

PROGRAM 1 :

Step 1 : created a folder program 1

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

```
1RV24MC036_gayatri_v_k@ubuntu:~$ mkdir pgm1
1RV24MC036_gayatri_v_k@ubuntu:~$ cd pgm1
1RV24MC036_gayatri_v_k@ubuntu:~/pgm1$ nano app.py
1RV24MC036_gayatri_v_k@ubuntu:~/pgm1$ nano requirements.txt
1RV24MC036_gayatri_v_k@ubuntu:~/pgm1$ nano Dockerfile
```

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

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

```
1RV24MC036_gayatri_v_k@ubuntu:~/pgm1$ docker build -t my-flask-app .
[+] Building 21.6s (10/10) FINISHED                                docker:default
=> [internal] load build definition from Dockerfile                0.0s
=> => transferring dockerfile: 558B                                0.0s
=> [internal] load metadata for docker.io/library/python:3.9-slim 6.5s
=> [internal] load .dockerignore                                  0.0s
=> => transferring context: 2B                                       0.0s
=> [1/5] FROM docker.io/library/python:3.9-slim@sha256:2d97f6910b16bd338 5.1s
=> => resolve docker.io/library/python:3.9-slim@sha256:2d97f6910b16bd338 0.0s
=> => sha256:ea56f685404adf81680322f152d2cfec62115b30dda481c 251B / 251B 0.7s
=> => sha256:2d97f6910b16bd338d3060f261f53f144965f7555 10.36kB / 10.36kB 0.0s
=> => sha256:dad5b29e3506c35e0fd222736f4d4ef25d21b219acd 1.74kB / 1.74kB 0.0s
=> => sha256:085da638e1b8a449514c3fda83ff50a3bffa4418b0 5.40kB / 5.40kB 0.0s
=> => sha256:b3ec39b36ae8c03a3e09854de4ec4aa08381dfed84a 1.29MB / 1.29MB 3.0s
=> => sha256:fc74430849022d13b0d44b8969a953f842f59c6e9 13.88MB / 13.88MB 3.5s
=> => extracting sha256:b3ec39b36ae8c03a3e09854de4ec4aa08381dfed84a9daa0 0.3s
=> => extracting sha256:fc74430849022d13b0d44b8969a953f842f59c6e9d1a0c2c 1.4s
=> => extracting sha256:ea56f685404adf81680322f152d2cfec62115b30dda481c2 0.0s
=> [internal] load build context                                    0.0s
=> => transferring context: 818B                                     0.0s
=> [2/5] WORKDIR /app                                              0.1s
=> [3/5] COPY requirements.txt .                                    0.0s
=> [4/5] RUN pip install --no-cache-dir -r requirements.txt       9.5s
=> [5/5] COPY . .                                                  0.0s
=> exporting to image                                              0.3s
=> => exporting layers                                              0.3s
=> => writing image sha256:a986c4686d36657df233693894336edb0d2f61b418add 0.0s
=> => naming to docker.io/library/my-flask-app                    0.0s
```

Step 5 : checking image using “sudo docker images”

Step 6 : Opening in in the server

```
1RV24MC036_gayatri_v_k@ubuntu:~/pgm1$ sudo docker images
[sudo] password for 1RV24MC036_gayatri_v_k:
REPOSITORY          TAG          IMAGE ID          CREATED          SIZE
my-flask-app        latest      a986c4686d36     50 seconds ago  133MB
node-multistage-app latest      81e096b81e02     2 days ago      137MB
:non>               <none>      bef49b35b619     2 days ago      132MB
my-node-app         latest      8b17073010b4     2 days ago      129MB
:non>               <none>      deda24c3ffb5     2 days ago      129MB
:non>               <none>      dfa50beba801     2 days ago      132MB
:non>               <none>      d7d26de2057a     2 days ago      132MB
:non>               <none>      217b721cf1d4     2 days ago      132MB
```

Step 7 : Image From The Web

Hello, Docker!