

Program3 : Code a dockerized Python Flask or Node.js Application

Program 3

```
|  
|  
|-----app.py  
|  
|-----requirements.txt  
|  
|-----Dockerfile
```

app.py :

```
from flask import Flask  
app=Flask(__name__)  
  
@app.route("/")  
def hello():  
    return "Hello from dockerized"  
  
if __name__=="__main__":  
    app.run(host='0.0.0.0',port=5000)
```

requirements.txt :

```
flask
```

Dockerfile :

```
FROM python:latest
```

```
WORKDIR /app
```

```
COPY requirements.txt .
```

```
RUN pip install -r requirements.txt
```

```
COPY . .
```

```
EXPOSE 5000
```

```
CMD ["python","app.py"]
```

Build the docker :

docker build -t program3

```
1RV24MC108_SWASTHIK_DEVADIGA@swasthik-Inspiron-15-3515:~/devops/prg3$ docker build -t program3 .
[+] Building 2.3s (10/10) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 183B
=> [internal] load metadata for docker.io/library/python:latest
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [1/5] FROM docker.io/library/python:latest@sha256:1ad1a43b5e2478e62056bbc28028afd858185d73bf4d6a439cbb058b6800a96d
=> => resolve docker.io/library/python:latest@sha256:1ad1a43b5e2478e62056bbc28028afd858185d73bf4d6a439cbb058b6800a96d
=> [internal] load build context
=> => transferring context: 29.85kB
=> CACHED [2/5] WORKDIR /app
=> CACHED [3/5] COPY requirements.txt .
=> CACHED [4/5] RUN pip install -r requirements.txt
=> [5/5] COPY . .
=> exporting to image
=> => exporting layers
=> => writing image sha256:0687151797d1ffeedf4a5310d7ba7fd56878e7cd86a0c0540de702a0603e193
=> => naming to docker.io/library/program3
1RV24MC108_SWASTHIK_DEVADIGA@swasthik-Inspiron-15-3515:~/devops/prg3$
```

Run the docker :

docker run -it -p 5000:5000 program3

```
=> CACHED [4/5] RUN pip install -r requirements.txt
=> [5/5] COPY . .
=> exporting to image
=> => exporting layers
=> => writing image sha256:0687151797d1ffeedf4a5310d7ba7fd56878e7cd86a0c0540de702a0603e193
=> => naming to docker.io/library/program3
1RV24MC108_SWASTHIK_DEVADIGA@swasthik-Inspiron-15-3515:~/devops/prg3$ docker run -it -p 5000:5000 program3
* 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
```

