

Task 8 - Create a dockerfile, file which when build must display your basic details in website

Python File:

```
from flask import Flask
```

```
app = Flask(__name__)
```

```
@app.route('/')
def hello():
```

```
    return '<b>Hello,</b><br><b>Name: Cyril Doss</b><br><b>Age: 22</b><br><b>Education: M.Sc Computer Science</b>'
```

```
if __name__ == '__main__':
```

```
    app.run(debug=True, host='0.0.0.0')
```

```
from flask import Flask
app = Flask(__name__)
@app.route('/')
def hello():
    return '<b>Hello,</b><br><b>Name: Cyril Doss</b><br><b>Age: 22</b><br><b>Education: M.Sc Computer Science<br><b>Education: M.Sc Computer Science</b></b> '
if __name__ == '__main__':
    app.run(debug=True, host='0.0.0.0')
```

Docker file:

```
FROM python:3.8-alpine

WORKDIR /try

COPY requirements.txt .

RUN pip install -r requirements.txt

COPY . .

EXPOSE 8000

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

Converting Docker file to image:

```
ubuntu@ip-172-31-41-158:~/Dockerfiles-SampleApps/python$ vi Dockerfile
ubuntu@ip-172-31-41-158:~/Dockerfiles-SampleApps/python$ docker build -t myapp .
```

```
ubuntu@ip-172-31-41-158:~/Dockerfiles-SampleApps/python$ docker build -t myapp .
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
            Install the buildx component to build images with BuildKit:
            https://docs.docker.com/go/buildx/

Sending build context to Docker daemon   16.9kB
Step 1/7 : FROM python:3.8-alpine
--> bedfee6adc40
Step 2/7 : WORKDIR /try
--> Using cache
--> 3e8f004e4e1e
Step 3/7 : COPY requirements.txt .
--> Using cache
--> ed2e52040c62
Step 4/7 : RUN pip install -r requirements.txt
--> Using cache
--> af90228ff1a9
Step 5/7 : COPY . .
--> e8d5846cc0c9
Step 6/7 : EXPOSE 8000
--> Running in a3600a7205f4
Removing intermediate container a3600a7205f4
--> 9416b81e90a5
Step 7/7 : CMD ["python", "app.py"]
--> Running in eb452707dba2
Removing intermediate container eb452707dba2
```

```
Successfully built d6285aab36e8
Successfully tagged myapp:latest
ubuntu@ip-172-31-41-158:~/Dockerfiles-SampleApps/python$ docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
myapp                latest             d6285aab36e8       12 seconds ago    58.7MB
```

Containerizing docker image:

```
ubuntu@ip-172-31-41-158:~/Dockerfiles-SampleApps/python$ docker run -d --name myapp_container -p 8000:8000 myapp
d50df6bc3722a5392892c7b276b926f20ff81850955a103061be506bfa390dc6
ubuntu@ip-172-31-41-158:~/Dockerfiles-SampleApps/python$
```

```
ubuntu@ip-172-31-41-158:~/Dockerfiles-SampleApps/python$ docker ps -a
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS
NAMES
d50df6bc3722  myapp    "python app.py"         34 seconds ago Up 33 seconds  0.0.0.0:8000->8000/tcp, :::8000->8000/tcp
myapp_container
```

Running Application using docker container:

