ASSIGNMENT -4 : DOCKER DESKTOP (Kubernet)

Question 1:

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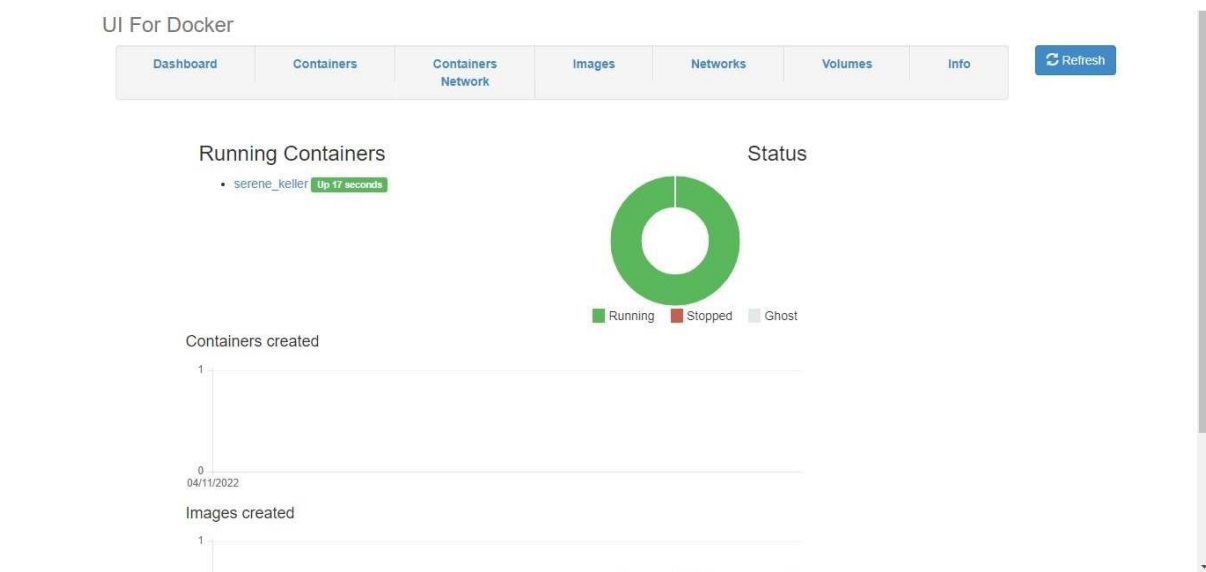
docker pull registry

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

Question 2:

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


```
FROM python:3.8
WORKDIR /app
ADD . /app
COPY requirements.txt /app
RUN python3 -m pip install -r requirements.txt
EXPOSE 5000
CMD ["python","app.py"]
```
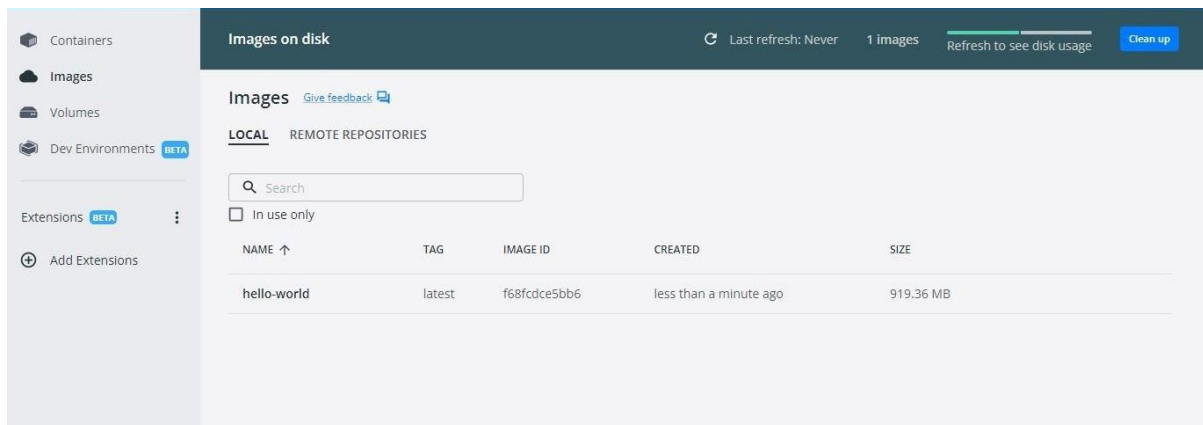
Question 3:

