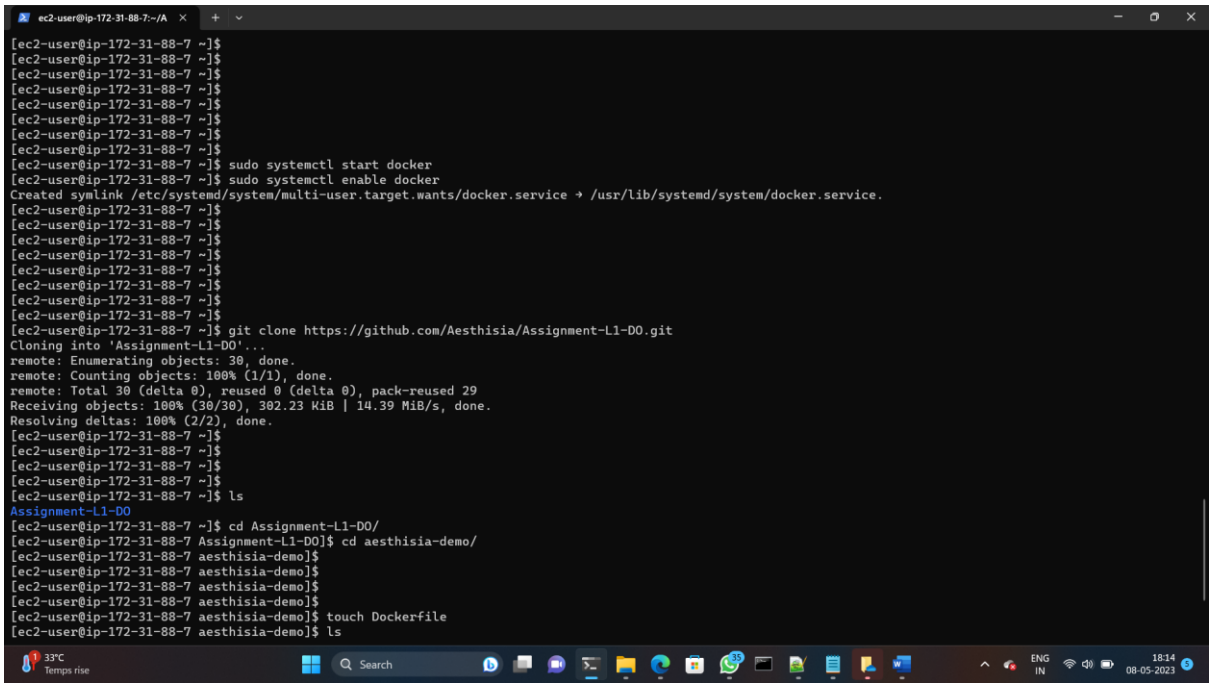
   - **sudo systemctl start docker**

6. Enable the docker service by running the following command .

   - **sudo systemctl enable docker**

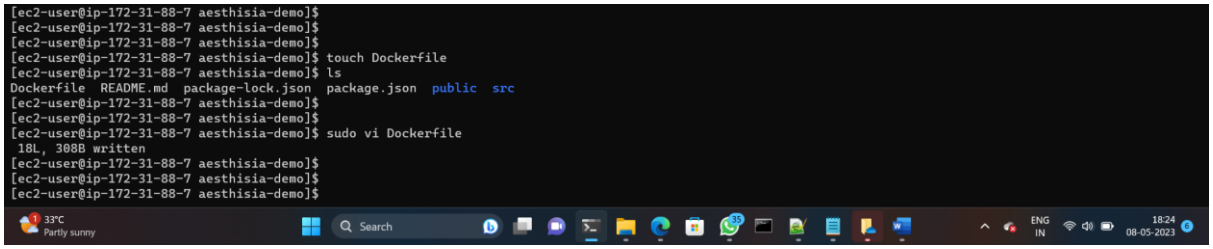
7. I haven given the permission to the docker demon in oder to work with docker by running the below command.

