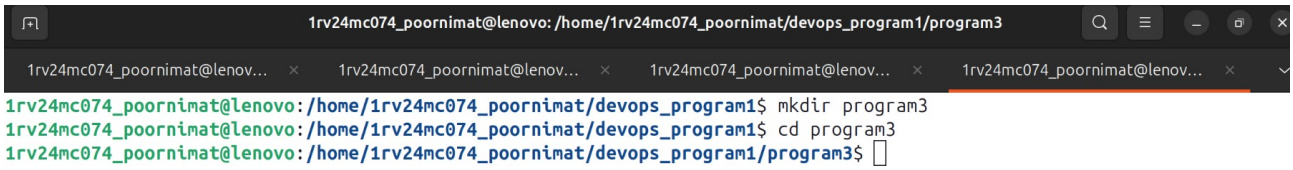
Devops lab program – 3

Code a Dockerized Python Flask or Node.js Application

Project structure

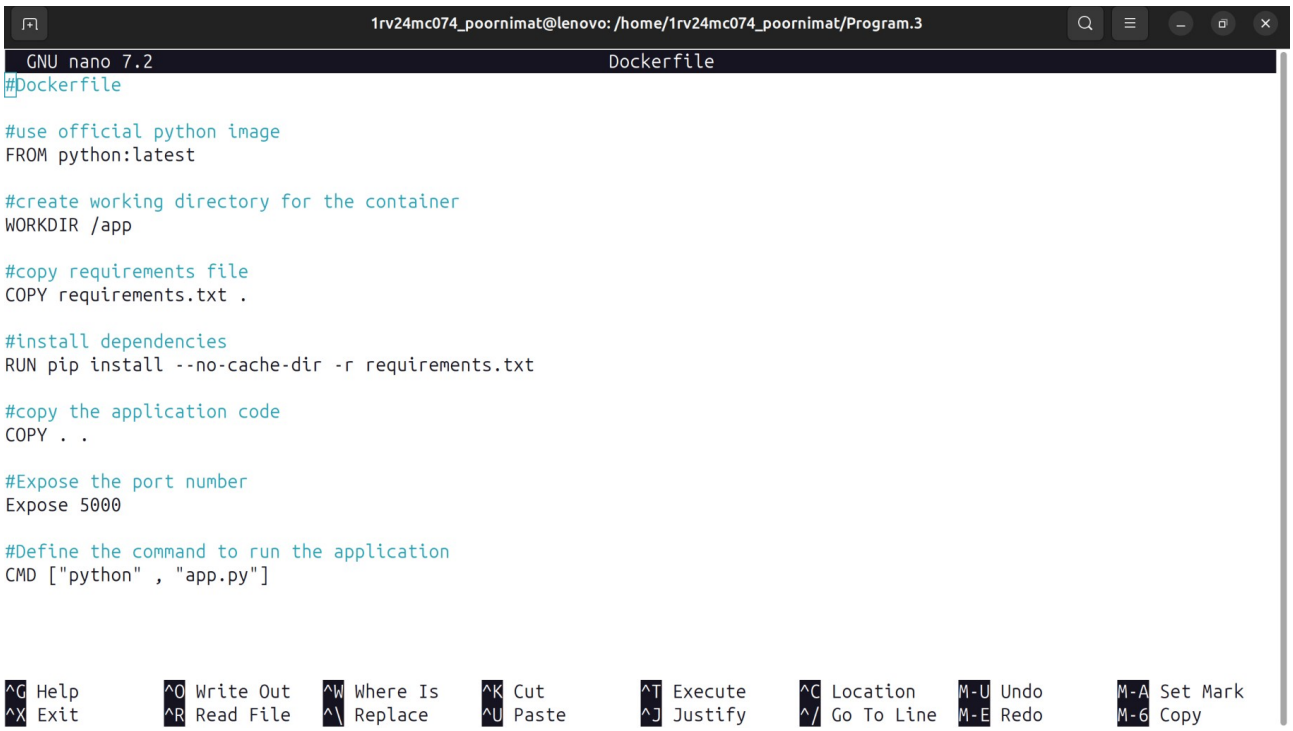
devops_program3
|__Dockerfile
|__app.py
|__requirements.txt