Create an IBM container registry and deploy helloworld app or job portalapp.
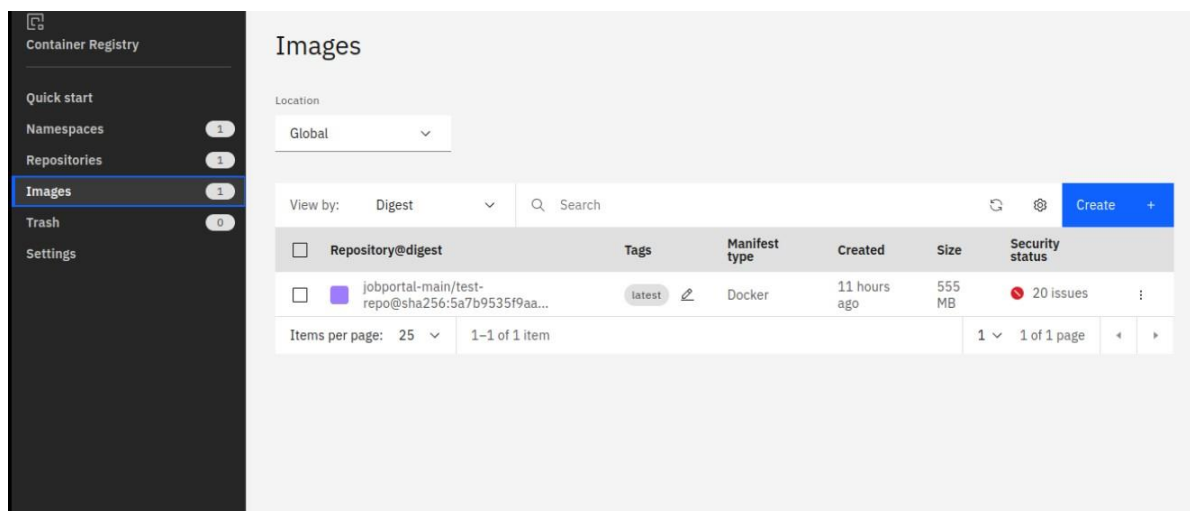
Question 4:

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

```
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
```

mycluster-free ✓ Normal Expires in 29 days Add tags ✎ Help **Kubernetes dashboard** ⬈ Actions... ⌄

Overview
Worker nodes
Worker pools
DevOps New

ⓘ **Expires in 29 days:**
Be sure to back up your data, your cluster will be deleted in 29 days. To access the full capabilities of the service, try out a standard cluster.

Node status	Add-on status	Master status	Ingress status
1 of 1	**0 of 0**	**Normal**	**Unknown**
✓ Normal	✓ Normal	✓	—
Details ↓	Details ↓	Docs ⬈	Docs ⬈

Details

Cluster ID	Version	Infrastructure	Zones
cdi1j33f0a6mchav5kig 📋	1.24.7_1542	Classic	Milan 01

Created	Resource group	Image security enforcement	
04/11/2022, 01:12	Default	Enable	

⎈ **kubernetes** default ⌄ 🔍 Search

☰ **Workloads > Pods > hello-world-deployment-6c75b9c898-p4ntv > Logs**

Workloads ⓝ
Cron Jobs
Daemon Sets
Deployments
Jobs
Pods
Replica Sets
Replication Controllers
Stateful Sets

Service
Ingresses ⓝ
Ingress Classes
Services ⓝ

Logs from hello-world ⌄ in hello-world-dep... ⌄

```
 * Serving Flask app 'app'
 * Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on all addresses (0.0.0.0)
 * Running on http://127.0.0.1:5000
 * Running on http://172.30.82.142:5000
Press CTRL+C to quit
```