   - **sudo chmod 666 /var/run/docker.sock**



8. In project directory create a new file named “**Dockerfile**” by running the following command .

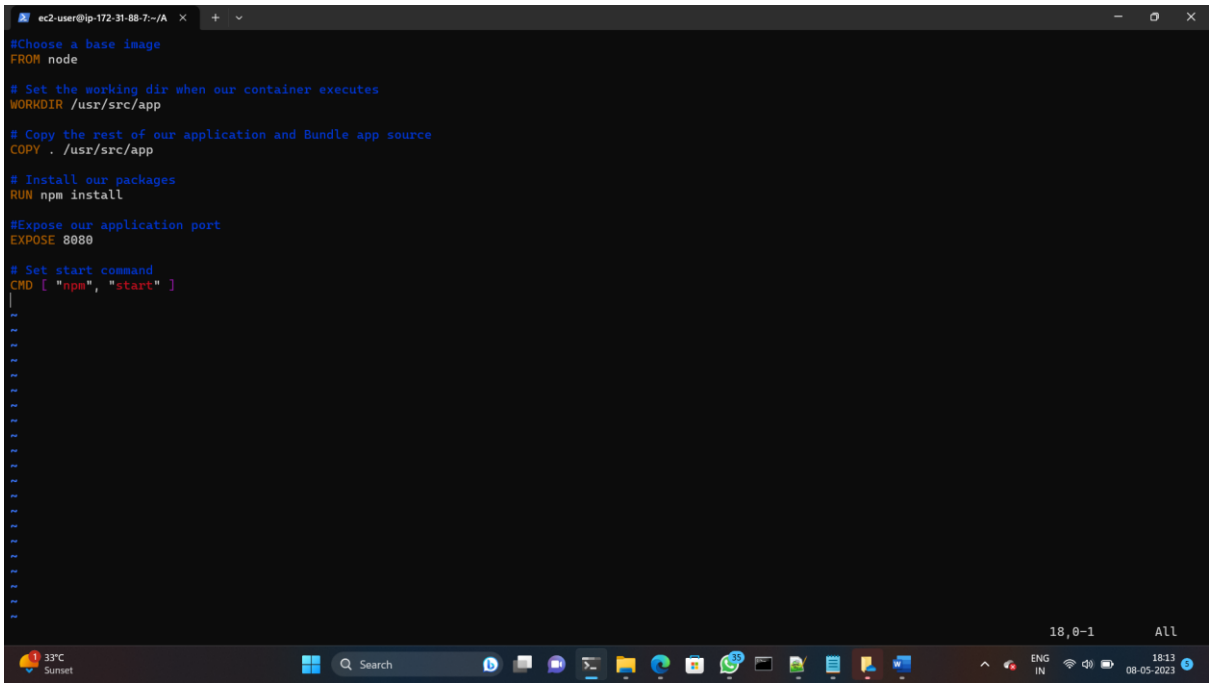
   - **touch Dockerfile**



9. By using **sudo vi Dockerfile** command opened the vim editor.

10. Edit the Dockerfile and spcify the instructions for building the docker image.

11. You can see my dockerfile below.



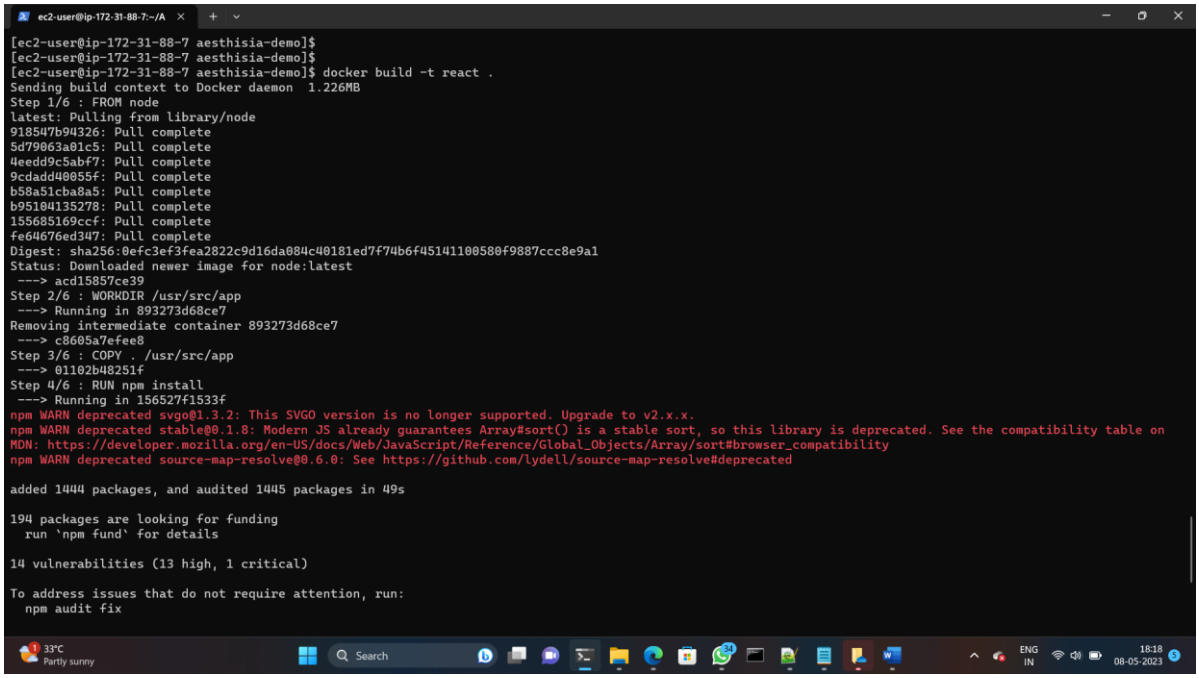
12. Save the docker file and exit the text editor by using **:wq!**.