step1:create project folder



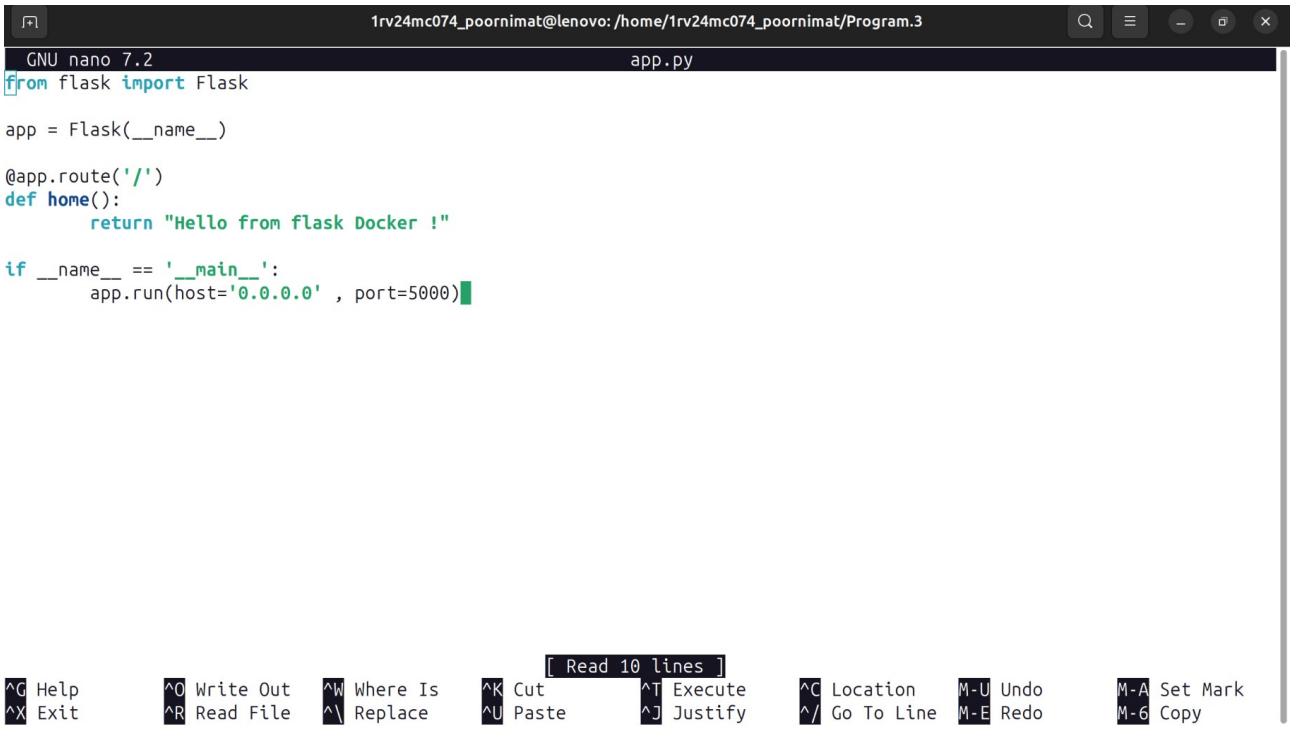
step2: create docker file

nano Dockerfile



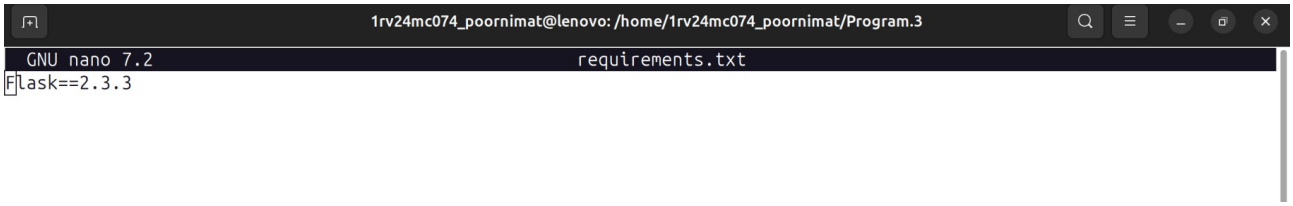
step3:create python application file

nano app.py



step4:create requirements.txt file

nano requirements.txt



step5:build docker image

sudo docker build -t p1 .

```
1rv24mc074_poornimat@lenovo: /home/1rv24mc074_poornimat/Program.3
1rv24mc074_poornimat@lenovo:/home/1rv24mc074_poornimat/Program.3$ sudo docker build -t p3 .
[+] Building 155.1s (10/10) FINISHED                                                                    docker:default
 => [internal] load build definition from Dockerfile                                                             0.0s
 => => transferring dockerfile: 423B                                                                             0.0s
 => WARN: ConsistentInstructionCasing: Command 'Expose' should match the case of the command majority (uppercase)  0.0s
 => [internal] load metadata for docker.io/library/python:latest                                                 5.7s
 => [internal] load .dockerignore                                                                                0.0s
 => => transferring context: 2B                                                                                  0.0s
 => [internal] load build context                                                                                0.0s
 => => transferring context: 93B                                                                                 0.0s
 => [1/5] FROM docker.io/library/python:latest@sha256:1ad1a43b5e2478e62056bbc28028afd858185d73bf4d6a439cbb058b6  137.1s
 => => resolve docker.io/library/python:latest@sha256:1ad1a43b5e2478e62056bbc28028afd858185d73bf4d6a439cbb058b680  0.0s
 => => sha256:1ad1a43b5e2478e62056bbc28028afd858185d73bf4d6a439cbb058b6800a96d 10.95kB / 10.95kB                 0.0s
 => => sha256:0134b02fcae7fd813645ca13d87412024d3c4324460c0b55e84015951284ad58 6.48kB / 6.48kB                   0.0s
 => => sha256:13cc39f8244ac66bf1dd9149e1da421ab1bbc80d612dc14fe368753e7be17b33 49.29MB / 49.29MB                37.3s
