Assignment-4

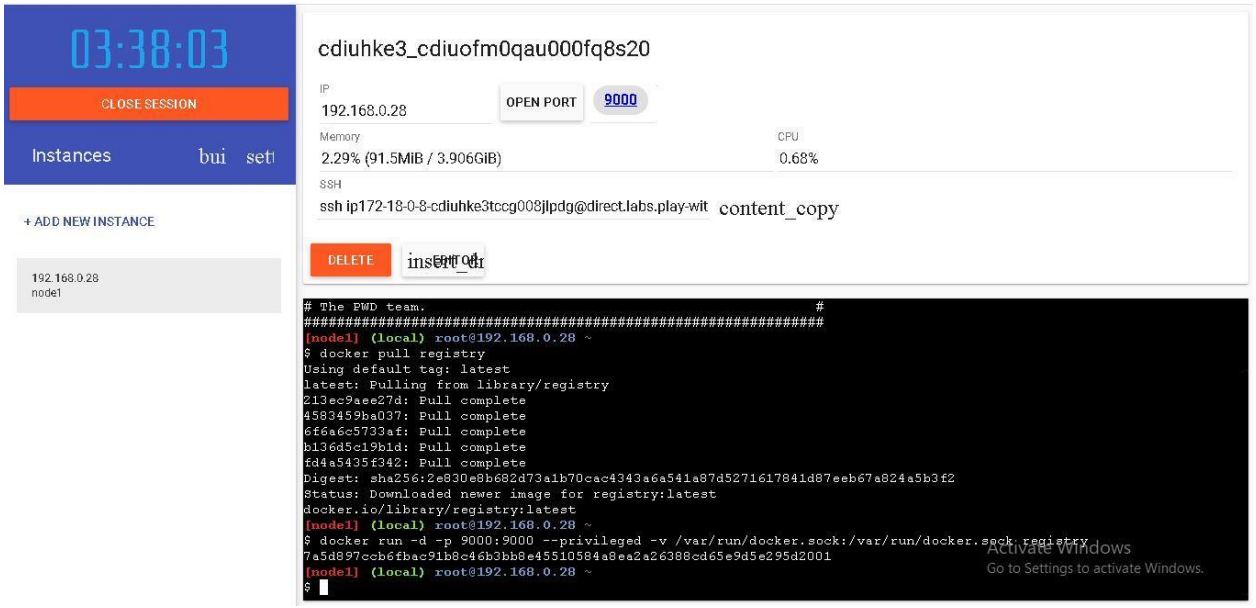
Assignment Date	28 October 2022
Student Name	T.K.Shalini Rani
Student Roll Number	913319104041
Maximum Marks	2 Marks

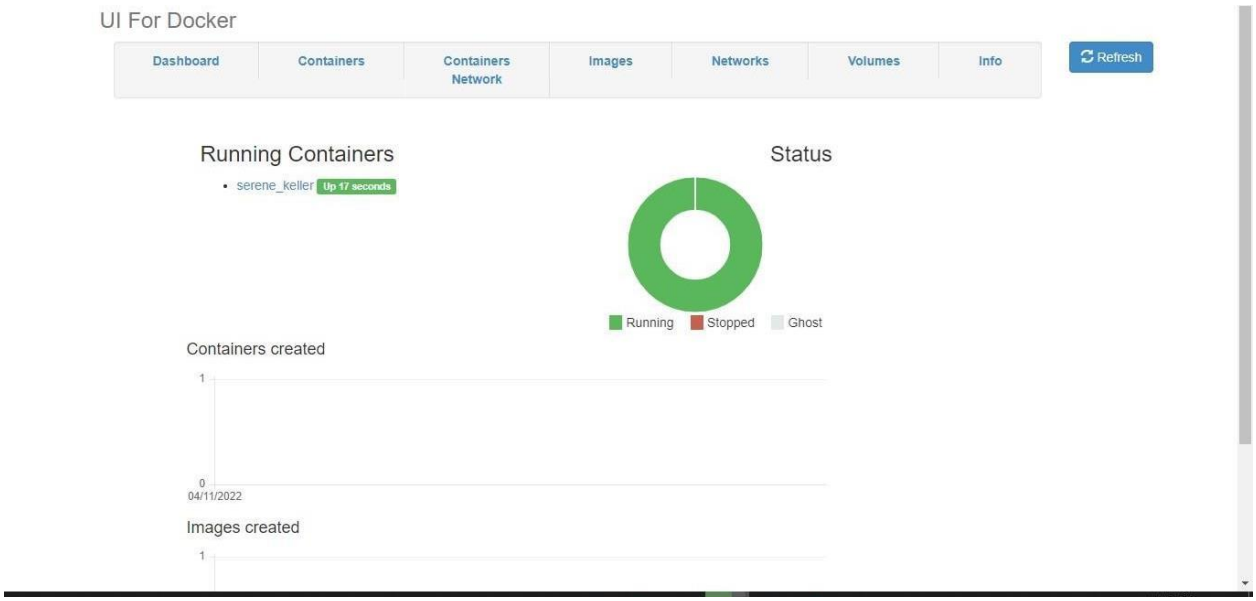
Question 1:

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

Solution:

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

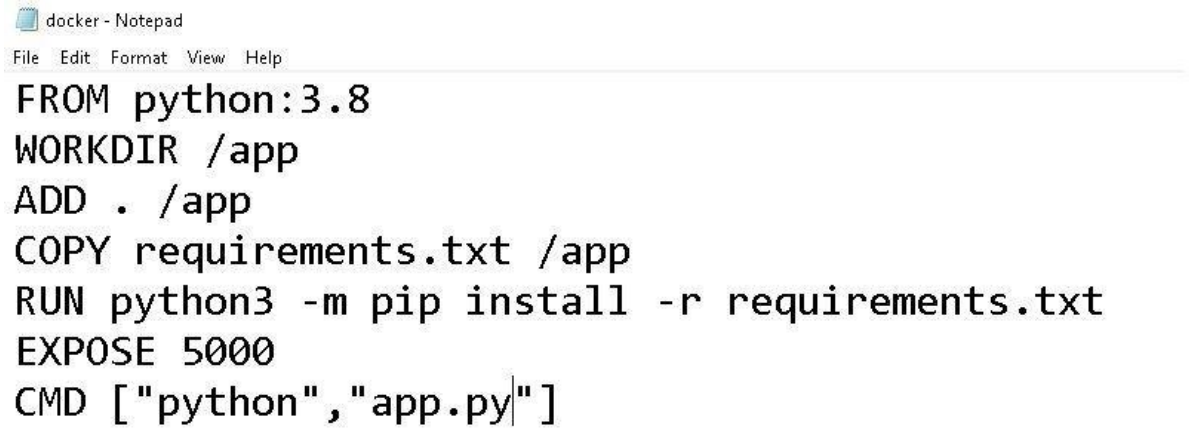


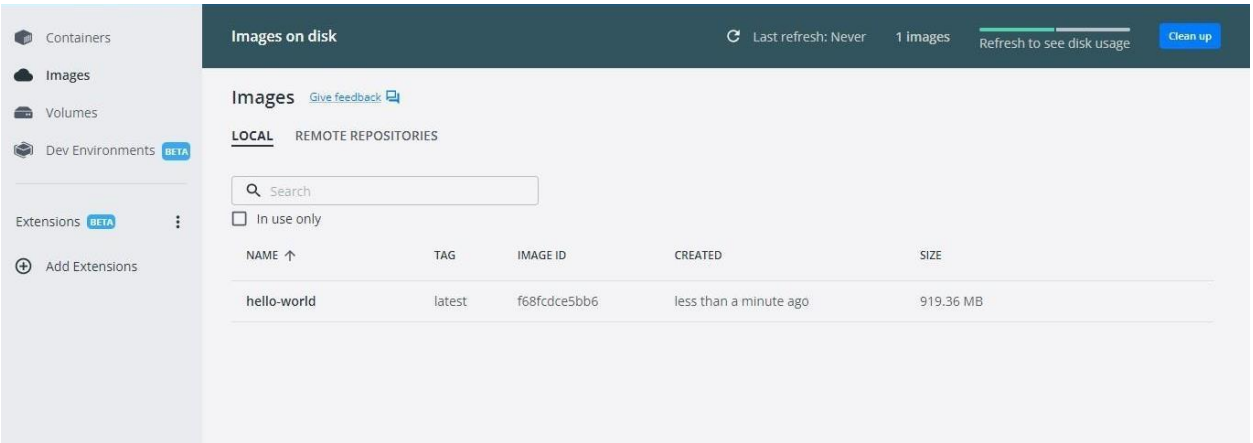


Question 2:

Create a docker file for the job portal / flask application and deploy it in docker desktop application.

