DevOps Lab – Program 1

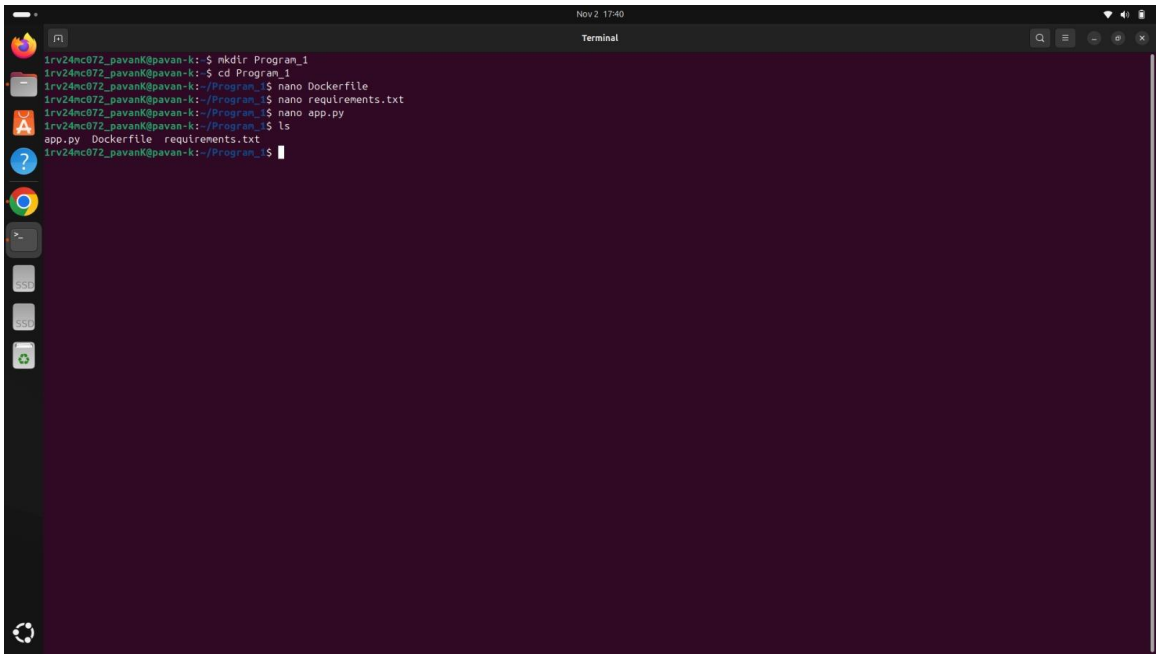
CREATING A DOCKER FILE

Project Structure

program_1/
│
├── Dockerfile
├── app.py
└── requirements.txt

Step 1 – Set Up Project Directory

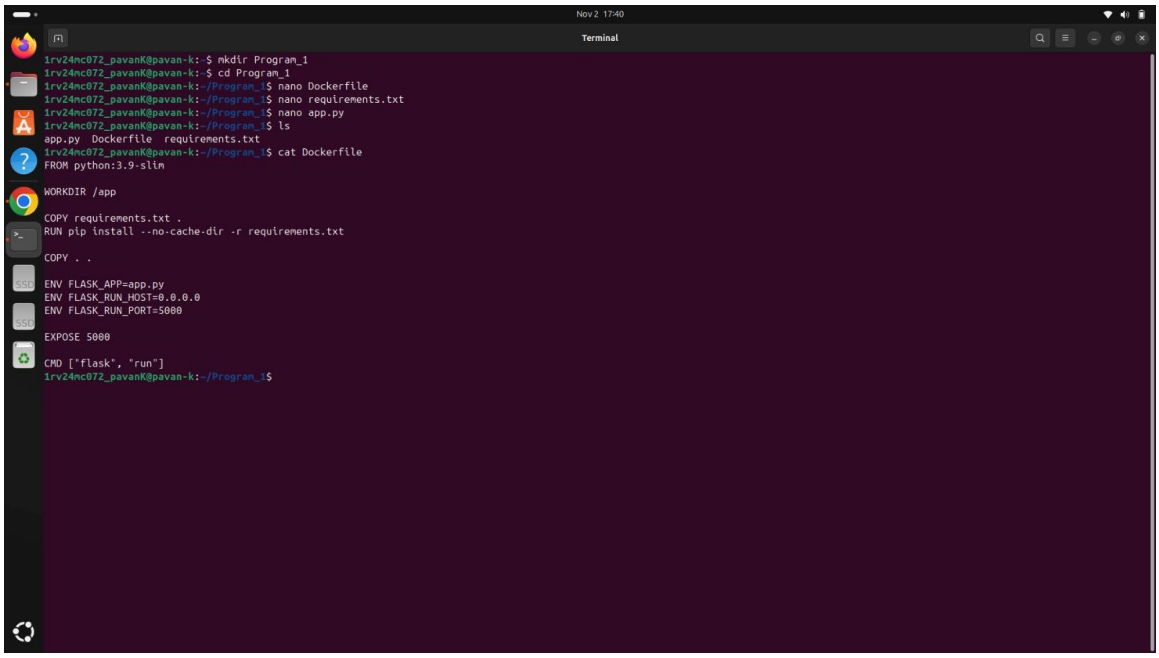
mkdir program_1
cd program_1



