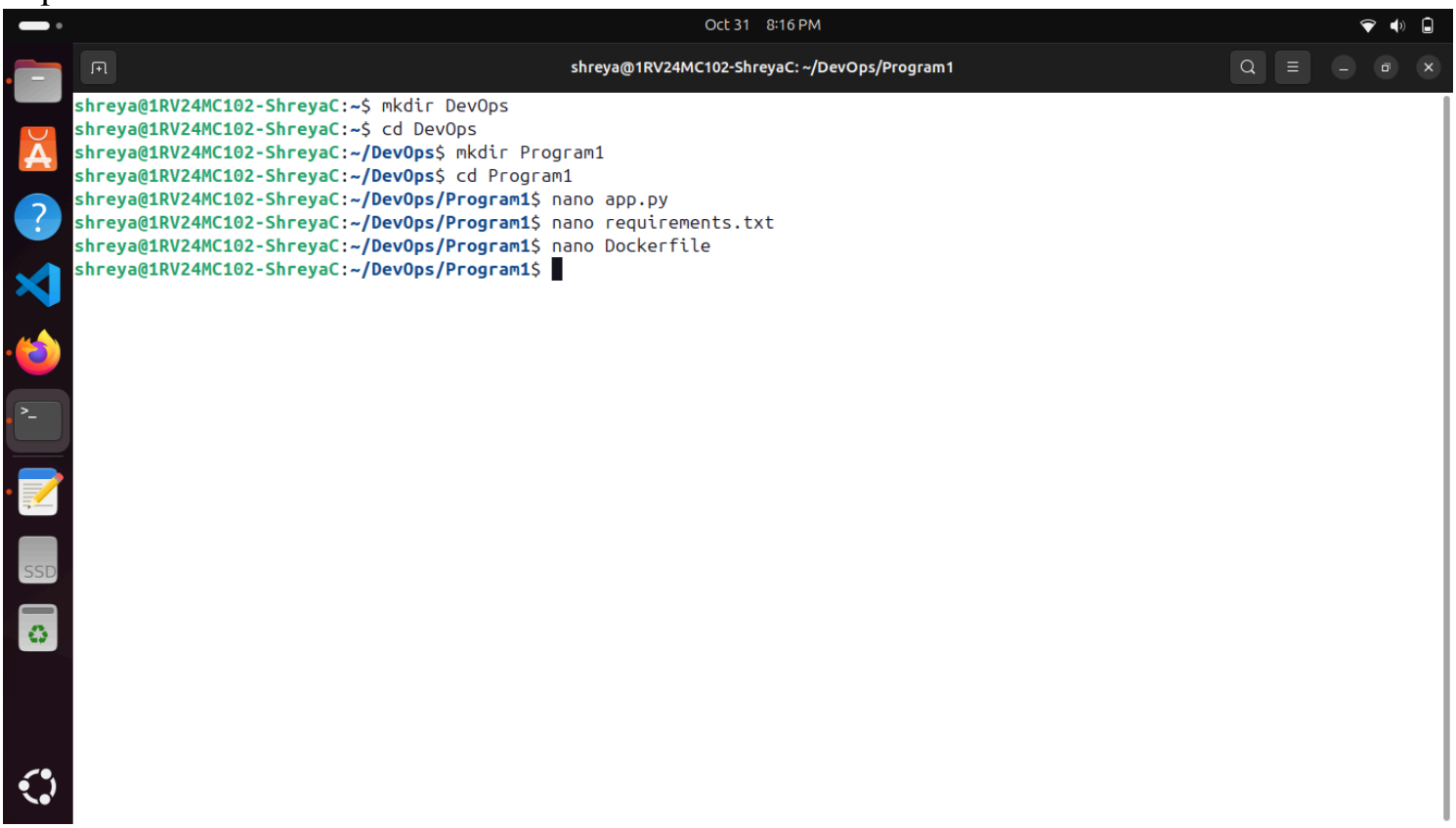
Shreya Rajesh Chadichal
1RV24MC102

Program 1 : Build a Docker Container from a Custom Dockerfile

Folder Structure

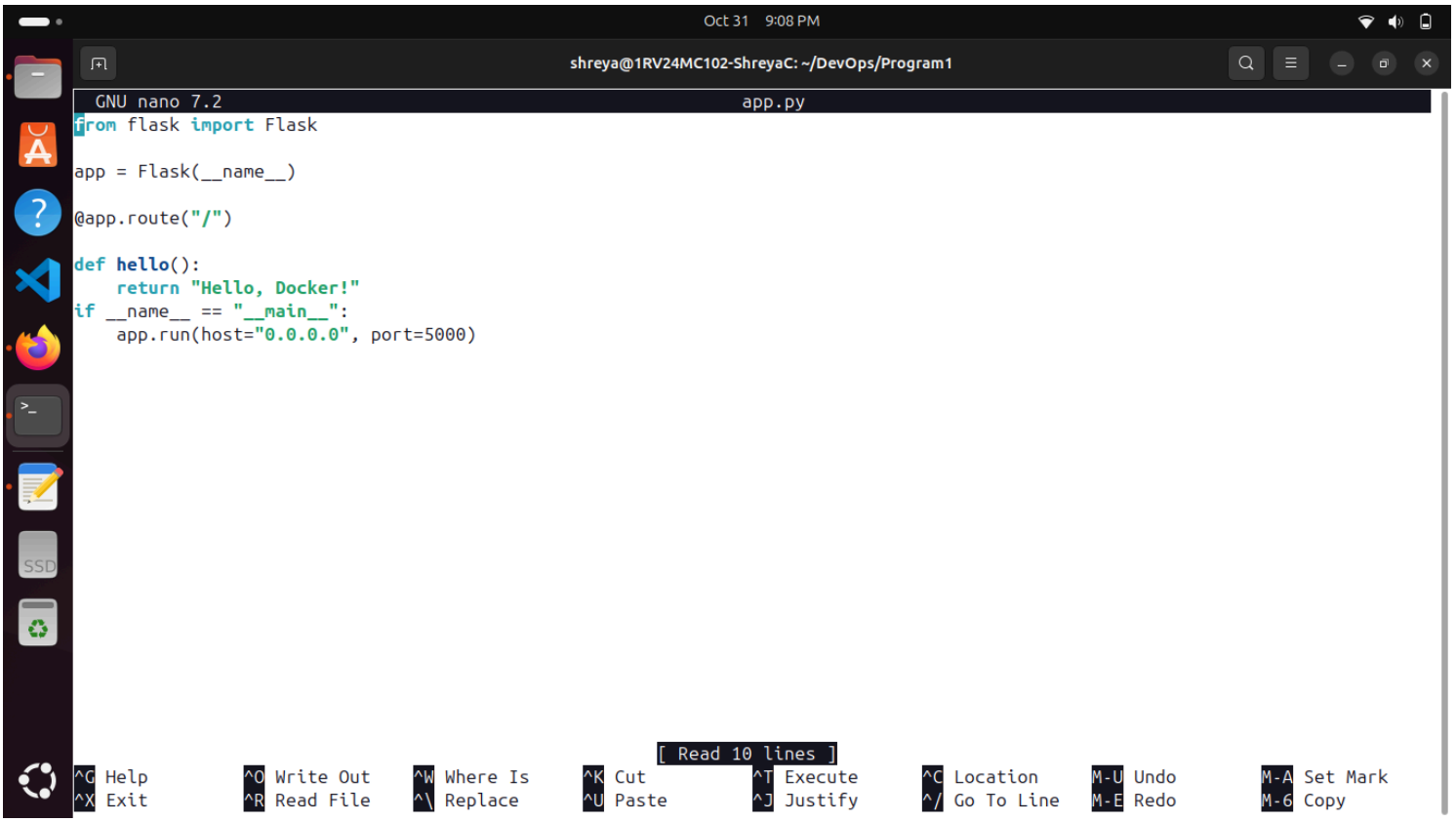
```
DevOps
   |-- Program1
         |-- app.py
         |-- requirements.txt
         |-- Dockerfile
```

Step 1: To build a docker container from custom Dockerfile, I've created a directory called DevOps navigate to DevOps directory and within that create a sub-directory with name Program1, navigate to Program1 directory and create the files such as app.py, requirements.txt and Dockerfile.

