ASSIGNMENT - 4

DOCKER DESKTOP (Kubernetes)

Team ID	PNT2022TMID37215
Project Name	Smart Fashion Recommender Application
Maximum Marks	2 Marks

Question 1:

Pull an image from docker hub and run it on docker playground.
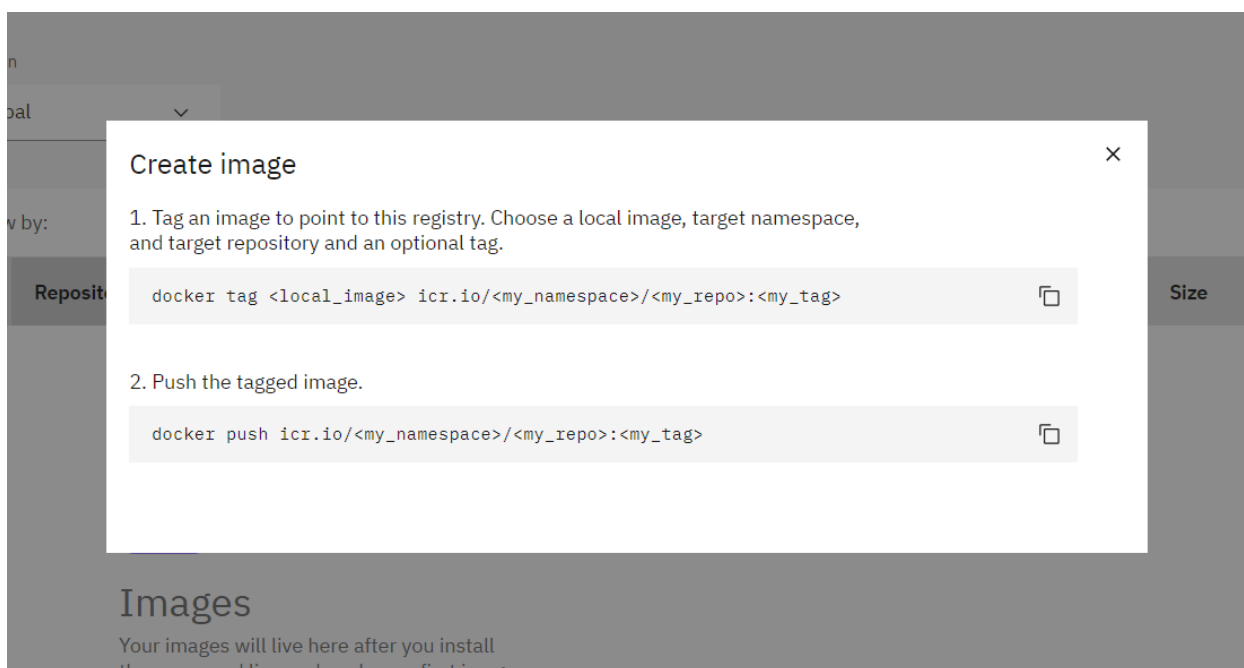
docker pull registry

docker run -d -p 9000:9000 -docker -privileged -v/var/run/docker.sock:/var/run/docker.sock registry

Select Command Prompt

```
Microsoft Windows [Version 10.0.22000.1219]
(c) Microsoft Corporation. All rights reserved.

C:\Users\bosei>docker pull registry
Using default tag: latest
ce14a6258f37: Download complete
cc6393207bf9: Download complete
81c944c2288b: Download complete
21df229223d2: Download complete
626897ccab21: Download complete
1ed0fc8a6161: Download complete
c41ae7ad2b39: Download complete
docker.io/library/registry:latest
```

```
C:\Users\bosei>docker run -d -p 80:80 docker/getting-started
Unable to find image 'docker/getting-started:latest' locally
b558be874169: Download complete
3a1b838d7761: Download complete
cb90f98fd791: Download complete
4071be97c256: Download complete
5867cba5fcbd: Download complete
79b586f1a54b: Download complete
0c9732f525d6: Download complete
bc19f3e8eeb1: Download complete
4b639e65cb3b: Download complete
061ed9e2b976: Download complete
8b501642a5bb4959526aa3d43f7e0633275802cc8dfb644ee23e13e4aba5ba30

C:\Users\bosei>
```

