PROGRAM 1

Build a Docker Container from a Custom Dockerfile

Project Structure

```
program1/
│
├── Dockerfile
├── app.py
└── requirements.txt
```

S1: Create Project Folder

mkdir program1

cd program1

S2: Create Dockerfile

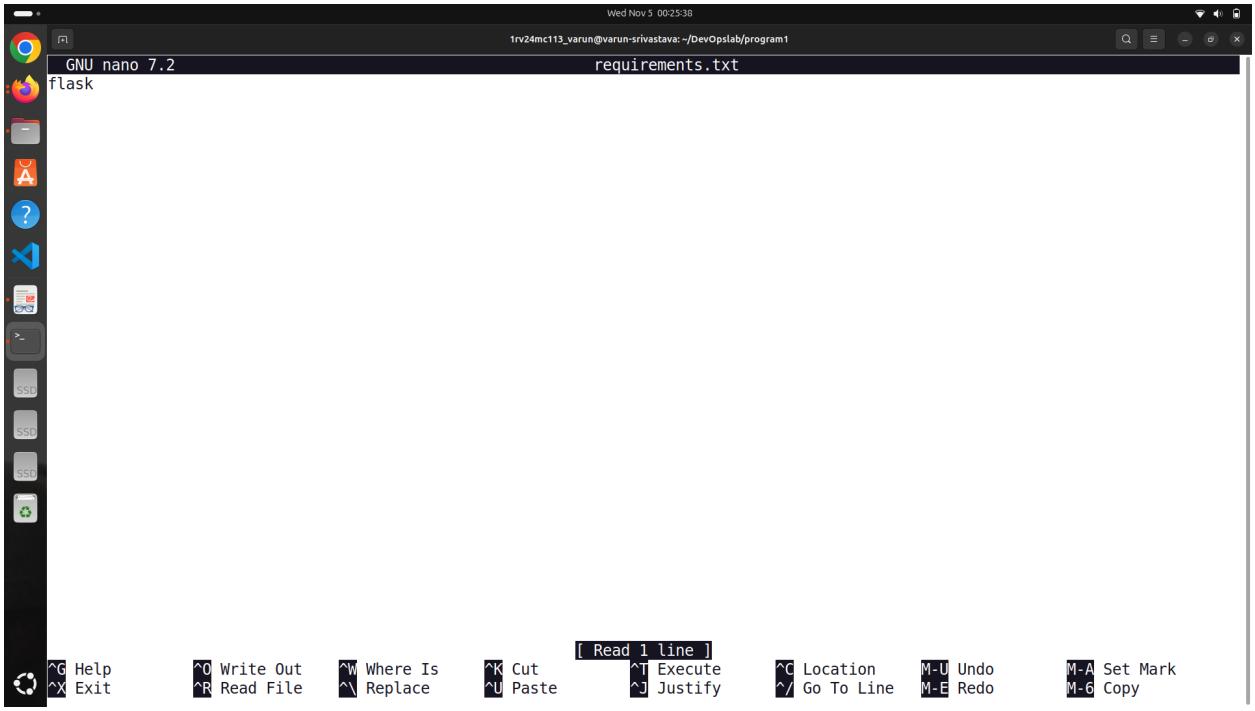
sudo nano Dockerfile

S3: Create Python Application File

nano app.py

S4: Create requirements.txt File

nano requirements.txt

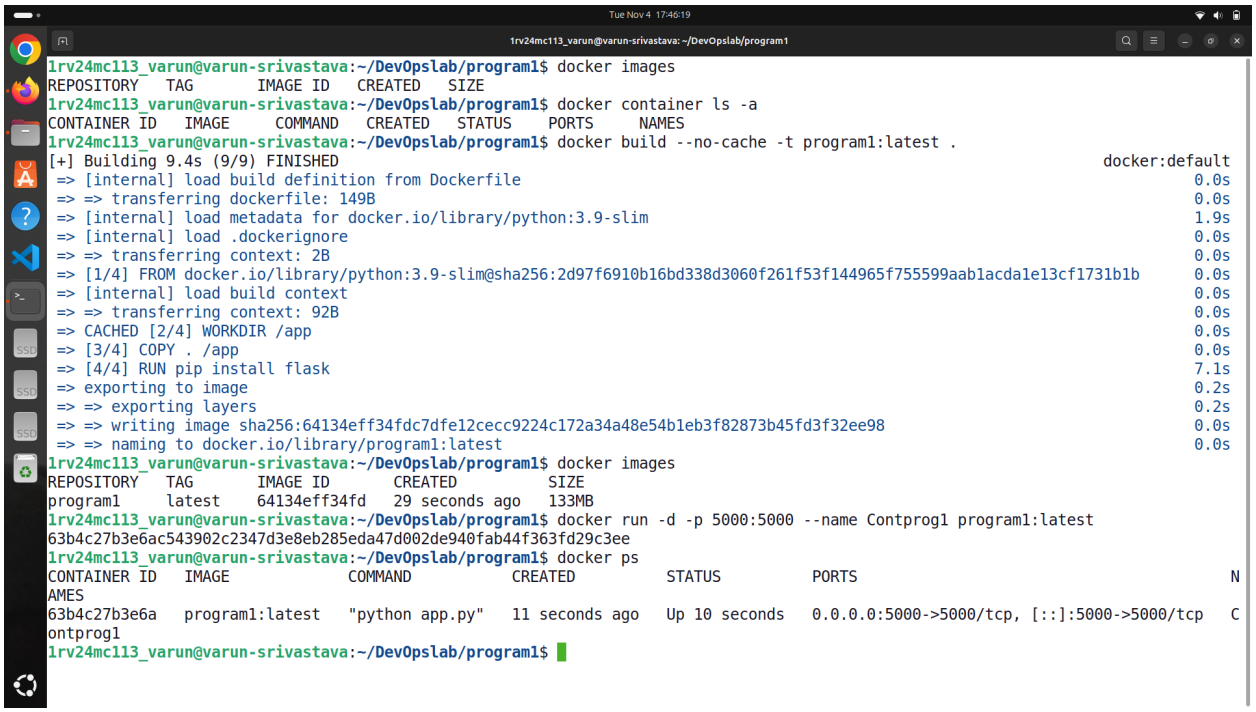


S5: Build the Docker Image

Sudo docker build -t program1 .

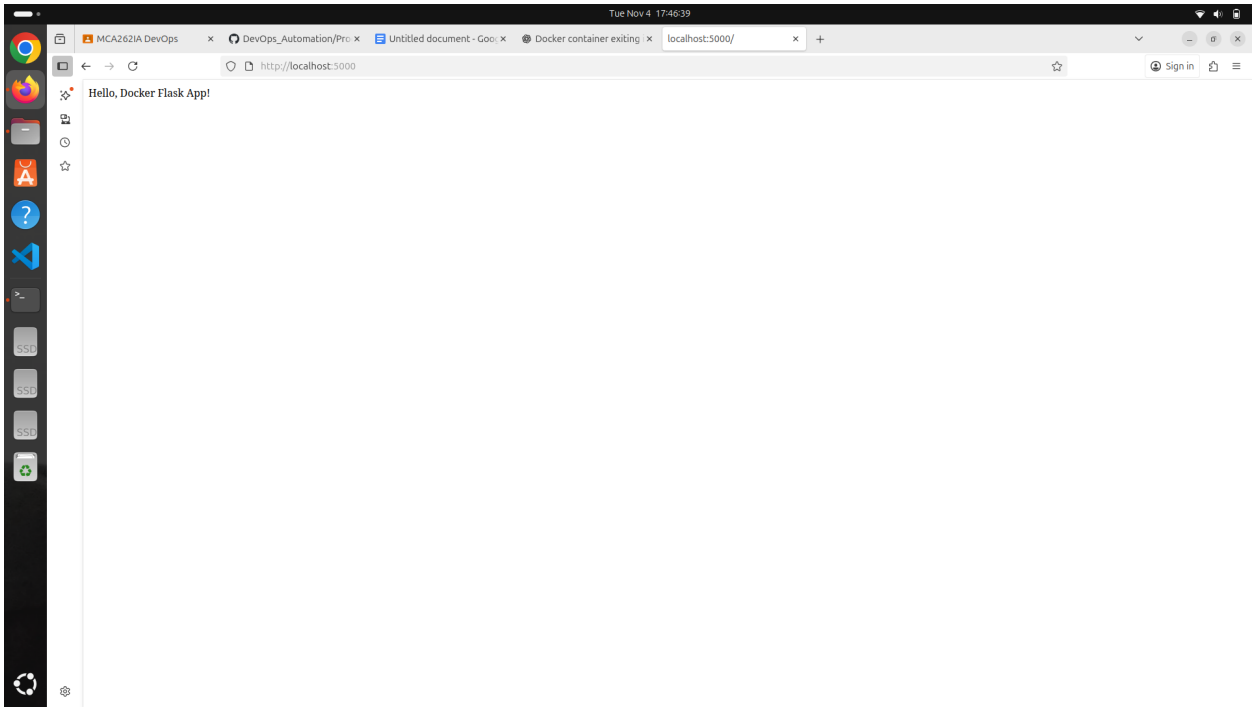
S6: Run the Docker Container

docker run -d -p 5000:5000 program_1



S7: Verify the Application

Open your browser and go to: http://localhost:5000



S8: Verify Running Container

docker ps