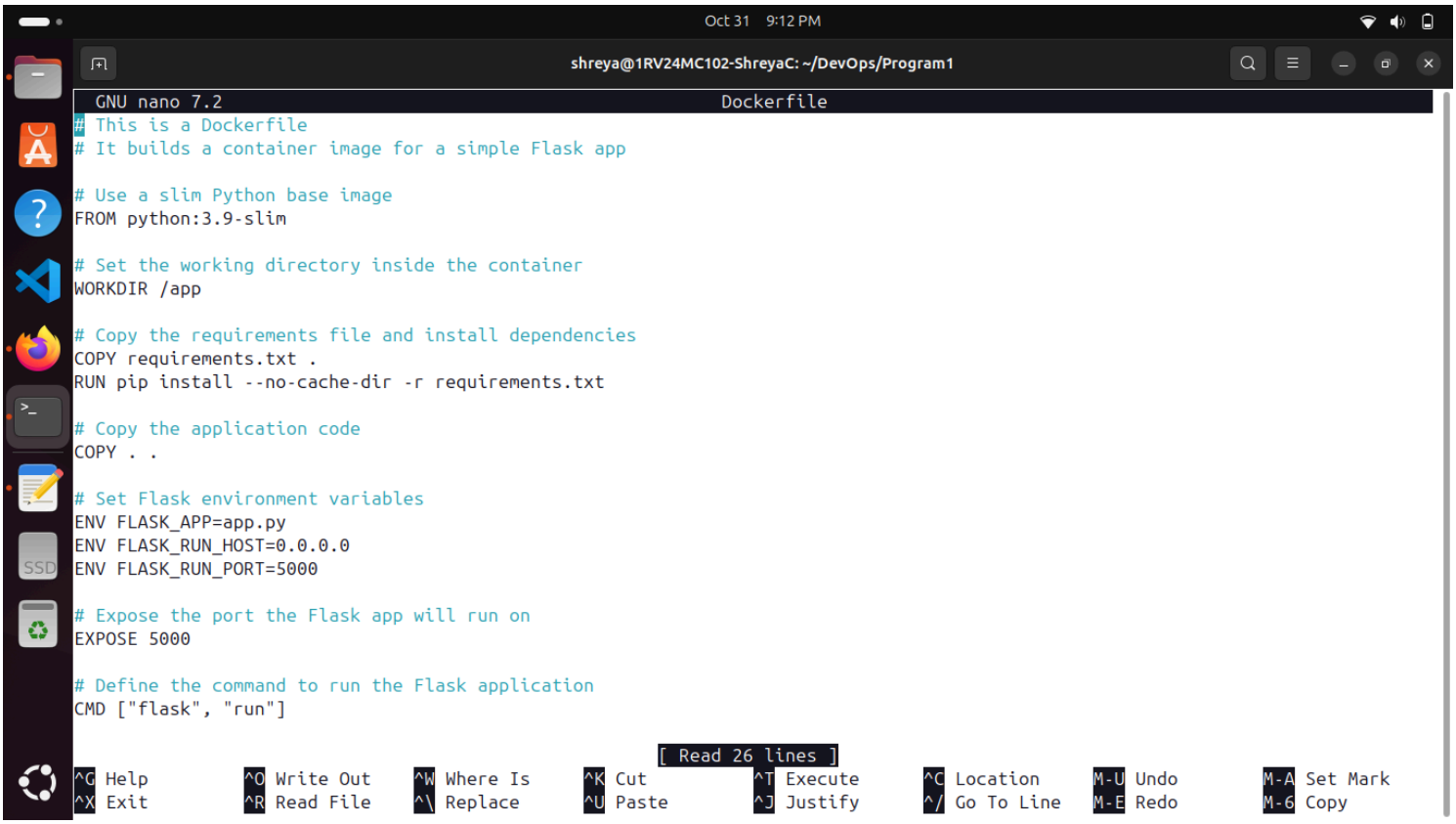


Step 2: Add the following code in requirements.txt file, which is used to install the dependencies.

