

Ex 9a

```
docker create hello-world
```

```
docker run hello-world
```

```
docker rename silly_hertz ex9
```

```
docker update --memory 512m --memory-swap 1g ex9
```

```
docker start ex9
```

```
docker start -i ex9
```

```
docker container ls
```

```
docker container ls -a
```

```
docker image ls
```

```
docker image ls -a
```

```
docker ps
```

```
docker ps -a
```

```
docker volumes ls
```

```
docker stop ex9
```

```
docker rm ex9
```

```
docker run -it openjdk
```

```
System.out.print("Hello World");
```

Ex 9b

```
cd ..
```

```
cd ..
```

```
mkdir myapp
```

```
cd myapp
```

Below is app.py

```
print("Hello this is from docker")
```

Below is Dockerfile.txt

```
FROM python:3.9-slim
```

```
WORKDIR /app
```

```
COPY . /app
```

```
RUN pip install --no-cache-dir -r requirements.txt || true
```

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

ren Dockerfile.txt Dockerfile

docker build -t mypythonapp .

docker run --name mycontainer mypythonapp

Change app.py

import time

while True:

print("Hello this is from docker still running")

time.sleep(5)

docker build -t mypythonapp .

docker run --name mycontainer1 mypythonapp

docker stop mycontainer1

Ex 9c

cd ..

cd ..

mkdir myflaskapp

cd myflaskapp

Below is app.py

from flask import Flask

app = Flask(\_\_name\_\_)

@app.route("/")

def home():

return "Hello from Flask inside Docker!"

if \_\_name\_\_ == "\_\_main\_\_":

app.run(host="0.0.0.0", port=5000)

Below is requirements.txt

Flask

Below is Dockerfile.txt

FROM python:3.9-slim

WORKDIR /app

COPY requirements.txt .

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

```
COPY . .
```

```
EXPOSE 5000
```

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

```
ren Dockerfile.txt Dockerfile
```

```
docker build -t mypythonapp .
```

```
docker run -d -p 5000:5000 --name myflaskcontainer myflaskapp
```

```
docker stop myflaskcontainer
```

Ex 9d

```
cd ..
```

```
cd ..
```

```
mkdir myvolapp
```

```
cd myvolapp
```

Below is app.py

```
print("Hello this is from docker")
```

Below is Dockerfile.txt

```
FROM python:3.9-slim
```

```
WORKDIR /app
```

```
COPY . /app
```

```
RUN pip install --no-cache-dir -r requirements.txt || true
```

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

```
ren Dockerfile.txt Dockerfile
```

```
docker build -t myvolapp .
```

```
docker run -d -p 5006:5006 -v mydata:/data myvolapp
```

```
docker run --rm -it -v mydata:/data alpine cat /data/log.txt
```