DevOps Assignment

Name: Hari Mahesh
Mobile: 8019782344
Email: harimahesh417@gmail.com

Objective: Demonstrate your basic ability to work with simple Docker features.

Deadline: 3 Days

Step 1: Download the assignment files from this link- https://drive.google.com/file/d/12gZcH1Jr1xWWRzyH3yMqJ9DV_3rlHsnK/view?usp=sharing

The assignment has two files-

1. main.js - Simple Node/Express REST API that returns a "Hello, World!" response on port 3000
2. package.json - Dependency management file

Step 2: Check if Node.js is installed on your computer, if not then install it.

Step 3: Run npm install, it will generate node_modules and package-lock.json

Step 4: Run node main.js, the API can now be accessed on http://localhost:3000 and you'll see the response "Hello, World!".

Step 5: Create a Dockerfile to build an image of the above code.

Step 6: Run a container using the created image. (Don't forget to expose the required port/(s)).

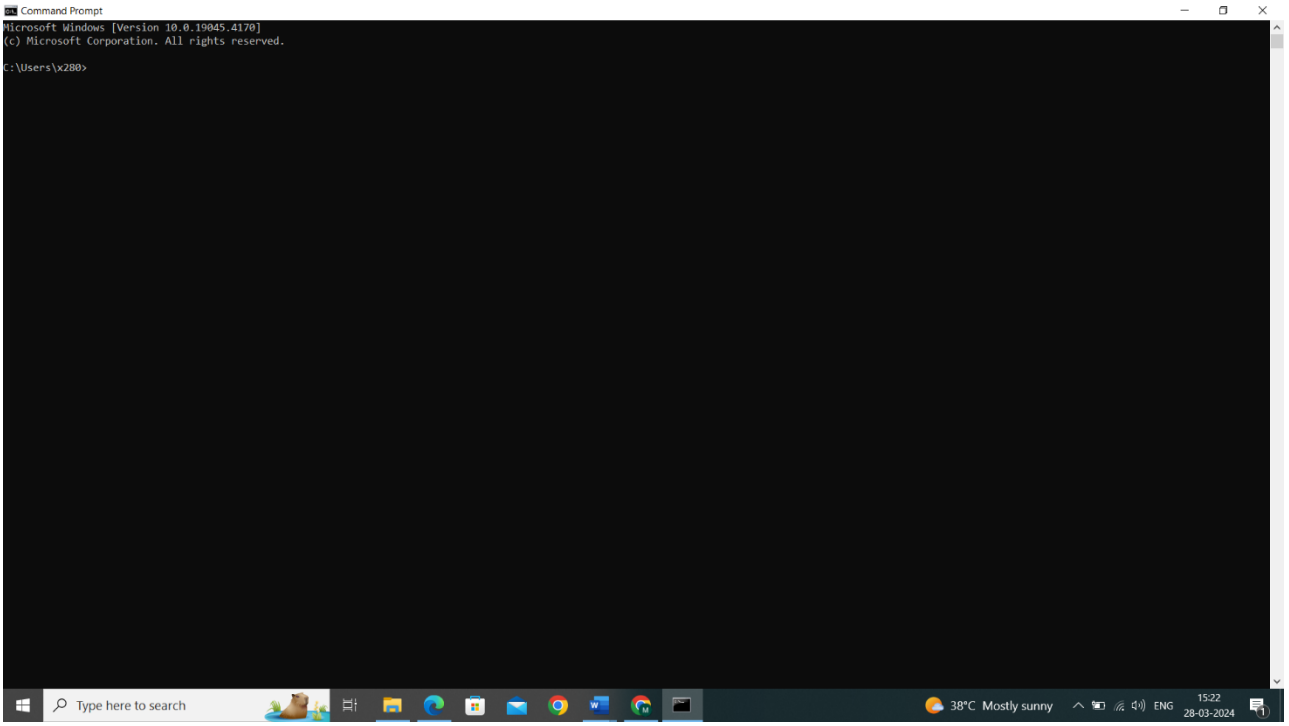
Step 7: Access the API and you must see the response "Hello World!".

BONUS: Write a docker-compose.yml file and use docker-compose to complete the assignment.

Once the assignment has been completed, push it on GitHub and share the repo link with us.