Step 2 – Create the Dockerfile

Open a new Dockerfile:

sudo nano Dockerfile



Step 3 – Write the Flask Application

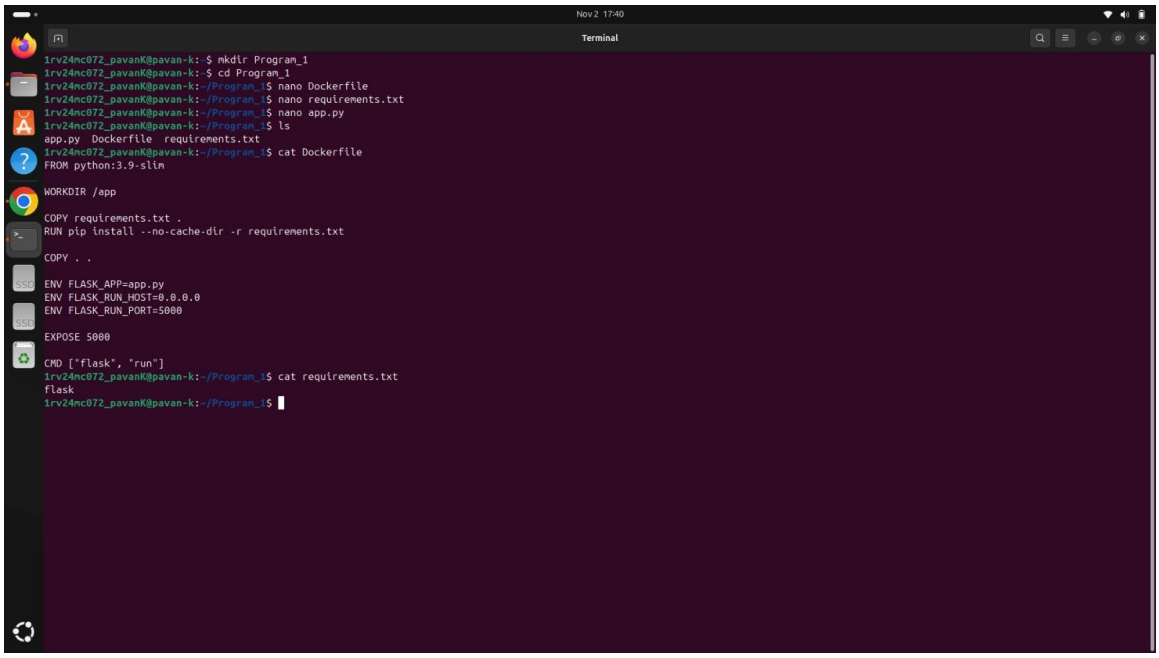
Create the main Python file:

nano app.py

Step 4 – Specify Dependencies

Create the requirements file:

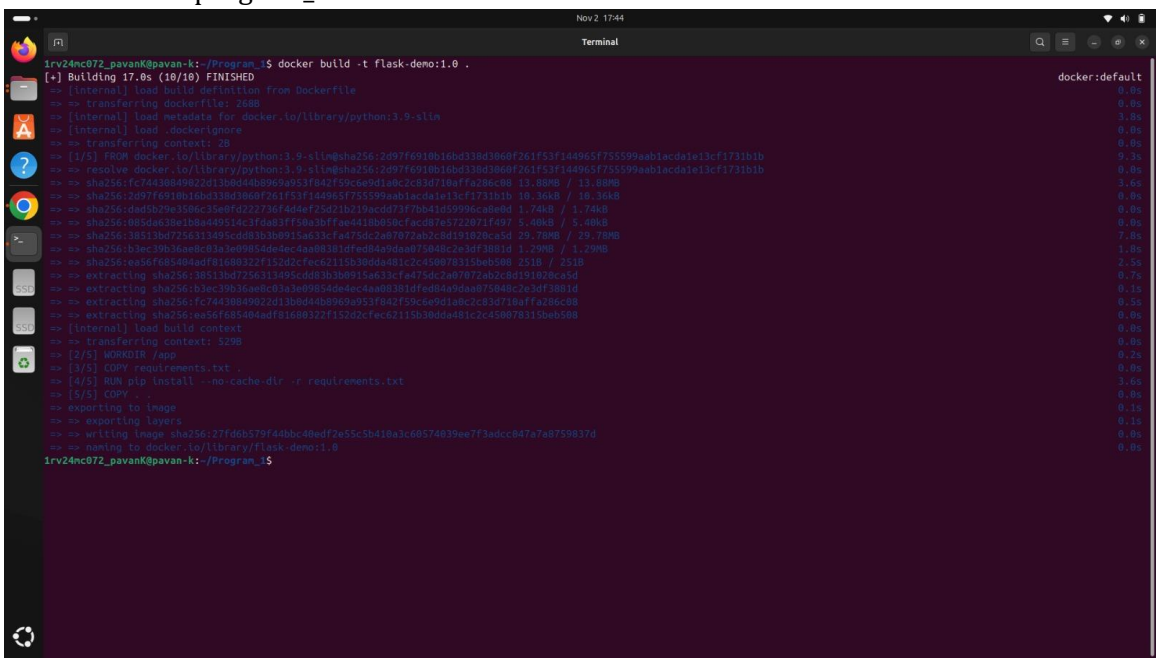
nano requirements.txt



Step 5 – Build the Docker Image

Execute:

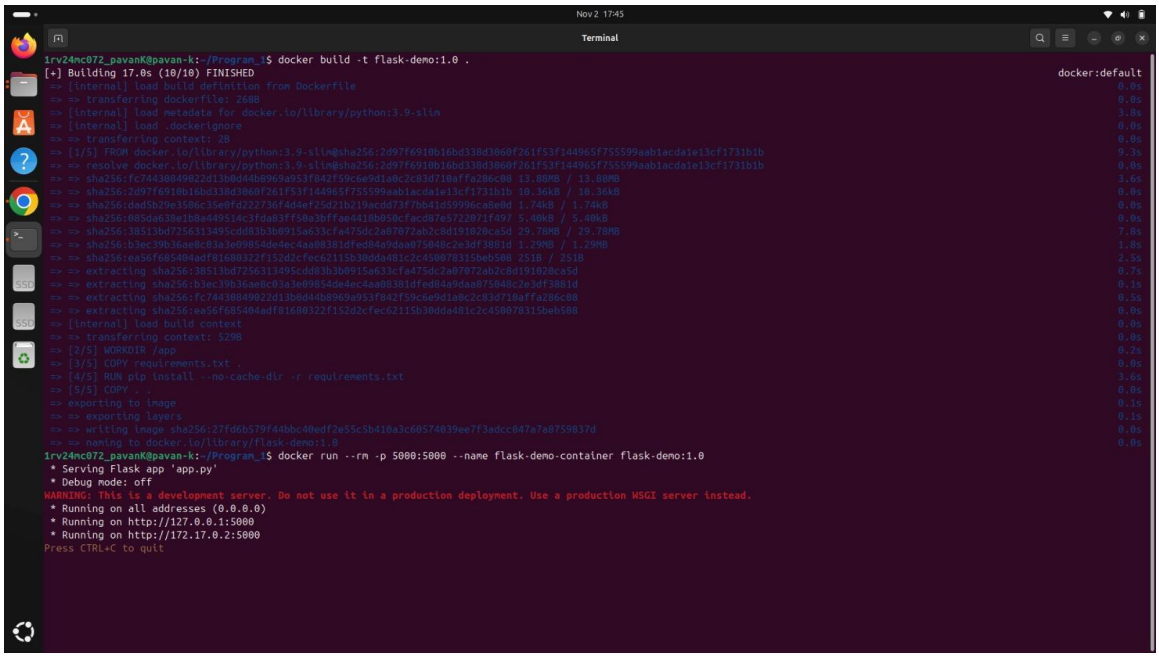
docker build -t program_1 .



Step 6 – Run the Container

Launch the container:

docker run -d -p 5000:5000 program_1



Step 7 – Test the Application

Open a web browser and visit:

http://localhost:5000