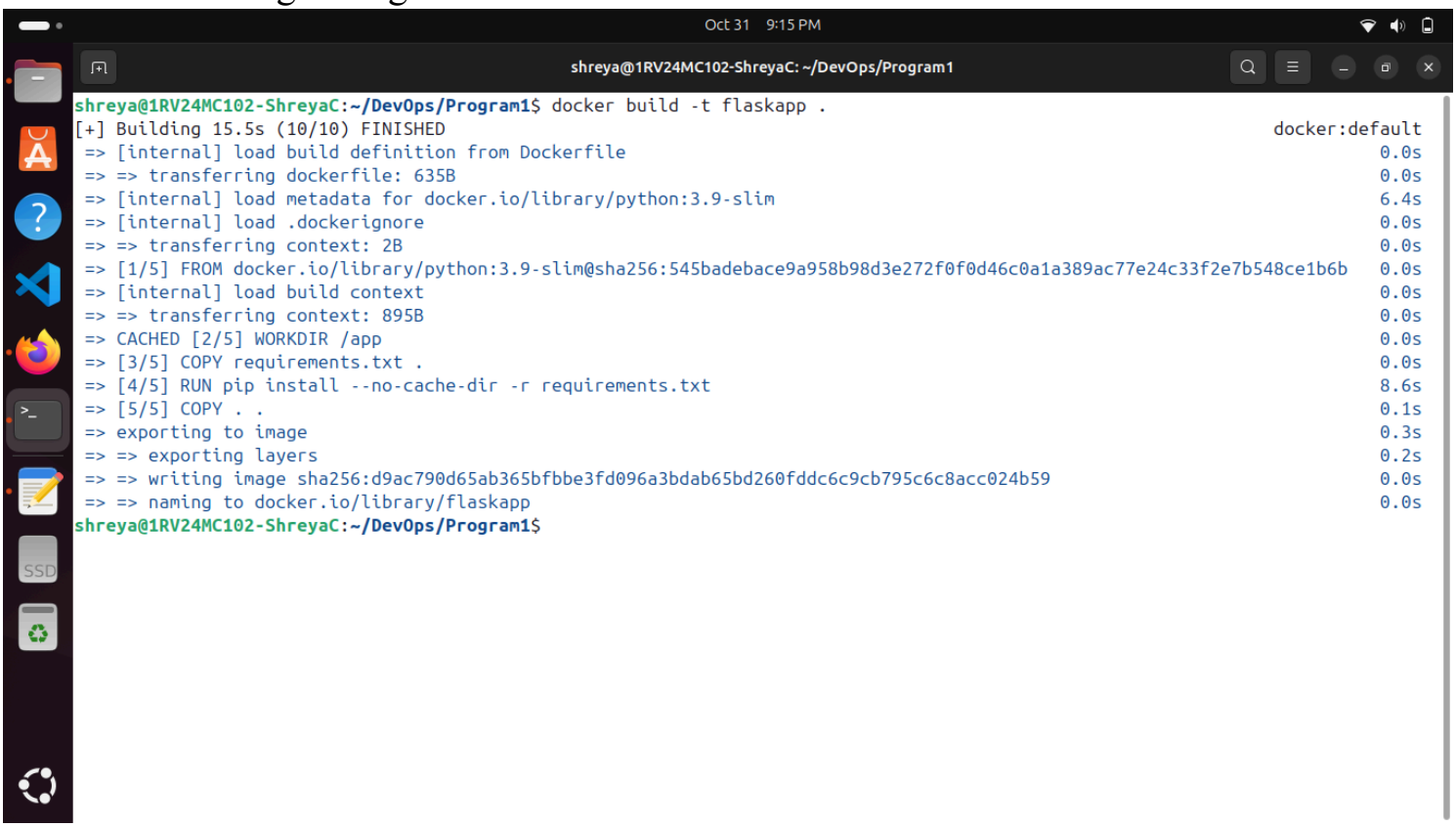
Step 3: Code the following in app.py file, this code runs a simple web server that shows **"Hello, Docker!"** when we visit.