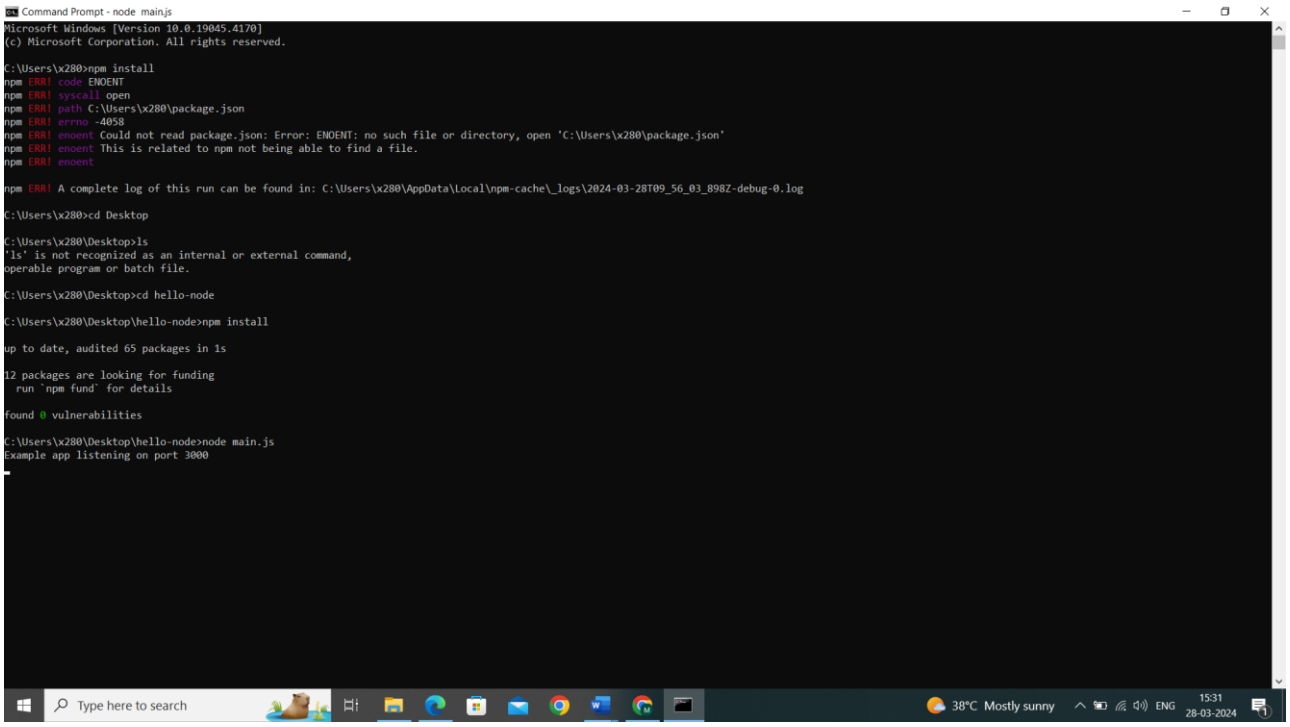
NOTE: You can install Docker on your system and do the assignment, or you can use an online Docker Playground on https://labs.play-with-docker.com.

- Download main.js and package.js files from the above link.
- Now install node.js in your computer link for download-https://nodejs.org/en/download
- open nodejs command prompt

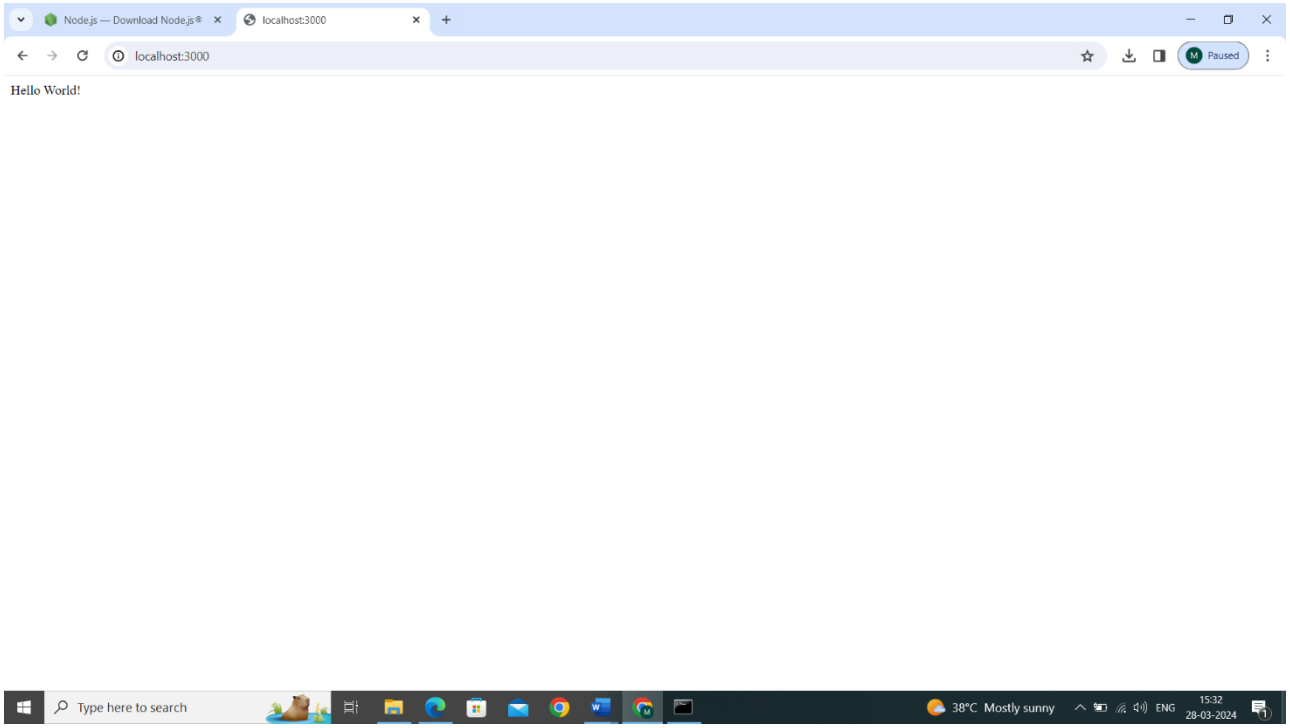


command prompt looks like above

- Now change directory and go to hello-node directory.
- Cd Desktop
- Cd hello-node
- Now install npm tool in nodejs command prompt.
- Command- npm install
- Now node main.js
- Listing on port 3000

