

## 1. Using terminal:

A. Create a Python script named getUser.py which prints user name (Computer account)

```
root@ubuntu-bionic:~/assignment# vi getUSer.py
root@ubuntu-bionic:~/assignment# python getUSer.py
vagrant
```

B. Create a Dockerfile including support for Python environment and your getUser.py

C. Create an image out of Dockerfile

```
root@ubuntu-bionic:~/assignment# vi Dockerfile
root@ubuntu-bionic:~/assignment# docker build -t assignment .
Sending build context to Docker daemon 3.072kB
Step 1/3 : FROM python:alpine
----> 880fc229346e
Step 2/3 : COPY getUSer.py /app/
----> 8989d4d425eb
Step 3/3 : CMD python app/getUser.py
----> Running in 9618bfb41366
Removing intermediate container 9618bfb41366
----> 145c8e8add0d
Successfully built 145c8e8add0d
Successfully tagged assignment:latest
root@ubuntu-bionic:~/assignment# docker images
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
assignment	latest	145c8e8add0d	5 minutes ago	48.7MB

D. Run container

```
root@ubuntu-bionic:~/assignment# docker run -d assignment
8864192ede870548651a6a819365e43d0c8414c33dec4a9e247b2fbb44421542
root@ubuntu-bionic:~/assignment# docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
8864192ede87	assignment	"/bin/sh -c 'python _"	10 seconds ago	Exited (0) 8 seconds ago		gifted_wing
654c29788f0b	python-app	"/bin/sh -c 'python _"	20 hours ago	Up 20 hours	0.0.0.0:5000->5000/tcp, :::5000->5000/tcp	clever_neumann
08a3fa5e08f1	python-app	"/bin/sh -c 'python _"	20 hours ago	Up 20 hours		mystifying_zhukovsky
ef0553a4dcc6	python-app	"/bin/sh -c 'python _"	20 hours ago	Up 20 hours		objective_ramanujan
8e38acabacfc	my-app	"/bin/sh -c 'python _"	20 hours ago	Exited (0) 20 hours ago		strange_tharp
d3fc6f68bfd2	nginx:alpine	"/docker-entrypoint..."	21 hours ago	Exited (0) 21 hours ago		sarah

```
root@ubuntu-bionic:~/assignment# docker logs 8864192ede87
root
```

## 2. Docker HUB:

A. Create a user at Docker HUB website

B. Push your image to HUB

<https://hub.docker.com/r/sarahkossmann/assignment>

```
root@ubuntu-bionic:~/assignment# docker login
Login with your Docker ID to push and pull images from Docker Hub. If you don't have a Docker ID, head over to https://hub.docker.com to create one.
Username: sarahkossmann
Password:
WARNING! Your password will be stored unencrypted in /root/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
root@ubuntu-bionic:~/assignment# ls
Dockerfile  getUSer.py
root@ubuntu-bionic:~/assignment# docker tag assignment sarahkossmann/assignment
root@ubuntu-bionic:~/assignment# docker push sarahkossmann/assignment
Using default tag: latest
The push refers to repository [docker.io/sarahkossmann/assignment]
abc0d325df2e: Pushed
4da53ae893e1: Mounted from library/python
b9a7a7381abe: Mounted from library/python
2306fb7a5a47: Mounted from library/python
6666686122fd: Mounted from library/python
994393dc58e7: Mounted from library/python
latest: digest: sha256:84e0dd80d4f4cfb7e91316671e002f0431fef5da6d0d08bd82b07c84e444b618 size: 1575
root@ubuntu-bionic:~/assignment#
```