Solution:

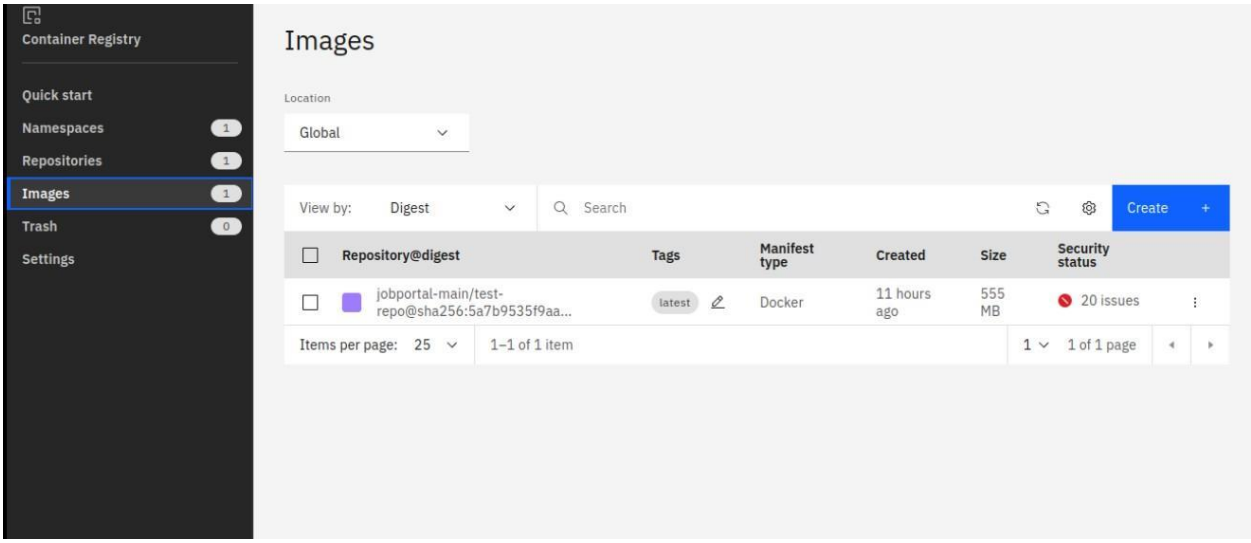




Question 3:

Create an IBM container registry and push docker image of flask application or job portal app.

Solution:

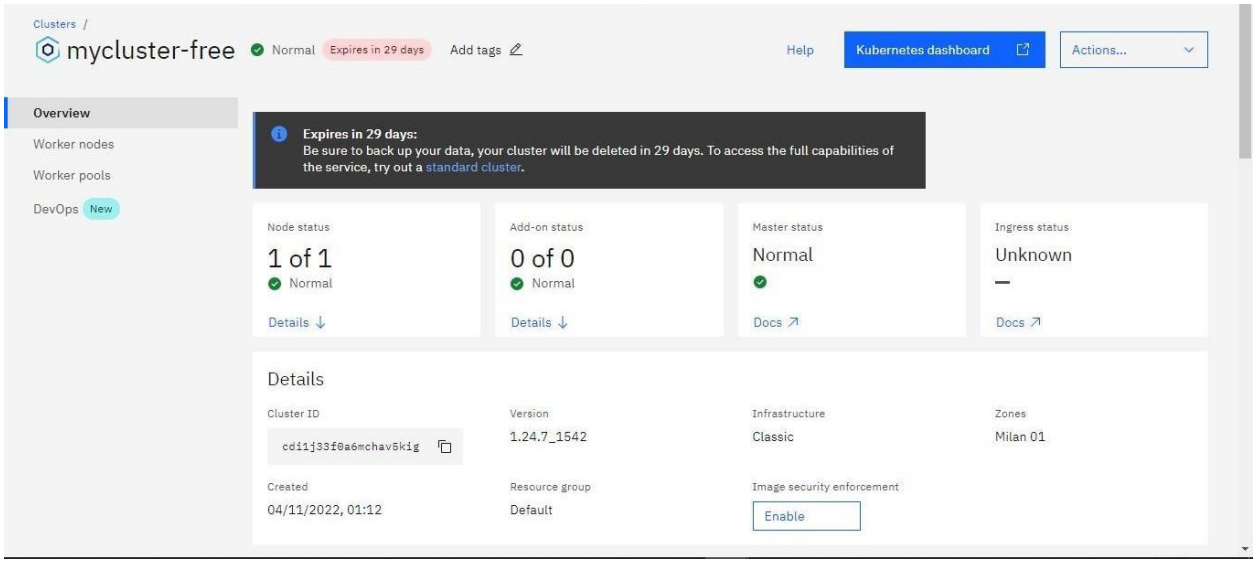


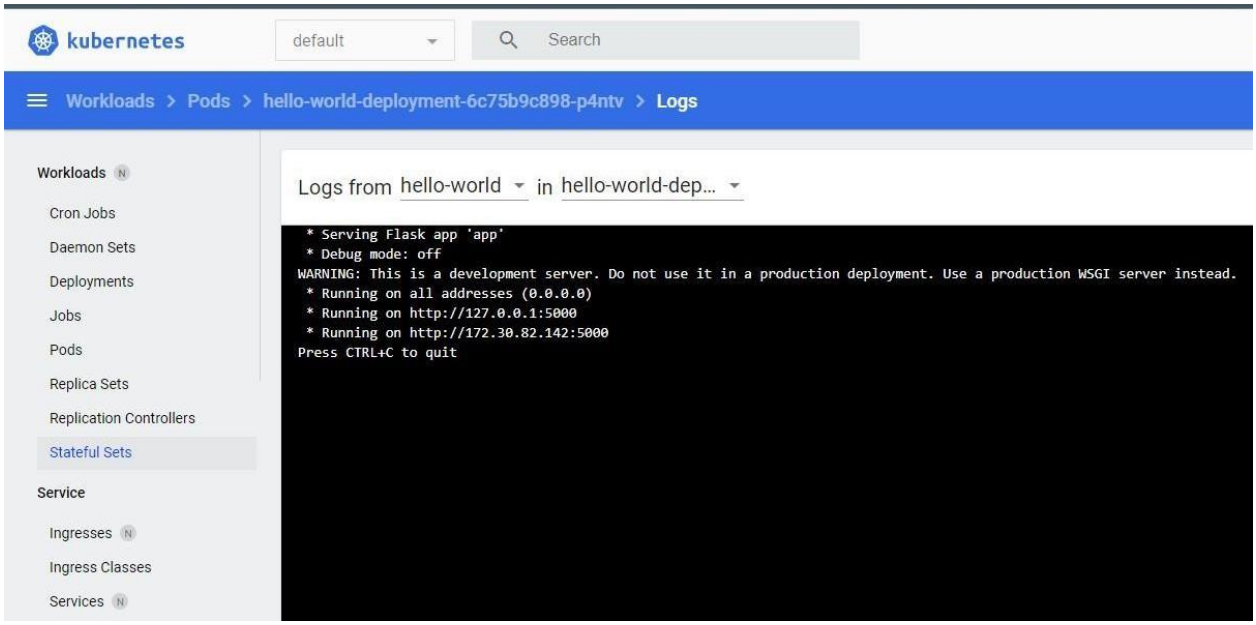
Question 4:

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

Solution:

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


Clusters /
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
1 of 1
Normal
Details
Add-on status
0 of 0
Normal
Details
Master status
Normal
Docs
Ingress status
Unknown
Docs
Details
Cluster ID
cdi1j33f0a6mchav5kig
Version
1.24.7_1542
Infrastructure
Classic
Zones
Milan 01
Created
04/11/2022, 01:12
Resource group
Default
Image security enforcement
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