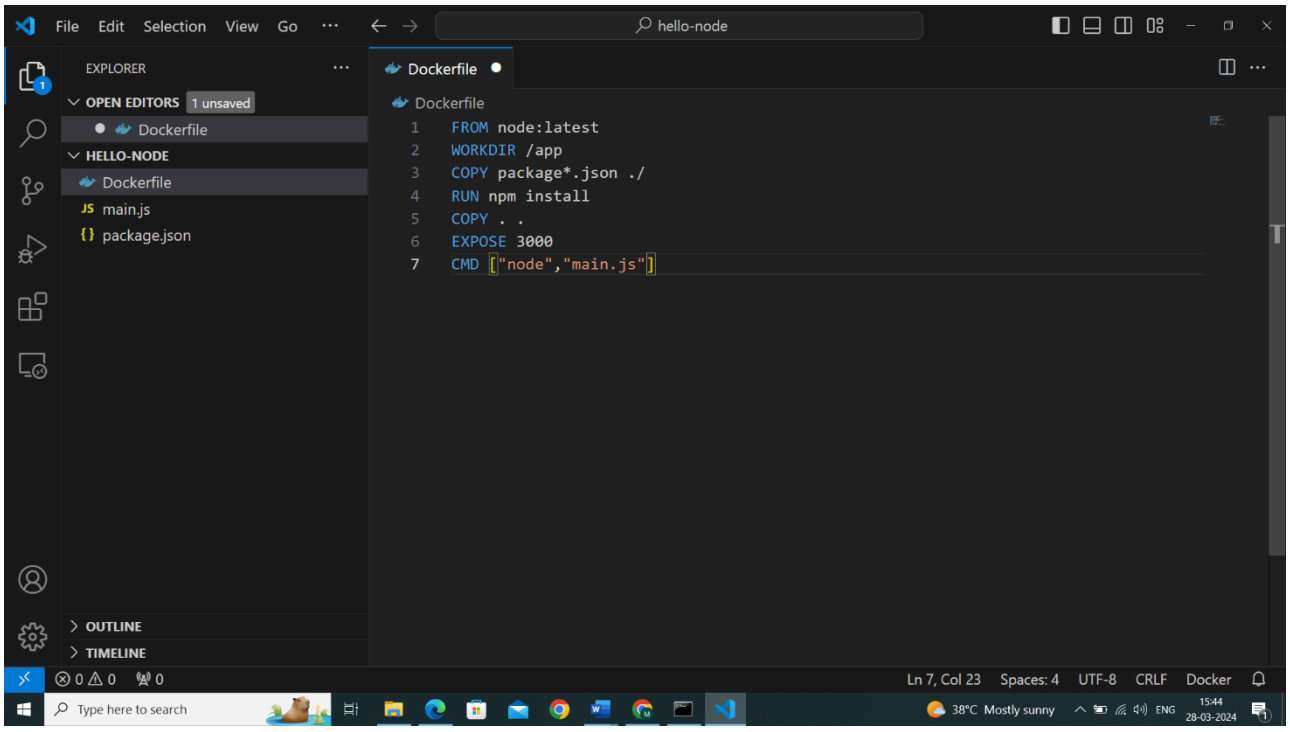


local host on port 3000 listing



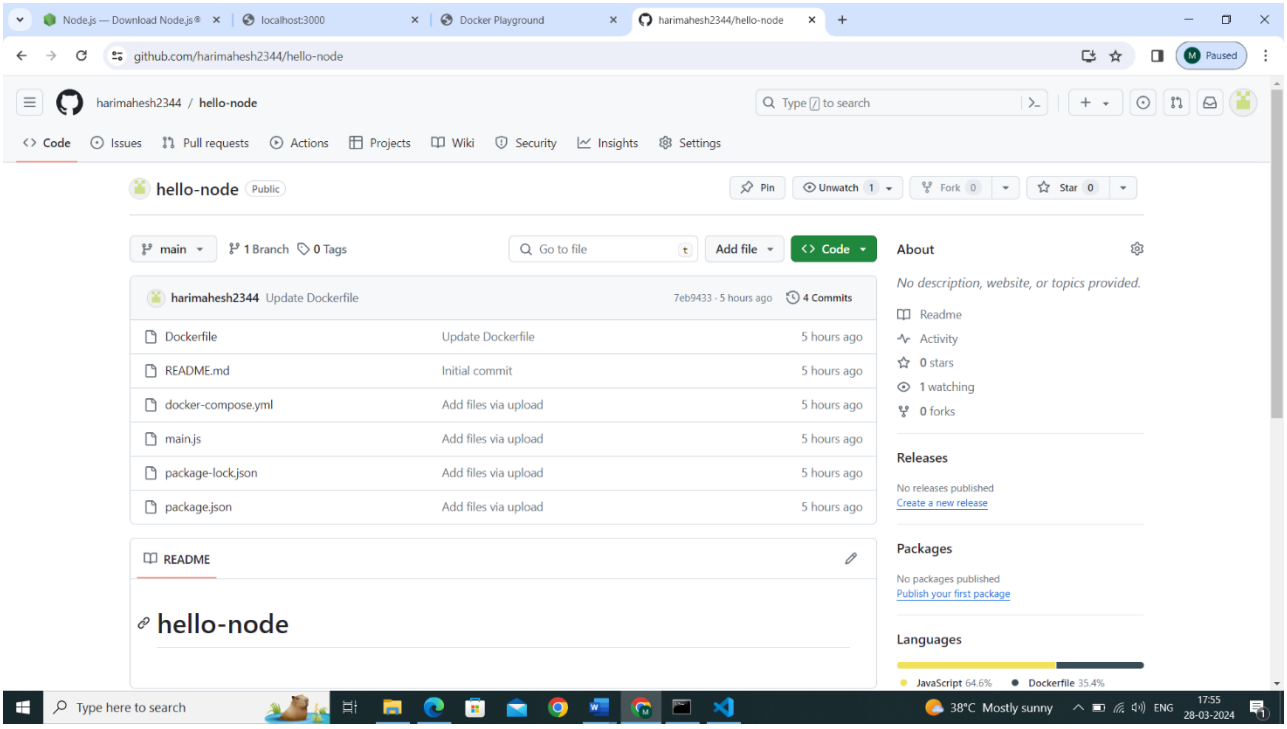
response is Hello World is successful

- Now writing Dockerfile
- Using visual studio code

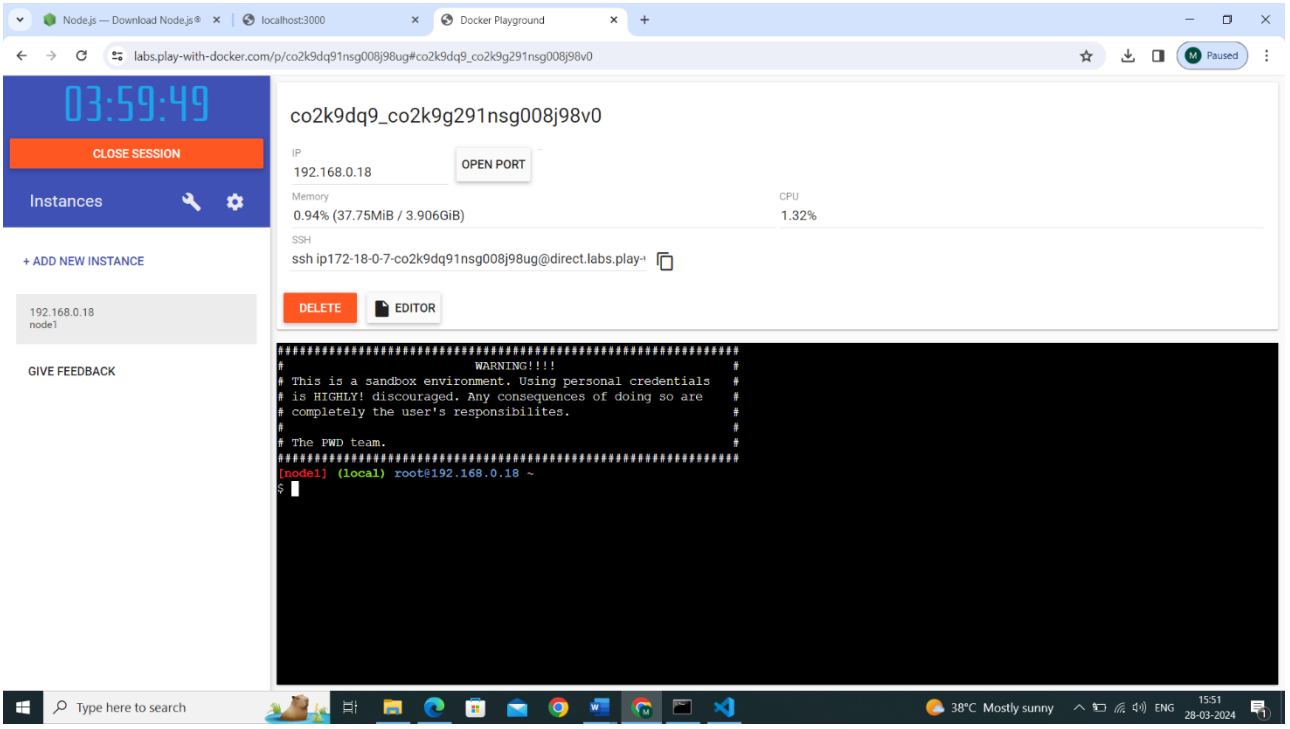


Writing Dockerfile for given files