 => => sha256:e3143549f2b8b3ad8d79efdc47824641c6771796b3770f3c637a38aabd2b3462 25.62MB / 25.62MB                27.4s
 => => sha256:72e8e93b0d018b135d833207c6feaba205653ac52e0a80d214477ec0de239dee 67.78MB / 67.78MB                64.4s
 => => sha256:c4a87c25190f591b29fb62b4ee424ea9907b4a1997357ed47e82d6db98c80b12 2.32kB / 2.32kB                   0.0s
 => => sha256:23d55a674b2e3641a37b7f2053f00af6fe4f2a89576ffb917d4b7b4deaf24591 235.94MB / 235.94MB             127.4s
 => => extracting sha256:13cc39f8244ac66bf1dd9149e1da421ab1bbc80d612dc14fe368753e7be17b33                         1.8s
 => => sha256:8f5fb10be9d4525dc6941af4e2a587d1d3edbbb7442cdad0eebb1a3806b183dd 6.09MB / 6.09MB                  41.6s
 => => extracting sha256:e3143549f2b8b3ad8d79efdc47824641c6771796b3770f3c637a38aabd2b3462                         0.8s
 => => sha256:2fbf02c04055ee28543076a502ce51fa41895e386e4462739fb1526dc371425e 29.23MB / 29.23MB                 62.7s
 => => sha256:149075fcccd1b52406789bff7063813f1c14baf10b165df0e1e00fcb0ca415e5 248B / 248B                       63.5s
 => => extracting sha256:72e8e93b0d018b135d833207c6feaba205653ac52e0a80d214477ec0de239dee                         2.6s
 => => extracting sha256:23d55a674b2e3641a37b7f2053f00af6fe4f2a89576ffb917d4b7b4deaf24591                         8.0s
 => => extracting sha256:8f5fb10be9d4525dc6941af4e2a587d1d3edbbb7442cdad0eebb1a3806b183dd                         0.3s
 => => extracting sha256:2fbf02c04055ee28543076a502ce51fa41895e386e4462739fb1526dc371425e                         1.0s
 => => extracting sha256:149075fcccd1b52406789bff7063813f1c14baf10b165df0e1e00fcb0ca415e5                         0.0s
```

step6: run the container
sudo docker run -p 5000:5000 p1

```
1rv24mc074_poornimat@lenovo: /home/1rv24mc074_poornimat/Program.3
1rv24mc074_poornimat@lenovo:/home/1rv24mc074_poornimat/Program.3$ sudo docker run -p 5000:5000 p3
 * Serving Flask app 'app'
 * Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on all addresses (0.0.0.0)
 * Running on http://127.0.0.1:5000
 * Running on http://172.18.0.2:5000
Press CTRL+C to quit
```

step7:veryify the application
open your browser and go to http://localhost:5000