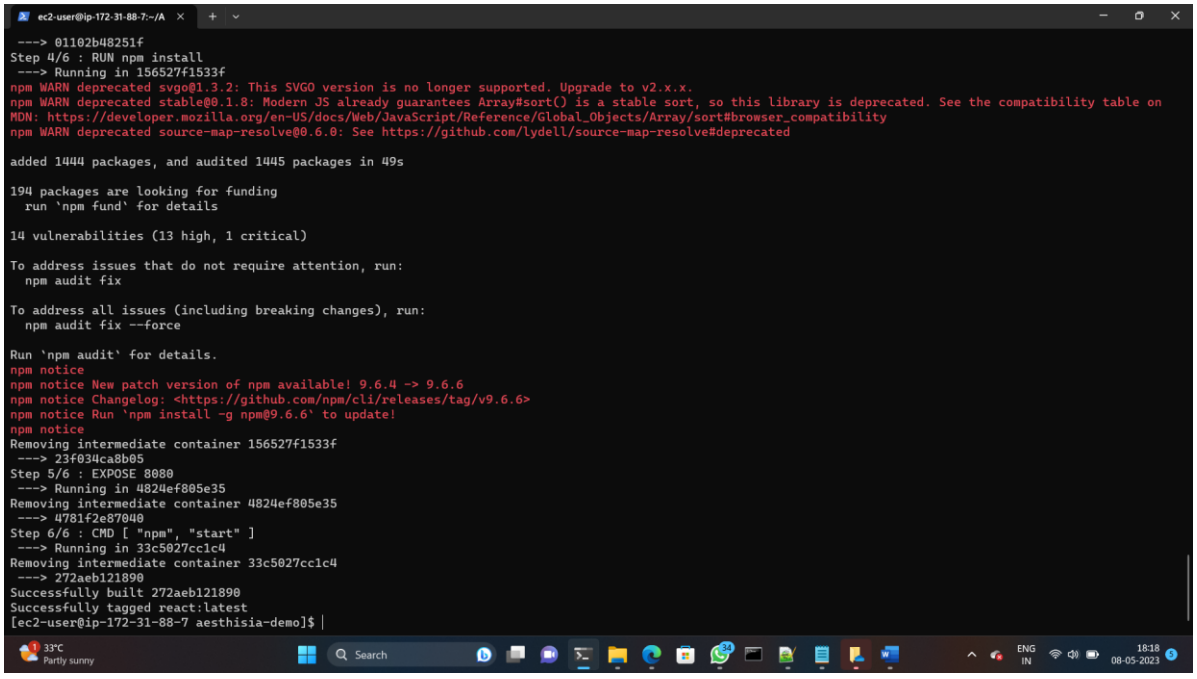
13. After creating the dockerfile, run the following command to build the docker image.