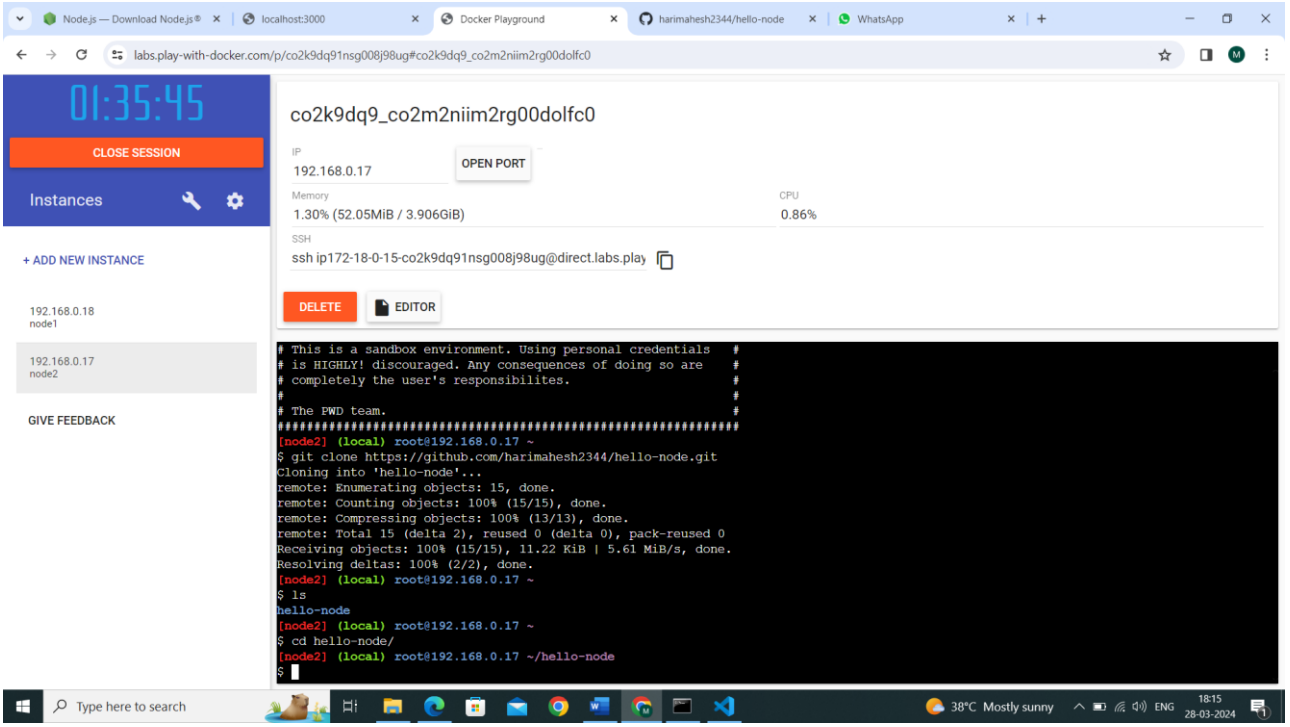
- Now add files to GitHub



- Now open docker playground



- Git clone to download files from remote repository.



Cloning from GitHub

- Cd hello-node
- Now build image using command- docker build -t <image name> .

