ASSIGNMENT 4

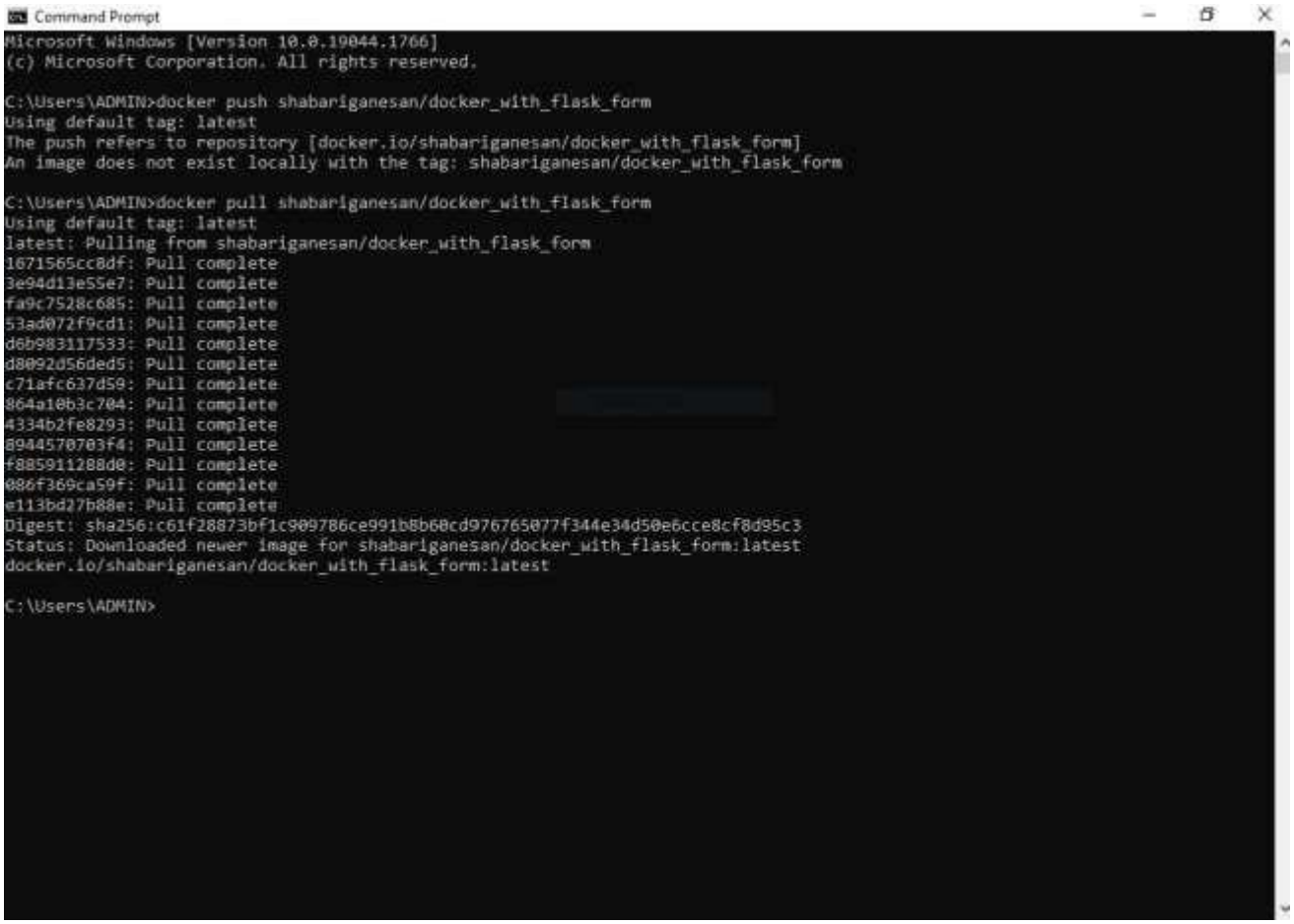
TEAM ID : PNT2022TMID50559