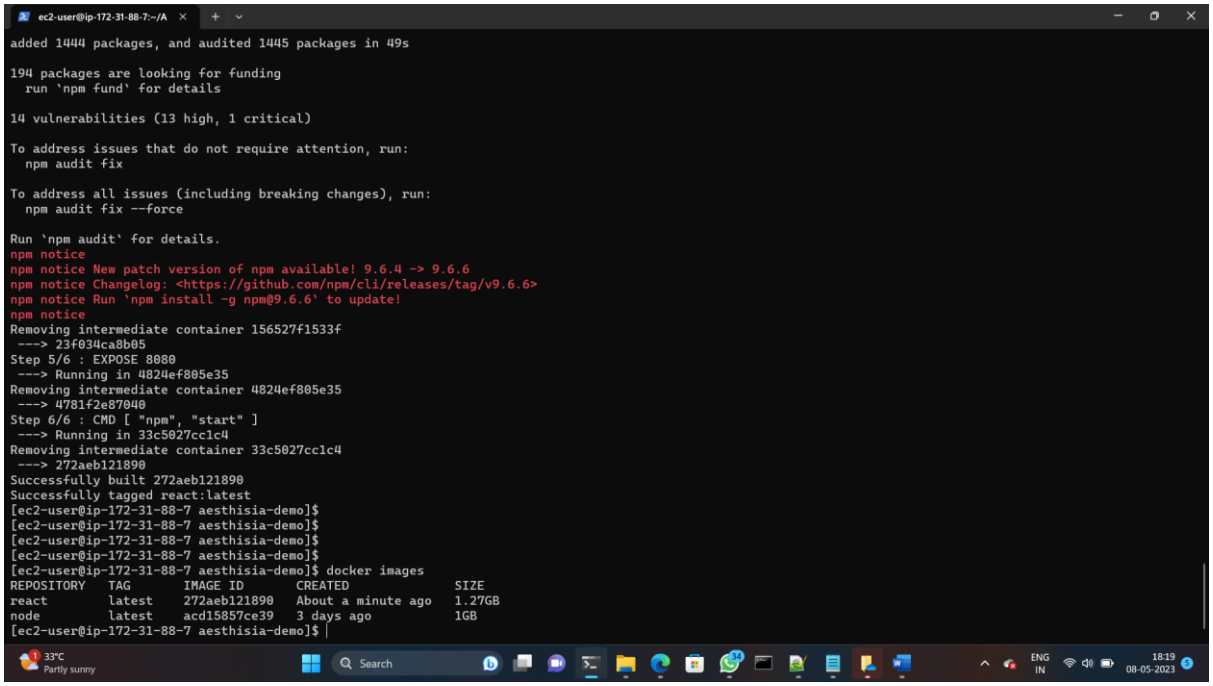
14. The command to create docker image

- **docker build -t react .**

  react is my image name


ec2-user@ip-172-31-88-7:~/A
[ec2-user@ip-172-31-88-7 aesthisia-demo]$
[ec2-user@ip-172-31-88-7 aesthisia-demo]$
[ec2-user@ip-172-31-88-7 aesthisia-demo]$ docker build -t react .
Sending build context to Docker daemon 1.226MB
Step 1/6 : FROM node
latest: Pulling from library/node
918547b94326: Pull complete
5d79063a01c5: Pull complete
4eedd9c5abf7: Pull complete
9cdadd40055f: Pull complete
b58a51cba8a5: Pull complete
b95104135278: Pull complete
155685169ccf: Pull complete
fe64676ed347: Pull complete
Digest: sha256:0efc3ef3fea2822c9d16da084c40181ed7f74b6f45141100580f9887ccc8e9a1
Status: Downloaded newer image for node:latest
---> acd15857ce39
Step 2/6 : WORKDIR /usr/src/app
---> Running in 893273d68ce7
Removing intermediate container 893273d68ce7
---> c8605a7efee8
Step 3/6 : COPY . /usr/src/app
---> 01102b48251f
Step 4/6 : RUN npm install
---> Running in 156527f1533f
npm WARN deprecated svgo@1.3.2: This SVGO version is no longer supported. Upgrade to v2.x.x.
npm WARN deprecated stable@0.1.8: Modern JS already guarantees Array#sort() is a stable sort, so this library is deprecated. See the compatibility table on
MDN: https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Array/sort#browser_compatibility
npm WARN deprecated source-map-resolve@0.6.0: See https://github.com/lydell/source-map-resolve#deprecated
added 1444 packages, and audited 1445 packages in 49s
194 packages are looking for funding
run `npm fund` for details
14 vulnerabilities (13 high, 1 critical)
To address issues that do not require attention, run:
npm audit fix
33°C
Partly sunny
Search
ENG
IN
18:18
08-05-2023