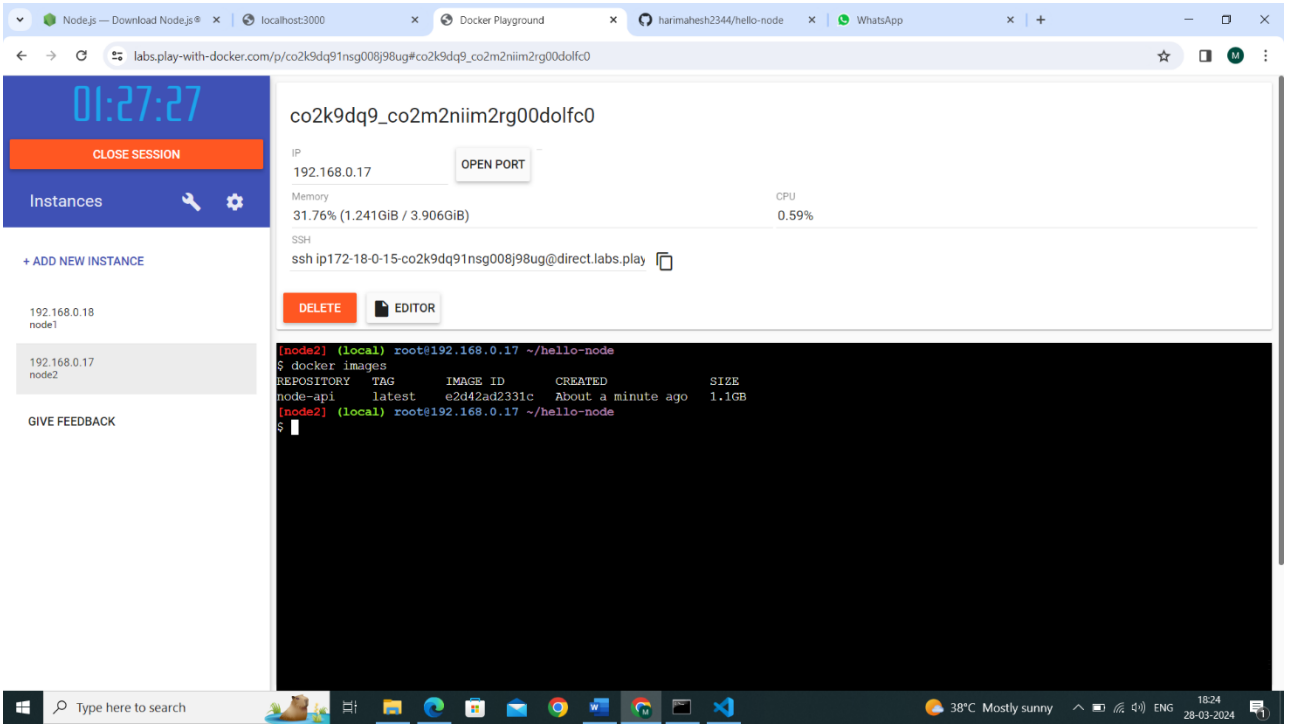
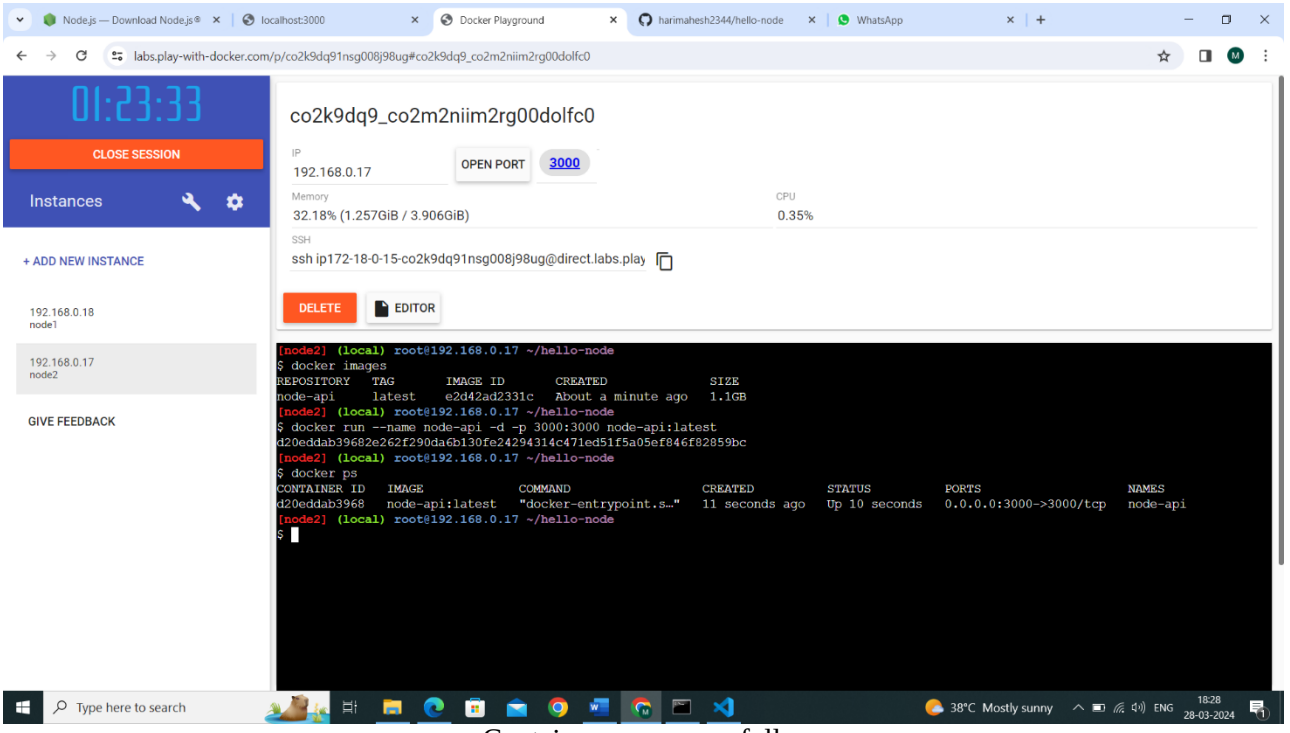
