

PROGRAM 1 :

Step 1 : created a folder program 1

Step 2 : created 3 files and written necessary code in requirements.txt , app.py, Dockerfile

```
rv24mc028_chethanacs@Elite:~/DEVops$ cd program1
rv24mc028_chethanacs@Elite:~/DEVops/program1$ nano requirements.txt
rv24mc028_chethanacs@Elite:~/DEVops/program1$ nano app.py
rv24mc028_chethanacs@Elite:~/DEVops/program1$ nano Dockerfile
```

Step 3: checked docker status using “sudo systemctl status docker”

Step 4 : build image using “sudo docker build -t prg1”

```
rv24mc028_chethanacs@Elite:~/DEVops/program1$ sudo docker build -t prg1 .
[+] Building 32.9s (10/10) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 268B
=> [internal] load metadata for docker.io/library/python:3.9-slim
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [1/5] FROM docker.io/library/python:3.9-slim@sha256:545badebace9a958b98d3e272f0f0d46c0a1a389ac77e24c33f2e7b548ce1b6b
=> => resolve docker.io/library/python:3.9-slim@sha256:545badebace9a958b98d3e272f0f0d46c0a1a389ac77e24c33f2e7b548ce1b6b
=> => sha256:dc9f486a31b5c0642ed5606b41c820fae66e6d91003c32e4f3d1624b6e7425cd 1.74kB / 1.74kB
=> => sha256:725dd64d2f62808e0aee4d5d916f4c208275716e74cc700ed68aa17078411ca9 5.30kB / 5.30kB
=> => sha256:38513bd7256313495cdd83b3b0915a633cfa475dc2a07072ab2c8d191020ca5d 29.78MB / 29.78MB
=> => sha256:c57466e36deb99f355eab1131bc21d799709189ecdd7fb41cf4c17d5f53724e2 1.29MB / 1.29MB
=> => sha256:6f010d693edcb2d965ff3c2a741fc92cded69746aa616f746e7813896fdd443b 13.87MB / 13.87MB
=> => sha256:545badebace9a958b98d3e272f0f0d46c0a1a389ac77e24c33f2e7b548ce1b6b 10.36kB / 10.36kB
=> => sha256:21ed5e7e522581efdab14b4fde1d7d493901b4d25736b947520695c7911da66b 250B / 250B
=> => extracting sha256:38513bd7256313495cdd83b3b0915a633cfa475dc2a07072ab2c8d191020ca5d
=> => extracting sha256:c57466e36deb99f355eab1131bc21d799709189ecdd7fb41cf4c17d5f53724e2
=> => extracting sha256:6f010d693edcb2d965ff3c2a741fc92cded69746aa616f746e7813896fdd443b
=> => extracting sha256:21ed5e7e522581efdab14b4fde1d7d493901b4d25736b947520695c7911da66b
=> [internal] load build context
=> => transferring context: 525B
=> [2/5] WORKDIR /app
=> [3/5] COPY requirements.txt .
=> [4/5] RUN pip install --no-cache-dir -r requirements.txt
=> [5/5] COPY . .
=> exporting to image
=> => exporting layers
=> => writing image sha256:5557541719266dc5766ae32970b6e0491a1403b59b7e17095a037b1856068cdd
=> => naming to docker.io/library/prg1
```

Step 5 : checking image using “sudo docker images”

Step 6 : Opening in the server

```
rv24mc028_chethanacs@Elite:~/DEVops/program1$ sudo docker images
REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
prg1                 latest         555754171926   3 minutes ago  132MB
secondfile           latest         296938fbba41   4 days ago     17.8MB
mynewimage           latest         1bb80aa6cf35   4 days ago     143MB
<none>               <none>         728cd74b59e5   4 days ago     147MB
hello-world          latest         1b44b5a3e06a   2 months ago   10.1kB
```

Step
7 :
image
from
web

```
rv24mc028_chethanacs@Elite:~/DEVops/program1$ sudo docker build -t prg1 .
sudo docker run -p 5000:5000 prg1
[+] Building 2.6s (10/10) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 268B
=> [internal] load metadata for docker.io/library/python:3.9-slim
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [1/5] FROM docker.io/library/python:3.9-slim@sha256:545badebace9a958b98d3e272f0d46c0a1a389ac77e24c33f2e7b548ce1b6b
=> [internal] load build context
=> => transferring context: 276B
=> CACHED [2/5] WORKDIR /app
```

← → ↻ ⓘ 127.0.0.1:5000

hello Docker !