ec2-user@ip-172-31-88-7:~/A
---> 01102b48251f
Step 4/6 : RUN npm install
---> Running in 156527f1533f
npm WARN deprecated svgo@1.3.2: This SVGO version is no longer supported. Upgrade to v2.x.x.
npm WARN deprecated stable@0.1.8: Modern JS already guarantees Array#sort() is a stable sort, so this library is deprecated. See the compatibility table on
MDN: https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Array/sort#browser_compatibility
npm WARN deprecated source-map-resolve@0.6.0: See https://github.com/lydell/source-map-resolve#deprecated
added 1444 packages, and audited 1445 packages in 49s
194 packages are looking for funding
run `npm fund` for details
14 vulnerabilities (13 high, 1 critical)
To address issues that do not require attention, run:
npm audit fix
To address all issues (including breaking changes), run:
npm audit fix --force
Run `npm audit` for details.
npm notice
npm notice New patch version of npm available! 9.6.4 -> 9.6.6
npm notice Changelog: <https://github.com/npm/cli/releases/tag/v9.6.6>
npm notice Run `npm install -g npm@9.6.6` to update!
npm notice
Removing intermediate container 156527f1533f
---> 23f034ca8b05
Step 5/6 : EXPOSE 8080
---> Running in 4824ef805e35
Removing intermediate container 4824ef805e35
---> 4781f2e87040
Step 6/6 : CMD ["npm", "start"]
---> Running in 33c5027cc1c4
Removing intermediate container 33c5027cc1c4
---> 272aeb121890
Successfully built 272aeb121890
Successfully tagged react:latest
[ec2-user@ip-172-31-88-7 aesthisia-demo]$
33°C
Partly sunny
Search
ENG
IN
18:18
08-05-2023