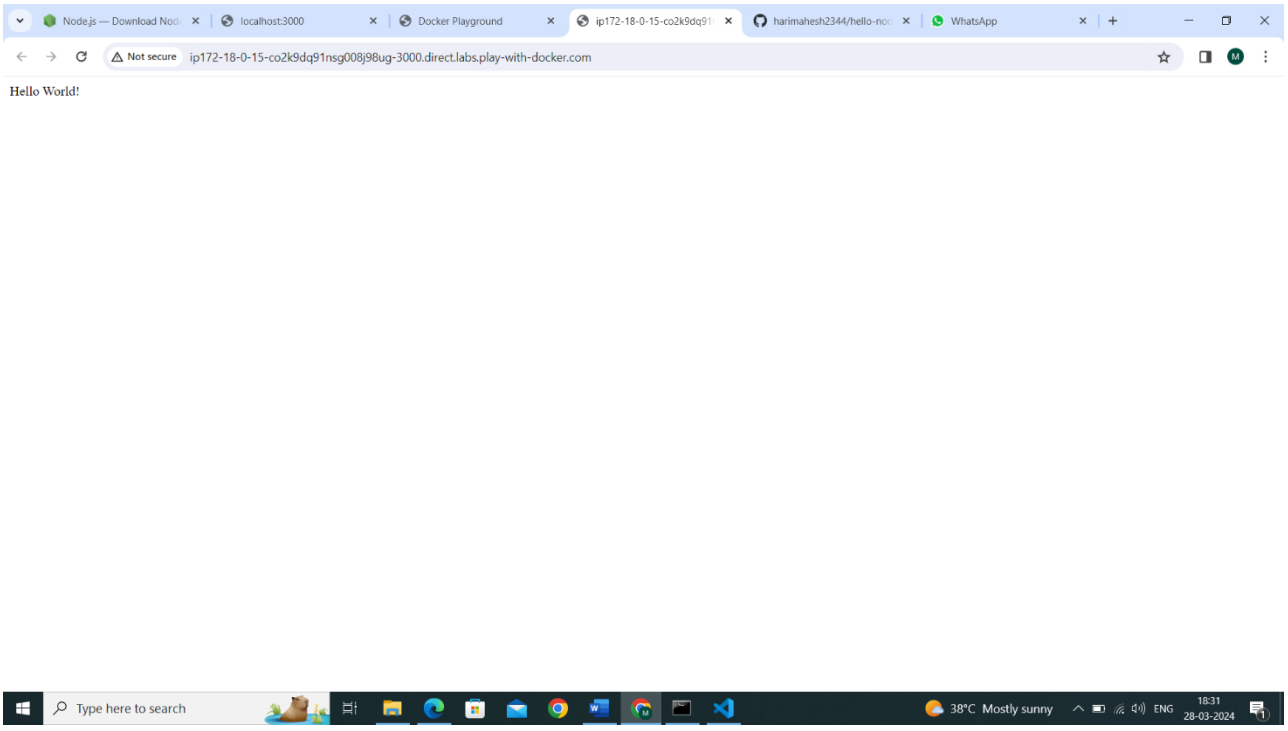