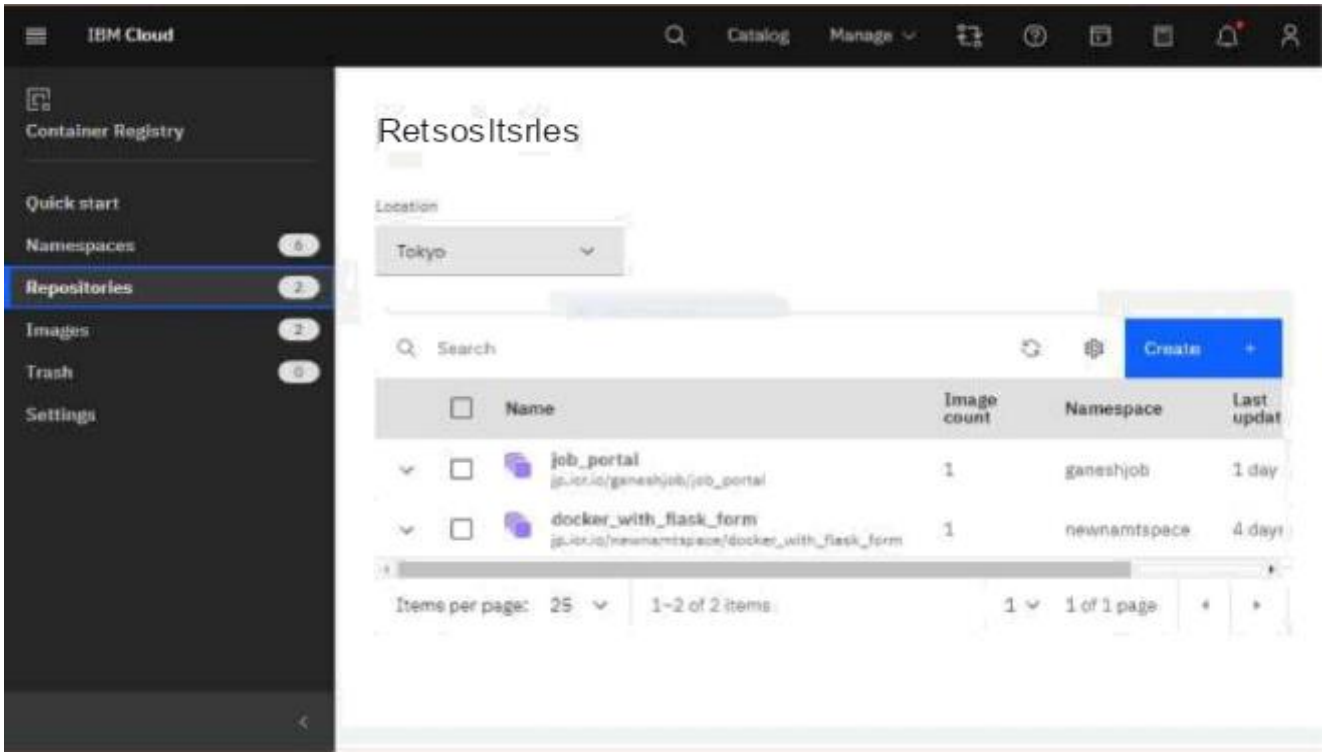
PROJECT NAME : CONTAINMENT ZONE ALERTING APPLICATION

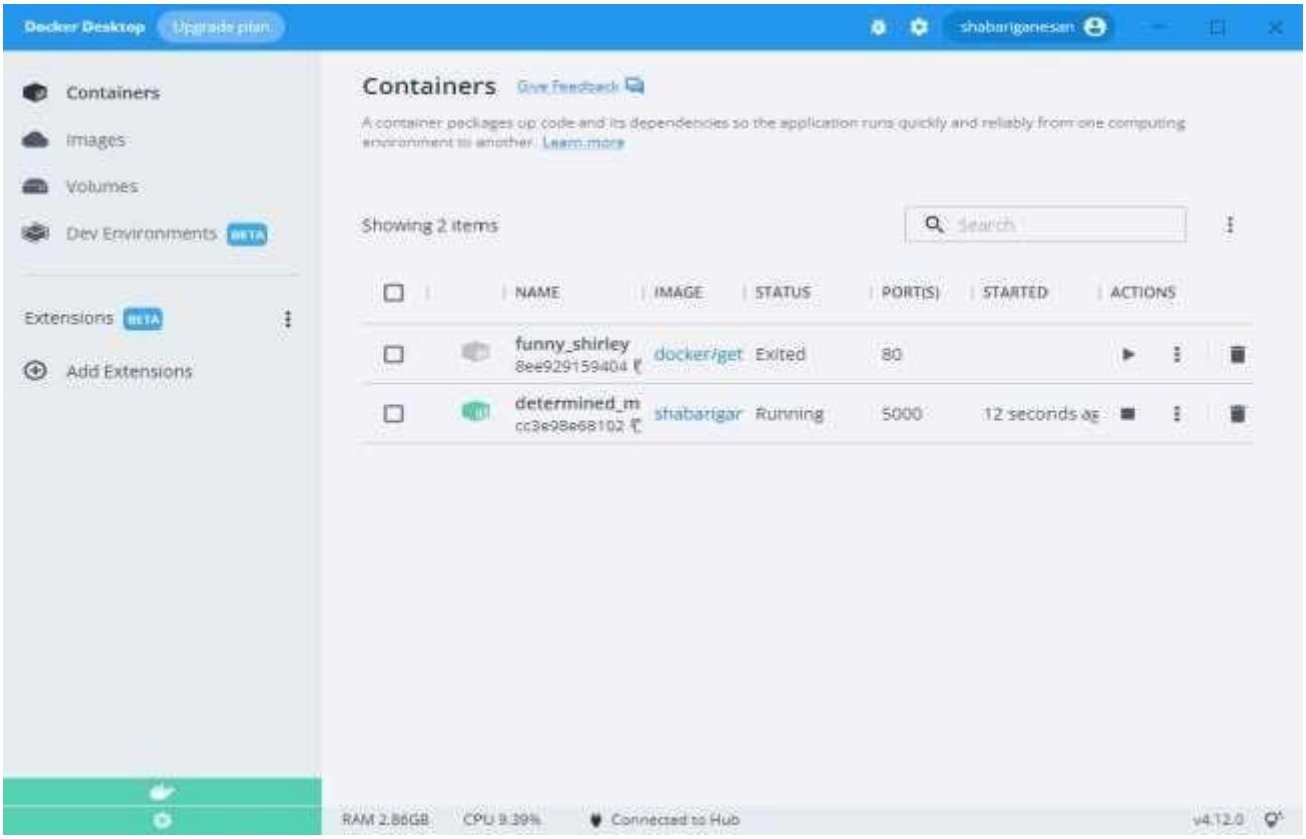
STUDENT NAME : A.JANNATH FIRTHOUSE

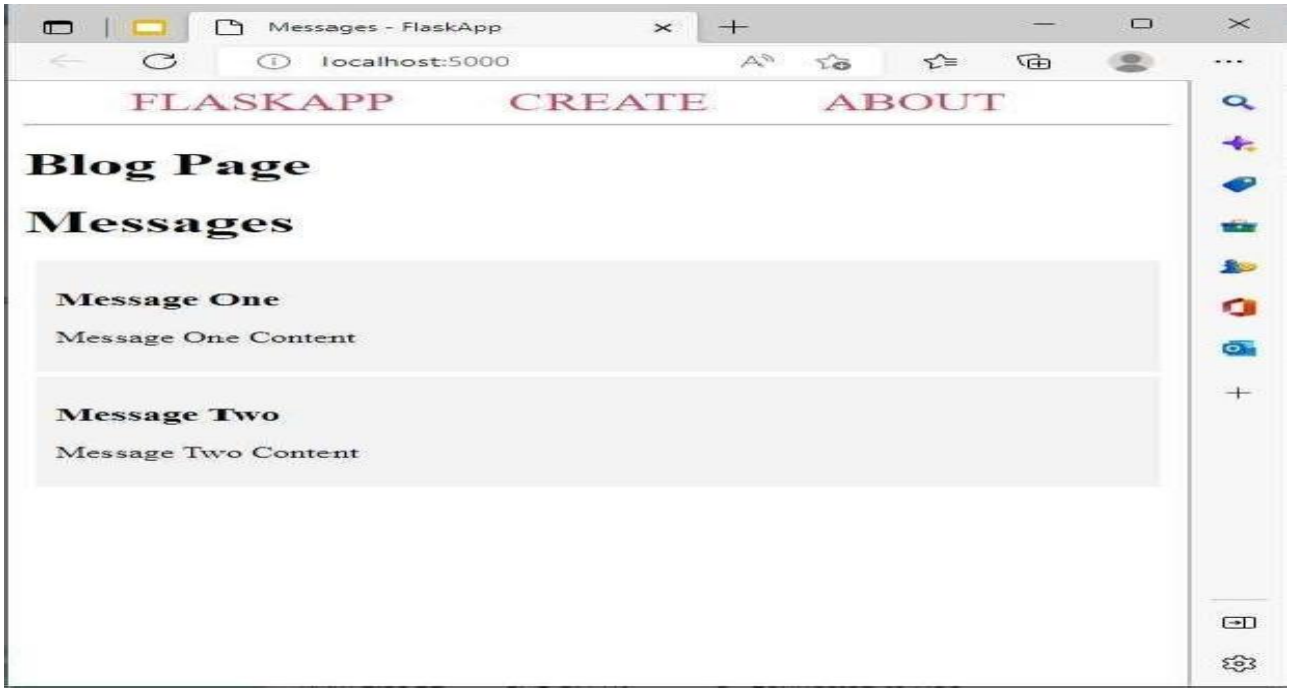
Question-1:

pull an image from docker hub and run it in docker playground



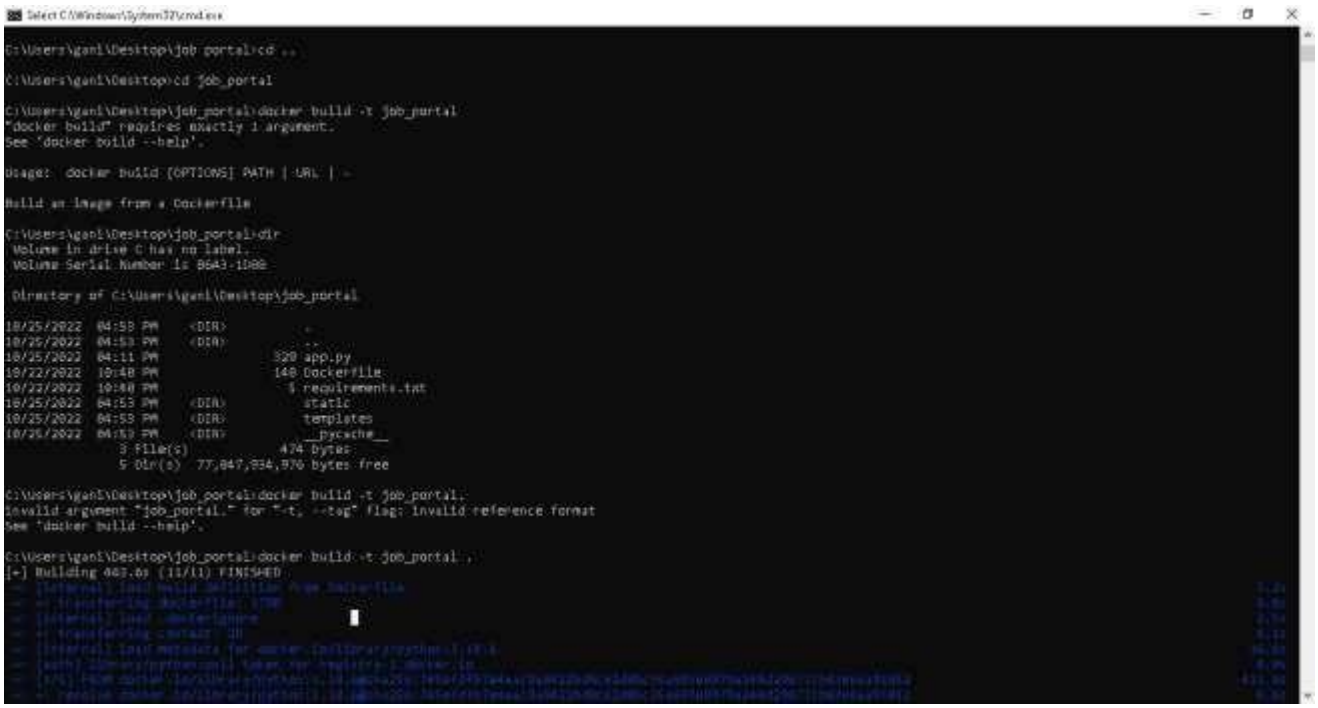

IBM Cloud
Catalog
Manage
Container Registry
Quick start
Namespaces
Repositories
Images
Trash
Settings
RetsosItsrles
Location
Tokyo
Search
Create
Name
Image count
Namespace
Last updat
job_portal
1
ganeshjob
1 day
docker_with_flask_form
1
newnamtspace
4 days
Items per page: 25
1-2 of 2 items
1 of 1 page