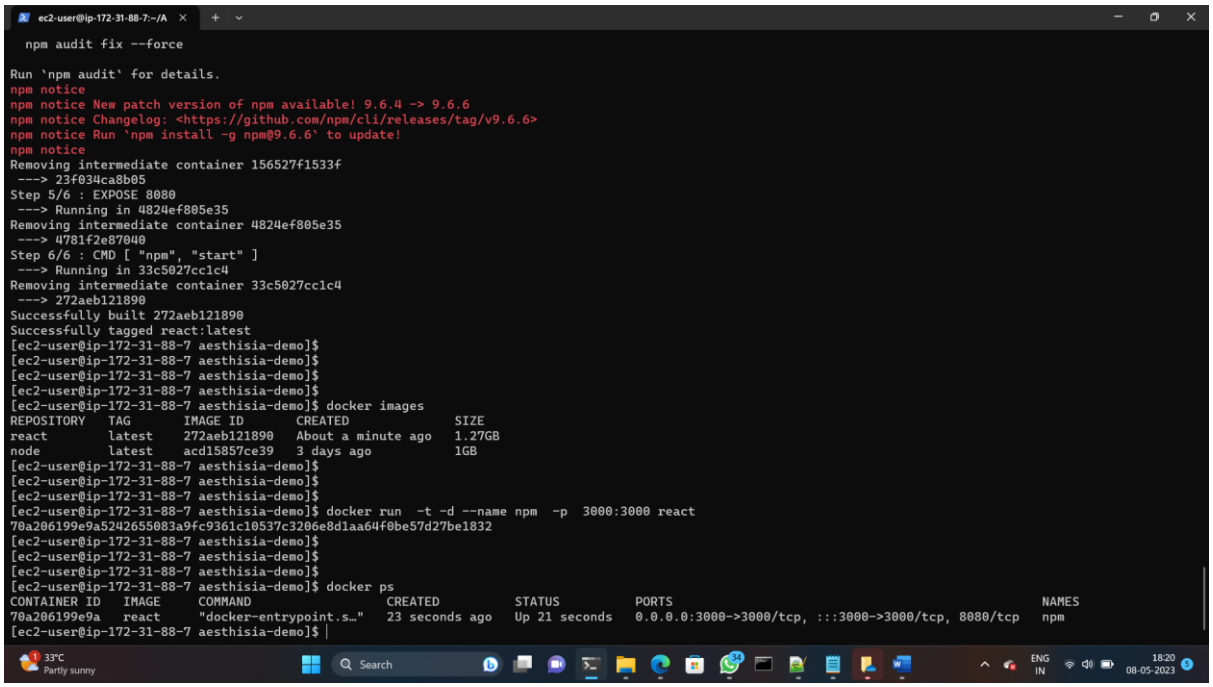


Successfully created the docker image .

15. After building the docker image run the following command the to start the docker container.

16. The command to create container from docker image is.

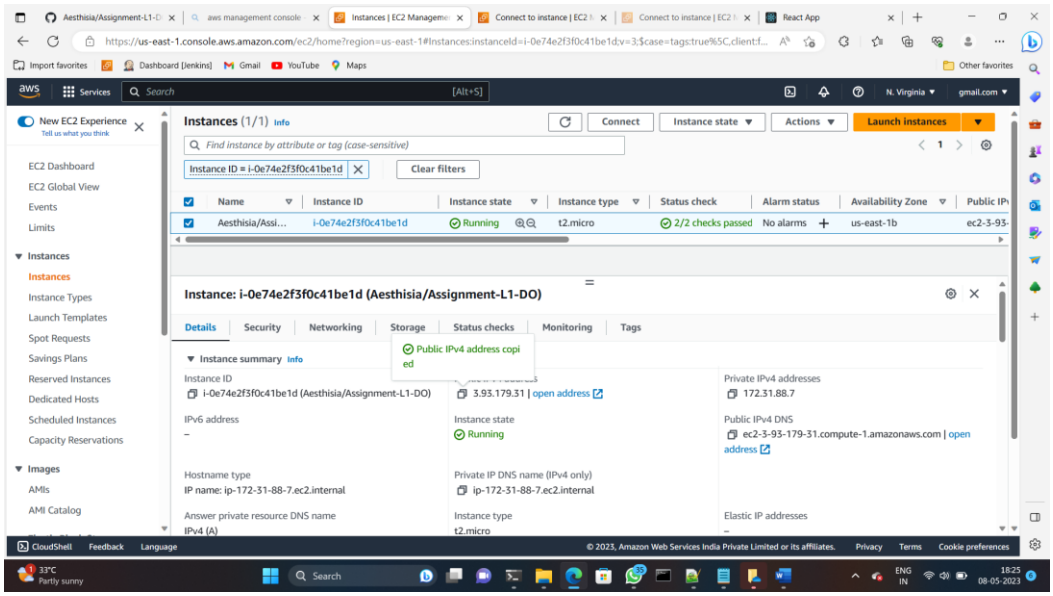
- **docker build -t -d --name npm -p 3000:3000 react**