Image created successfully

- Run as container command- docker run –name <container name> -d -p 3000:3000 <image name>:<tag>

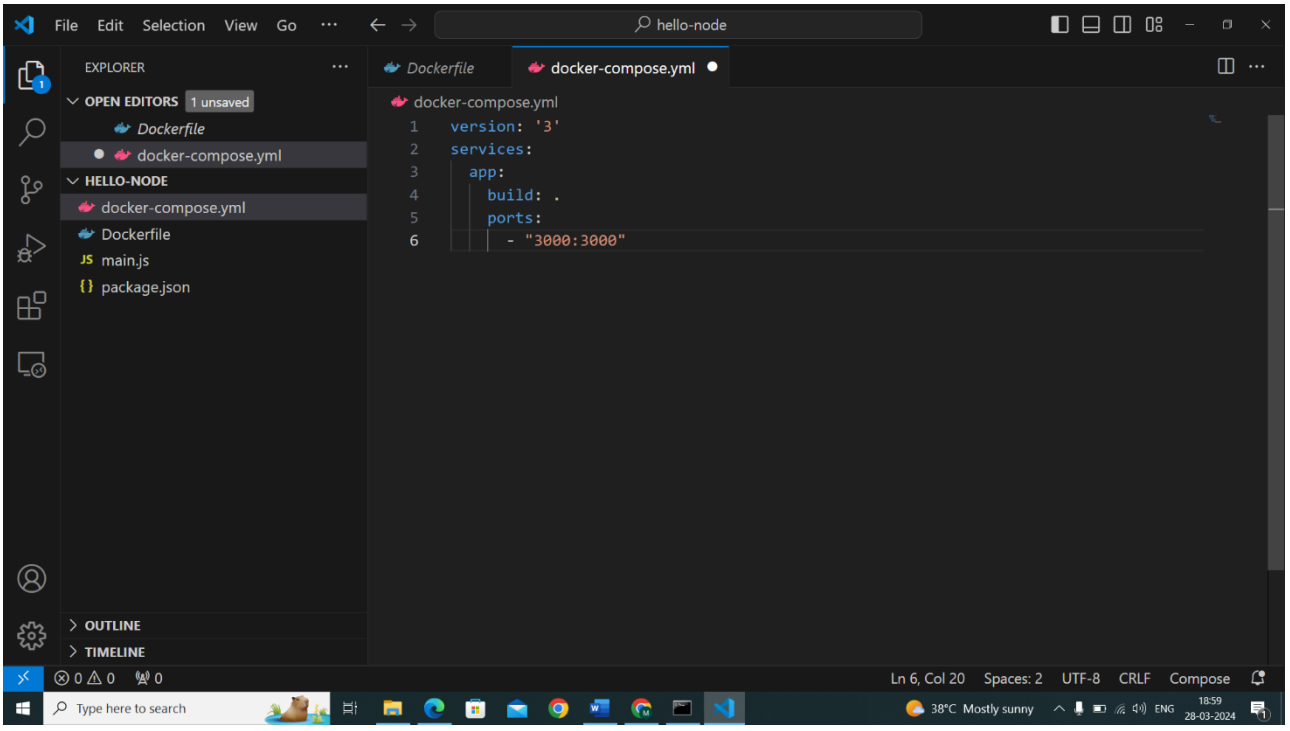


Container run successfully



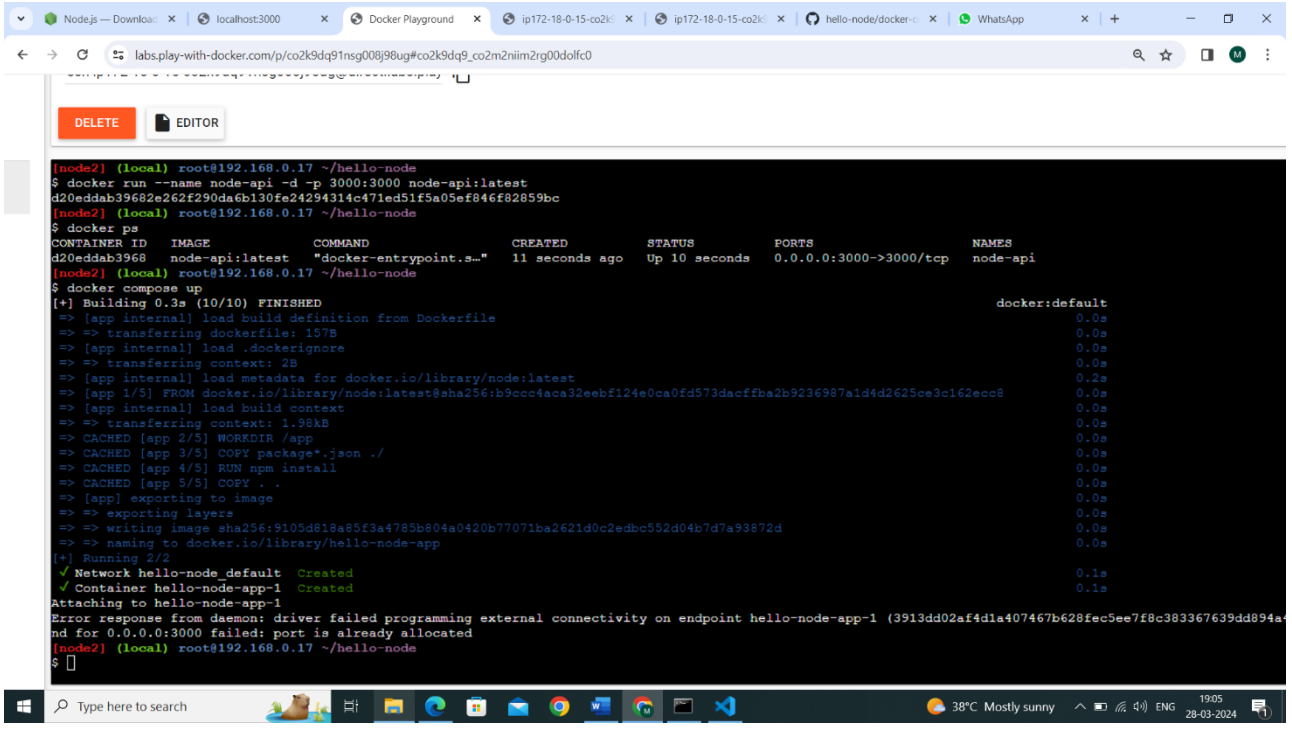
with docker playground successfully hosted