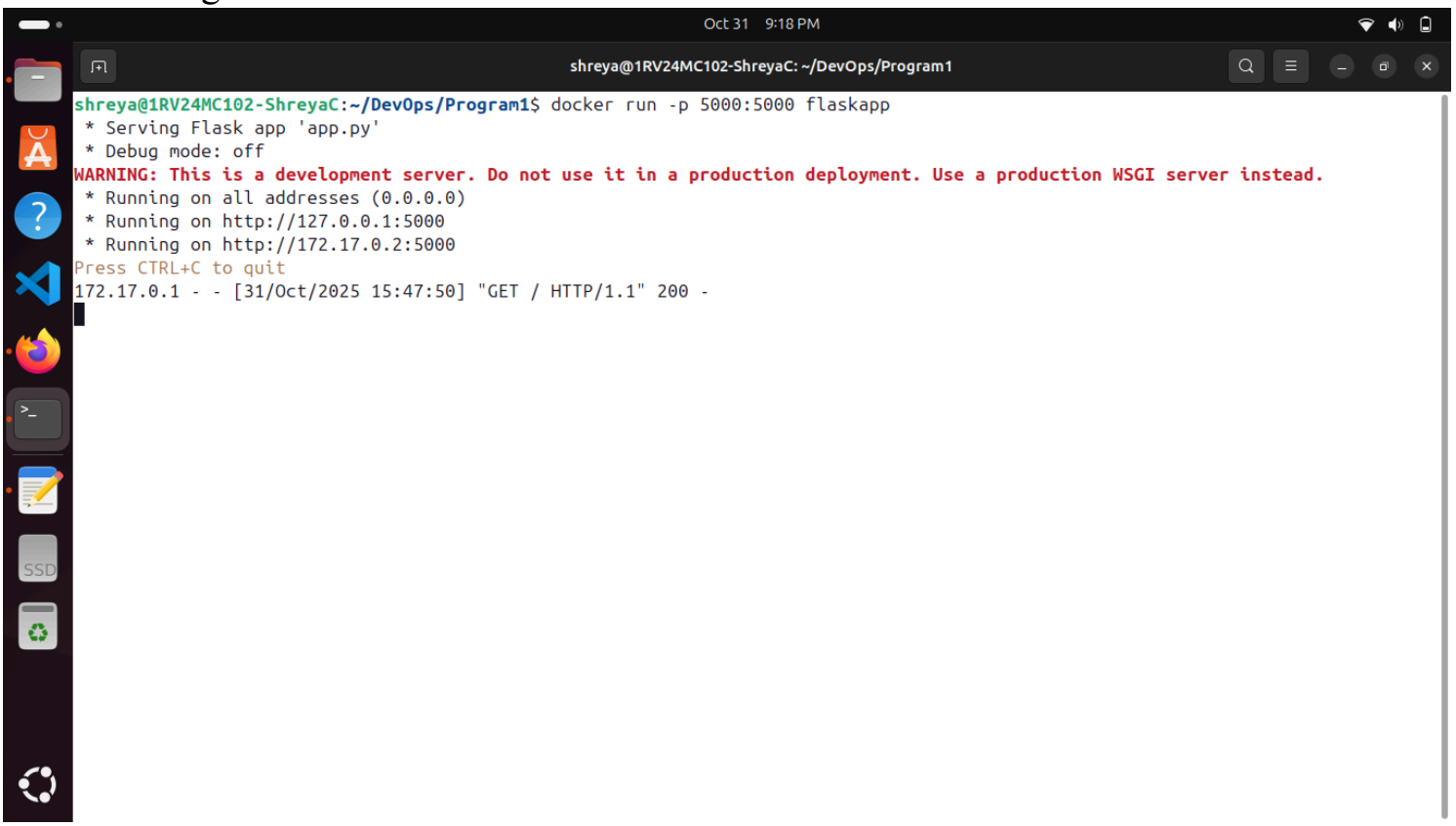
Step 4: Code the following in Dockerfile, it creates a lightweight container that installs Python and Flask dependencies, copies the code to /app and runs our Flask server on port 5000.