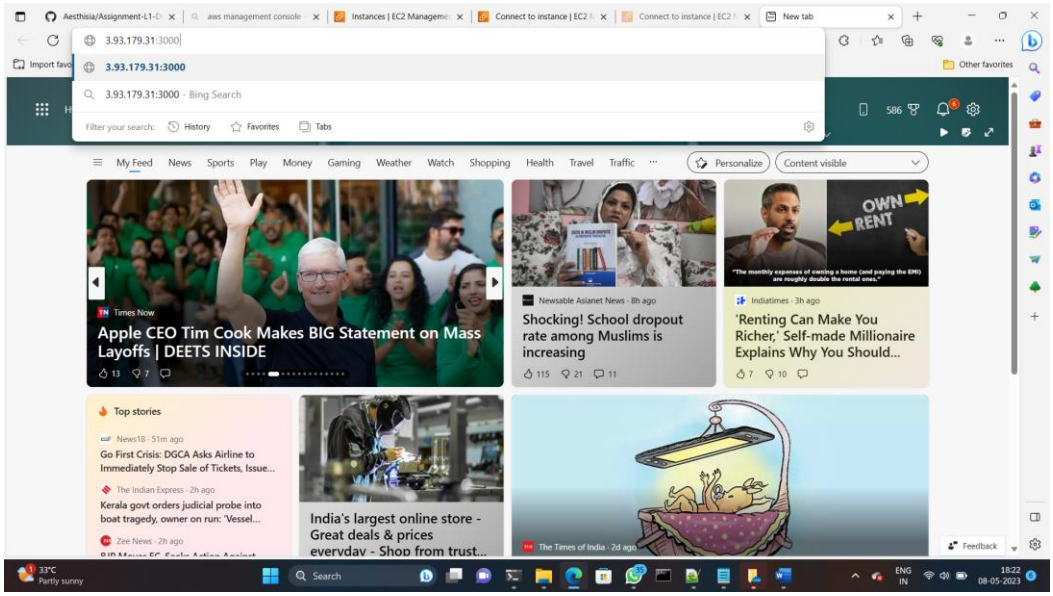


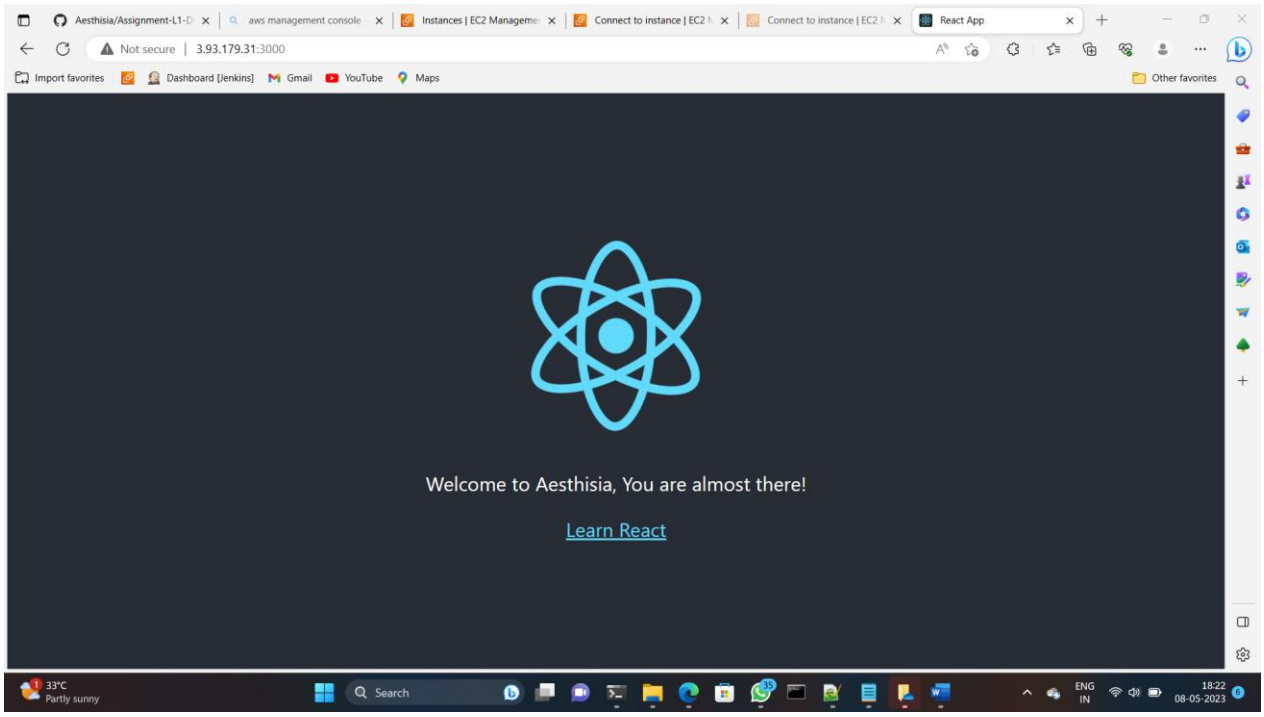
17. To see if container is successfully created or not run the **docker ps** command it will shows the running containers.

18. My docker container is successfully created you can see in the above image and Browse the app.

19. Once the docker container is running . you can browse the app by opening web browser and navigating to the public ip of your instance ,followed by the port 3000.







And the lastly , I had look to see that this was running correctly.

Thank you ,

Shalini.K