- Now write docker-compose.yml using visual studio code.

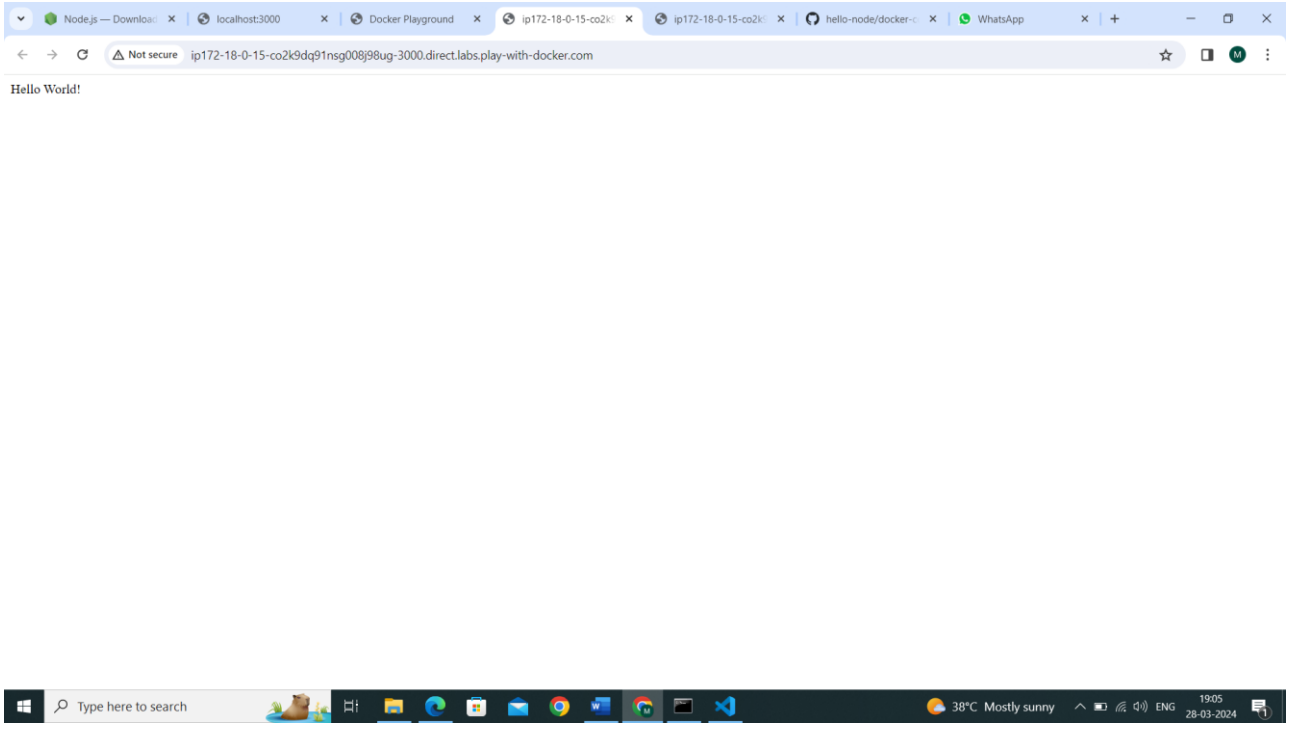


Writing docker-compose.yml in visual studio code

- Again clone into docker playground.
- Now command- docker compose up



Docker Compose up successfully



- Host on 3000
- Successfully completed all the steps.

Thanking you