Create image

1. Tag an image to point to this registry. Choose a local image, target namespace, and target repository and an optional tag.

```
docker tag <local_image> icr.io/<my_namespace>/<my_repo>:<my_tag>
```

2. Push the tagged image.

```
docker push icr.io/<my_namespace>/<my_repo>:<my_tag>
```

Images

Your images will live here after you install
the command line and push your first image

Question 2:

Create a docker file for the job portal app or hello world app and deploy it indocker desktop app.

```
docker - Notepad

File    Edit    View

FROM python:3.8
WORKDIR /app
ADD . /app
COPY requirement.txt /app
RUN python3 -m pip install -r requirement.txt
EXPOSE 5000
CMD ["python","app.py"]
```

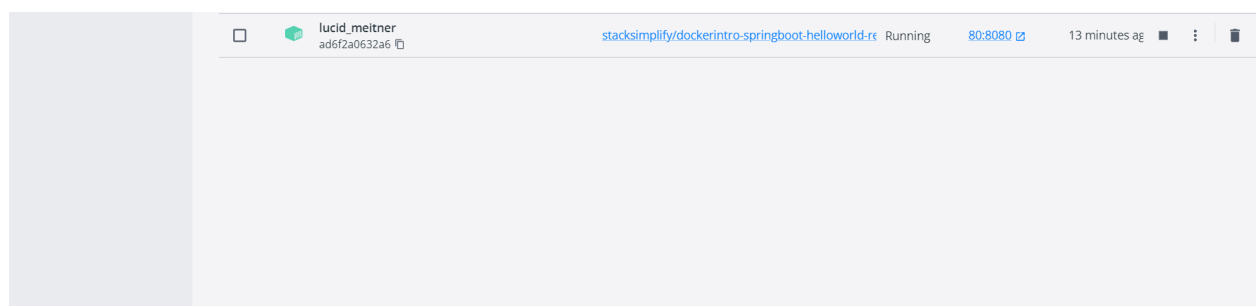## Images Give feedback

LOCAL   REMOTE REPOSITORIES

Search

☐ In use only

NAME ↑	TAG	IMAGE ID	CREATED	SIZE
alpine/git	latest	1dc958bc2b47	1 day ago	21.3 MB
docker/desktop-storage-provi...	v2.0	115d77efe6e2	1 day ago	17.3 MB
docker/desktop-vpnkit-contr...	v2.0	b5bcb3a7172a	1 day ago	6.56 MB
docker/getting-started IN USE	latest	b558be874169	less than a minute ago	13.97 MB
docker101tutorial	latest	c127094eb191	1 day ago	14.03 MB
hubproxy.docker.internal:500...	kubernetes-v1.25.2-cni-...	783fe465eee4	1 day ago	153.33 MB
k8s.gcr.io/coredns	v1.9.3	8e352a029d30	1 day ago	14.84 MB
k8s.gcr.io/etcd	3.5.4-0	6f72b8515449	1 day ago	102.16 MB
k8s.gcr.io/kube-apiserver	v1.25.2	86e7b79379dd	1 day ago	34.24 MB
k8s.gcr.io/kube-controller-ma	v1.25.2	f961aee35fd2	1 day ago	31.26 MB

Question 3:

Create an IBM container registry and deploy helloworld app or job portalapp.

		lucid_meitner ad6f2a0632a6	stacksimplify/dockerintro-springboot-helloworld-re	Running	80:8080	13 minutes ag	■ ⋮ 🗑

Question 4:

Create a kubernetes cluster in IBM cloud and deploy helloworld imageor job portal image and also expose the same app to run in nodeport.

```yaml
apiVersion:
v1kind:
Service
metadata:
      name: hello-world
   deploymentspec:
      ports:
      - port: 5000
        targetPort:
      5000selector: app:
        hello-world
---
   apiVersion:
   apps/v1kind:
   Deployment
   metadata:
      name: hello-world
   deploymentspec:
      replic
      as: 1
      select
      or:
         matchLabels: app:
           hello
      worldtemplate:
        meta
           da
           ta
           :
           la
           be
           ls
           :
              app: hello
         worldspec:
           containers:
           - name: hello-world
              image: au.icr.io/hello-world-app/hello
              worldimagePullPolicy: Always
              ports:
              - containerPort: 5000
```