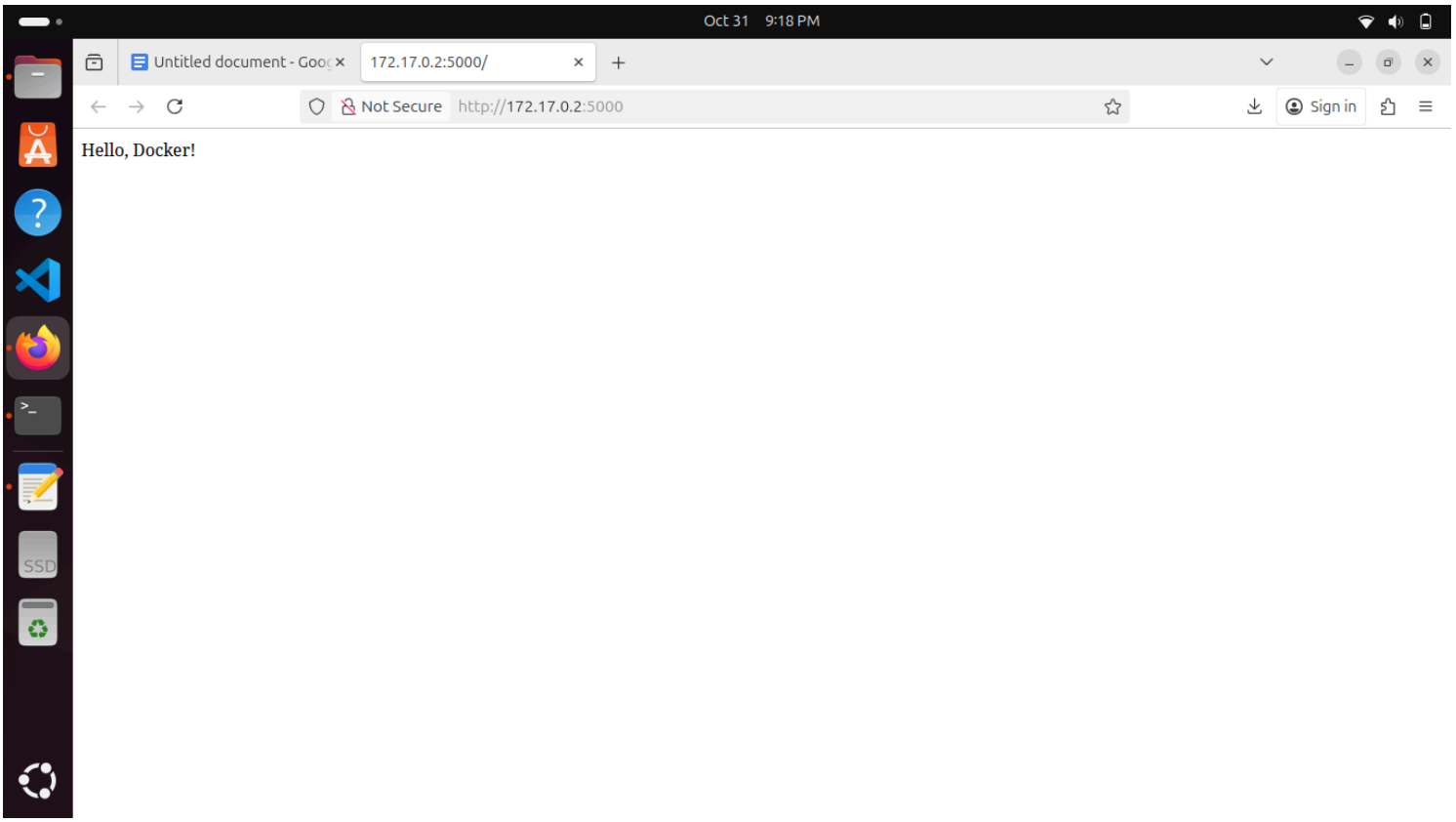


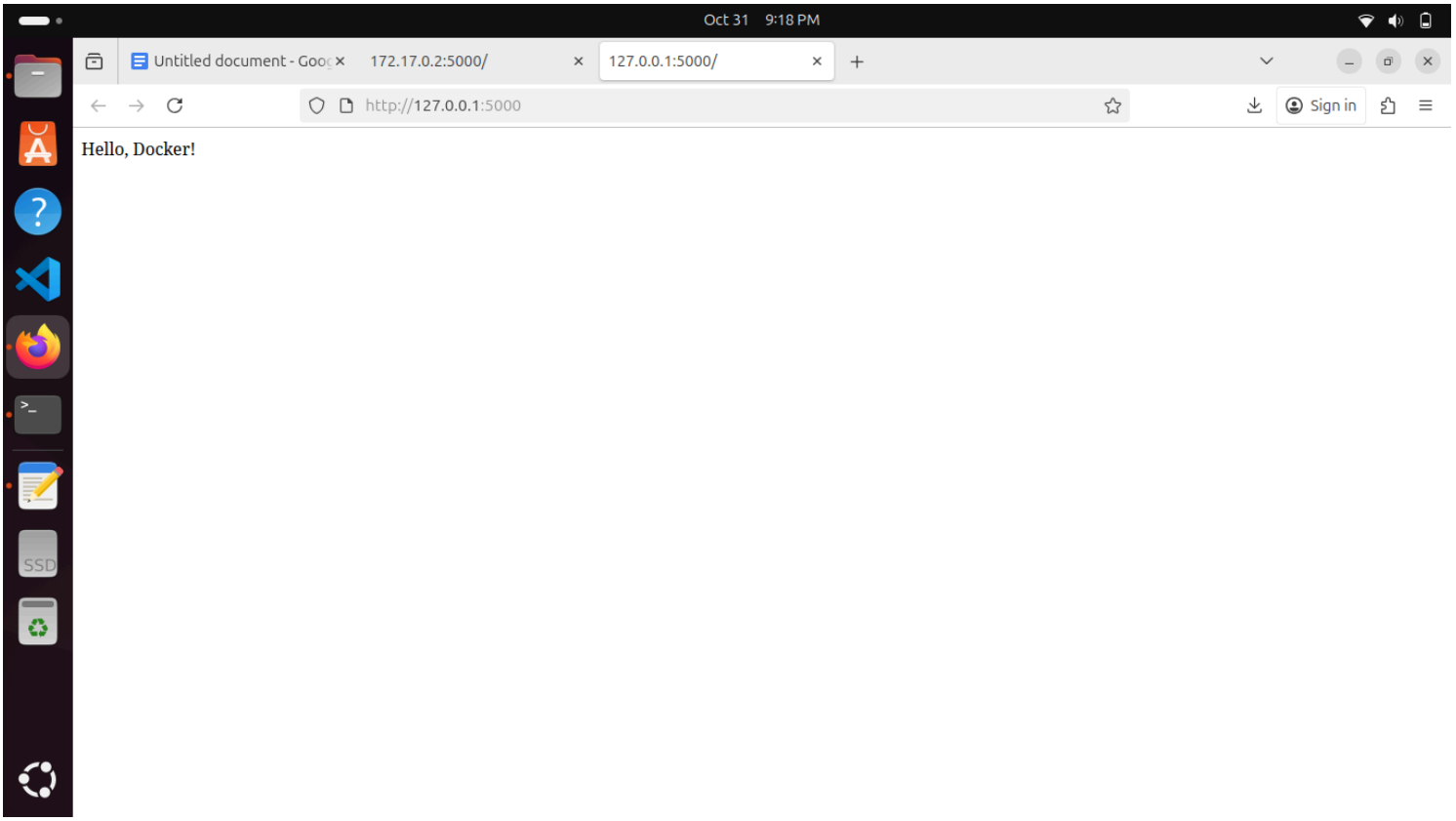
Step 5: Now build the docker container using docker build command which tells the Docker to create new image using Dockerfile.



Step 6: Run the Docker container using docker run command, which creates the container from the image we built.






Oct 31 9:18 PM
Untitled document - Goo
172.17.0.2:5000/
127.0.0.1:5000/
http://127.0.0.1:5000
Sign in
Hello, Docker!
SSD