

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>This application is developed using  
python!</b><br><b>Application is running on port number  
5000!</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>This application is developed using python!</b><br><b>Application is running on port number 5000!</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 500

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 myapplication .
```

```
Successfully built a14a56582638
Successfully tagged myapplication:latest
ubuntu@ip-172-31-41-158:~/Dockerfiles-SampleApps/python$ docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
myapplication        latest              a14a56582638       9 seconds ago      58.7MB
```

Containerizing docker image:

```
ubuntu@ip-172-31-41-158:~/Dockerfiles-SampleApps/python$ docker run -d --name myapplication_container -p 5000:5000 myappl
ication
278ba468f5a6ade3386434ae36d155ec3d99d251bfe707ddd39a106a883c30bd
ubuntu@ip-172-31-41-158:~/Dockerfiles-SampleApps/python$ docker ps -a
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS
NAMES
278ba468f5a6   myapplication  "python app.py"         5 seconds ago  Up 4 seconds  500/tcp, 0.0.0.0:5000
->5000/tcp, :::5000->5000/tcp  myapplication_container
9d0c4284ceb9   httpd         "httpd-foreground"     47 hours ago  Exited (137) 47 hours ago
httpdcontainer
ee0bb498c80c   nginx         "/docker-entrypoint..." 47 hours ago  Exited (137) 47 hours ago
containernginx
ubuntu@ip-172-31-41-158:~/Dockerfiles-SampleApps/python$
```

Running Application using docker container:

