Devops lab program – 1

Build a Docker Container from a Custom Dockerfile

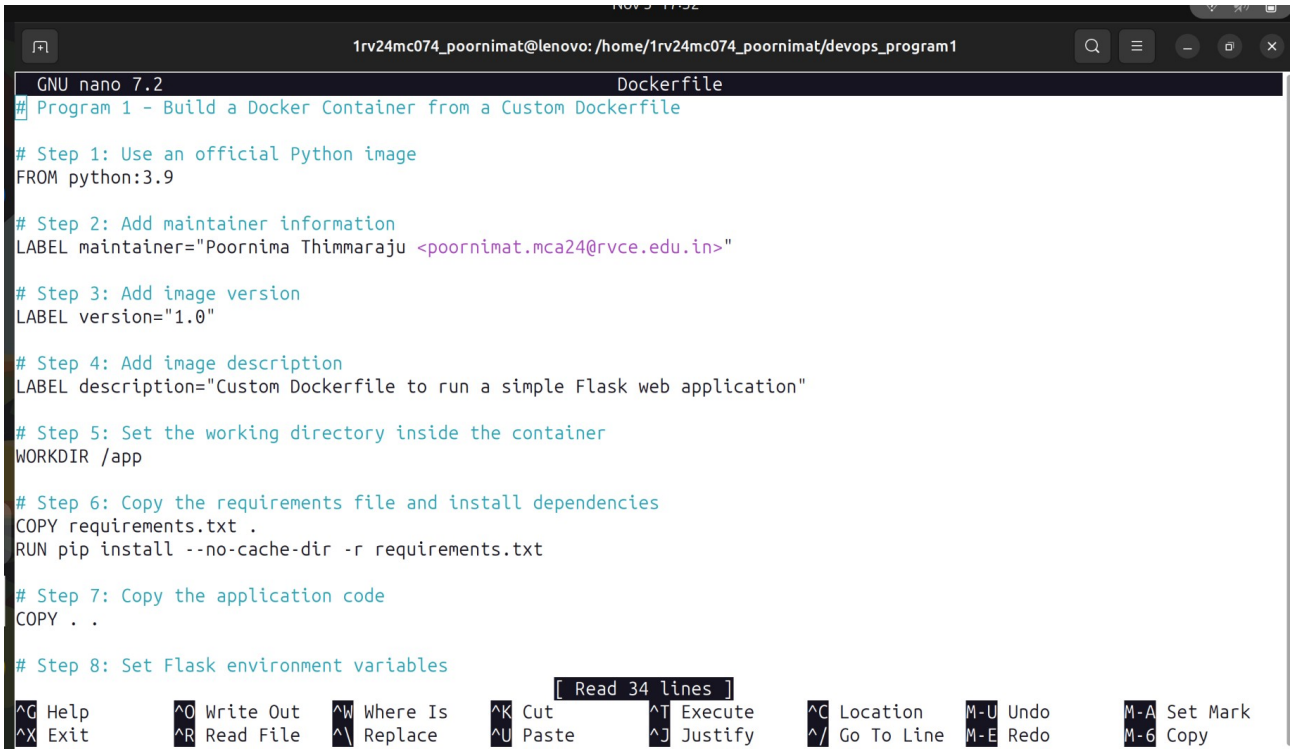
Project structure

devops_program1
|__Dockerfile
|__app.py
|__requirements.txt

step1:create project folder

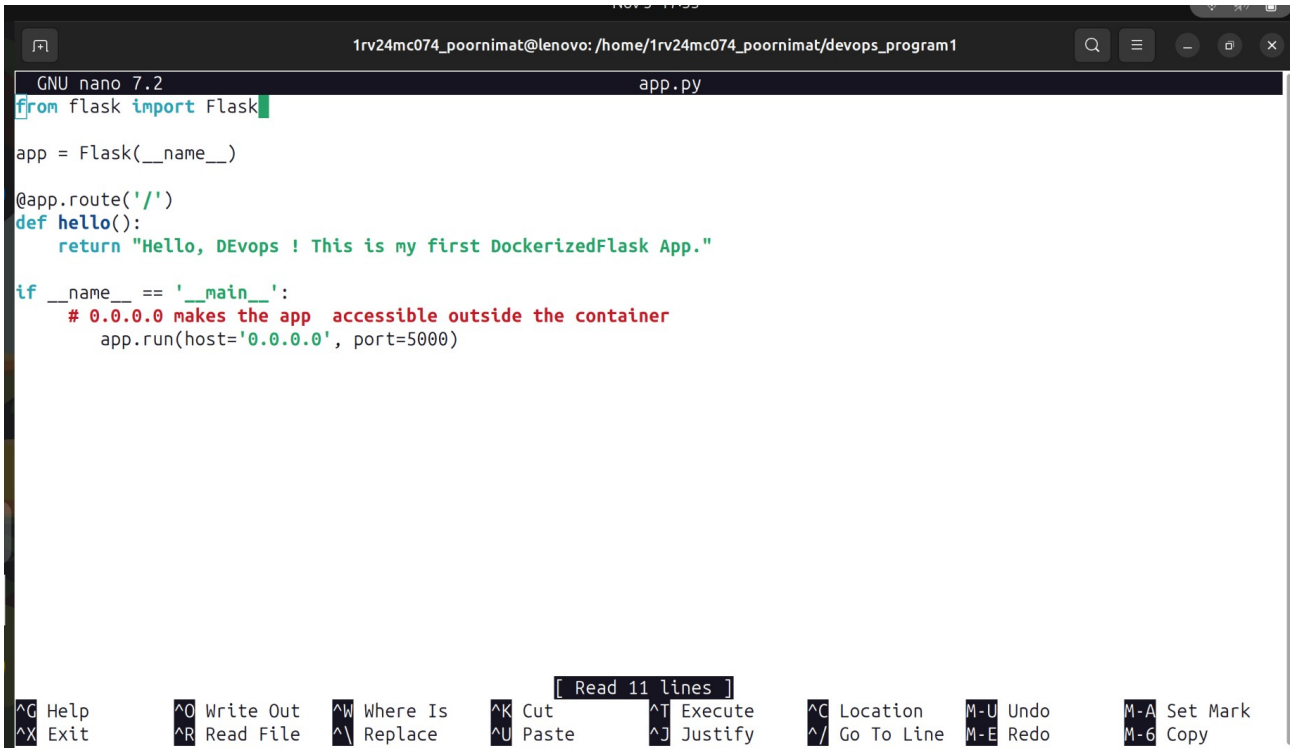
step2: create docker file

nano Dockerfile



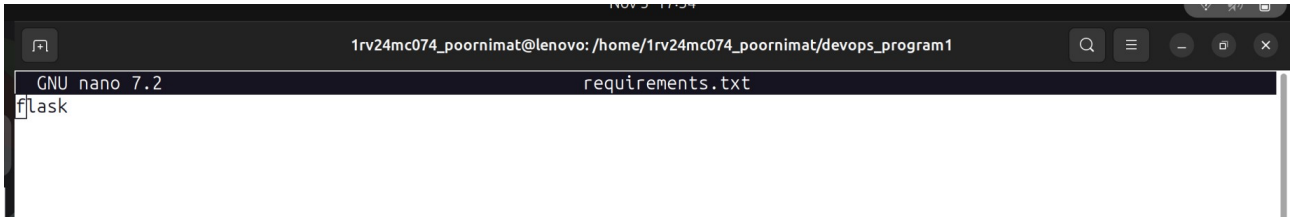
step3:create python application file

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/devops_program1
1rv24mc074_poornimat@lenovo:/home/1rv24mc074_poornimat/devops_program1$ sudo docker build -t p1 .
[+] Building 178.9s (10/10) FINISHED                                                                    docker:default
 => [internal] load build definition from Dockerfile                                                             0.0s
 => => transferring dockerfile: 941B                                                                             0.0s
 => [internal] load metadata for docker.io/library/python:3.9                                                    6.5s
 => [internal] load .dockerignore                                                                                0.0s
 => => transferring context: 2B                                                                                  0.0s
 => [1/5] FROM docker.io/library/python:3.9@sha256:da5aee29682d12a6649f51c8d6f15b87deb3e6c524b923c41d0cb3304d07  166.0s
 => => resolve docker.io/library/python:3.9@sha256:da5aee29682d12a6649f51c8d6f15b87deb3e6c524b923c41d0cb3304d07c9  0.0s
 => => sha256:bcd3da5974912584a81ed86fd944ab5fba9093ff1c9a0b0ed18349f9a69e4762 6.23kB / 6.23kB                   0.0s
 => => sha256:795dbedde24d2c72dafd2b71fe36643552e56859c0e29cdb095ed54b825fbaa2 49.28MB / 49.28MB                67.2s
 => => sha256:89d573bf42b377ce6a5a0451c15388849686fa4058efd68999f3b014daeb5b55 25.62MB / 25.62MB                45.4s
 => => sha256:26dfe2fac1c486e9aaf41d1028ed30be2c442aa84af44462bc7bac8c148ffb13 67.78MB / 67.78MB                58.5s
 => => sha256:da5aee29682d12a6649f51c8d6f15b87deb3e6c524b923c41d0cb3304d07c913 10.30kB / 10.30kB                 0.0s
 => => sha256:d6ca7d9522a172c424721d3509ee12079f7864a742b6adf1eeb66b6c405307ee 2.32kB / 2.32kB                   0.0s
 => => sha256:79d5bd8a8d262418bf22e705535ce38c6789dc72e319d76b30aafa5c331b6924 235.93MB / 235.93MB             156.9s
 => => sha256:081ccf923272c30c6072c6ff1617d9072e03ab2a90a431951d325d45e296962b 6.10MB / 6.10MB                 69.5s
 => => sha256:c9723aa529b03c40e66d0aee927a410b4719528ab865af6e0bac1b7c9b10829e 20.37MB / 20.37MB                79.3s
 => => extracting sha256:795dbedde24d2c72dafd2b71fe36643552e56859c0e29cdb095ed54b825fbaa2                        1.7s
 => => extracting sha256:89d573bf42b377ce6a5a0451c15388849686fa4058efd68999f3b014daeb5b55                        0.8s
 => => sha256:91c91c91f1d23f4edf4280a8fe935f14340fec43a7a3576149a7cffcf70c2f9b 250B / 250B                       70.1s
 => => extracting sha256:26dfe2fac1c486e9aaf41d1028ed30be2c442aa84af44462bc7bac8c148ffb13                        2.5s
 => => extracting sha256:79d5bd8a8d262418bf22e705535ce38c6789dc72e319d76b30aafa5c331b6924                        7.6s
 => => extracting sha256:081ccf923272c30c6072c6ff1617d9072e03ab2a90a431951d325d45e296962b                        0.3s
 => => extracting sha256:c9723aa529b03c40e66d0aee927a410b4719528ab865af6e0bac1b7c9b10829e                        0.8s
 => => extracting sha256:91c91c91f1d23f4edf4280a8fe935f14340fec43a7a3576149a7cffcf70c2f9b                        0.0s
 => [internal] load build context                                                                                0.0s
```

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

```
1rv24mc074_poornimat@lenovo:/home/1rv24mc074_poornimat/devops_program1$ sudo docker run -p 5000:5000 p1
 * Serving Flask app 'app.py'
 * Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server inst
 * 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

Hello, DEvops ! This is my first DockerizedFlask App.