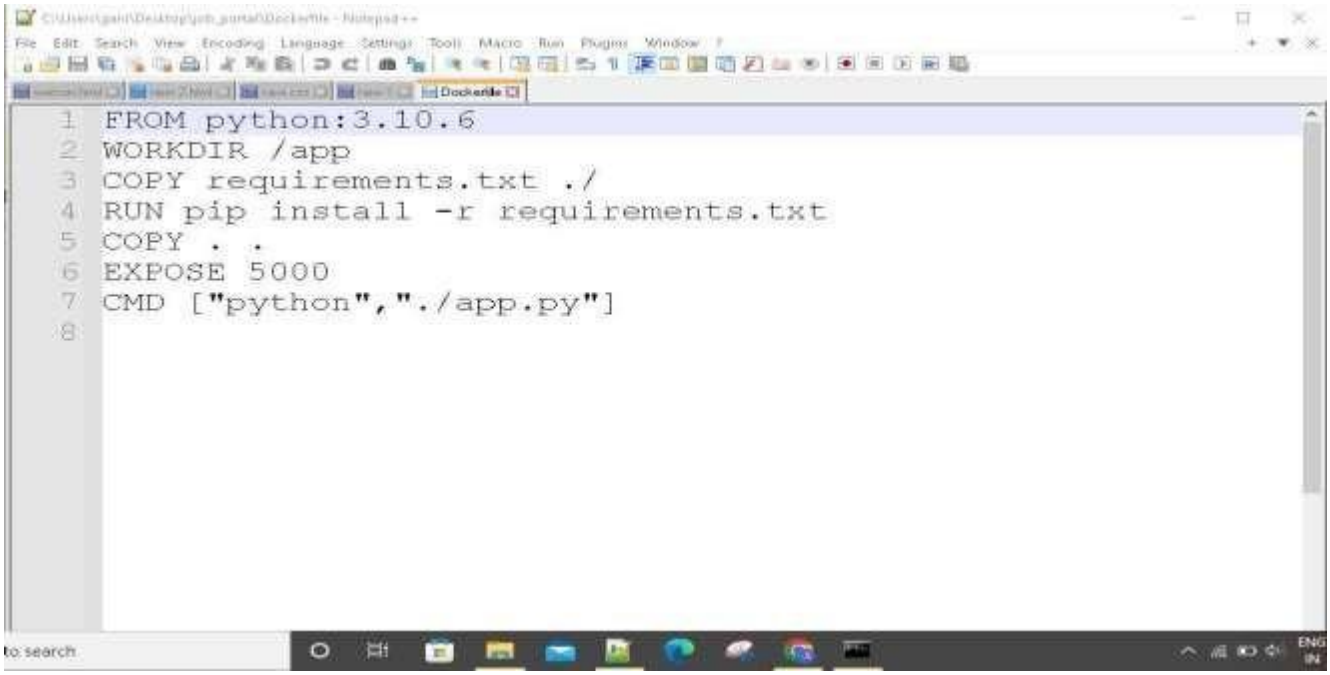

Docker Desktop
Upgrade plan
shabariganesan
Containers
Images
Volumes
Dev Environments
BETA
Extensions
BETA
Add Extensions
Containers
Give Feedback
A container packages up code and its dependencies so the application runs quickly and reliably from one computing environment to another. Learn more
Showing 2 items
Search
NAME
IMAGE
STATUS
PORT(S)
STARTED
ACTIONS
funny_shirley
8ee929159404
docker/get
Exited
80
determined_m
cc3e98e68102
shabarigar
Running
5000
12 seconds ag
RAM 2.86GB
CPU 9.39%
Connected to Hub
v4.12.0

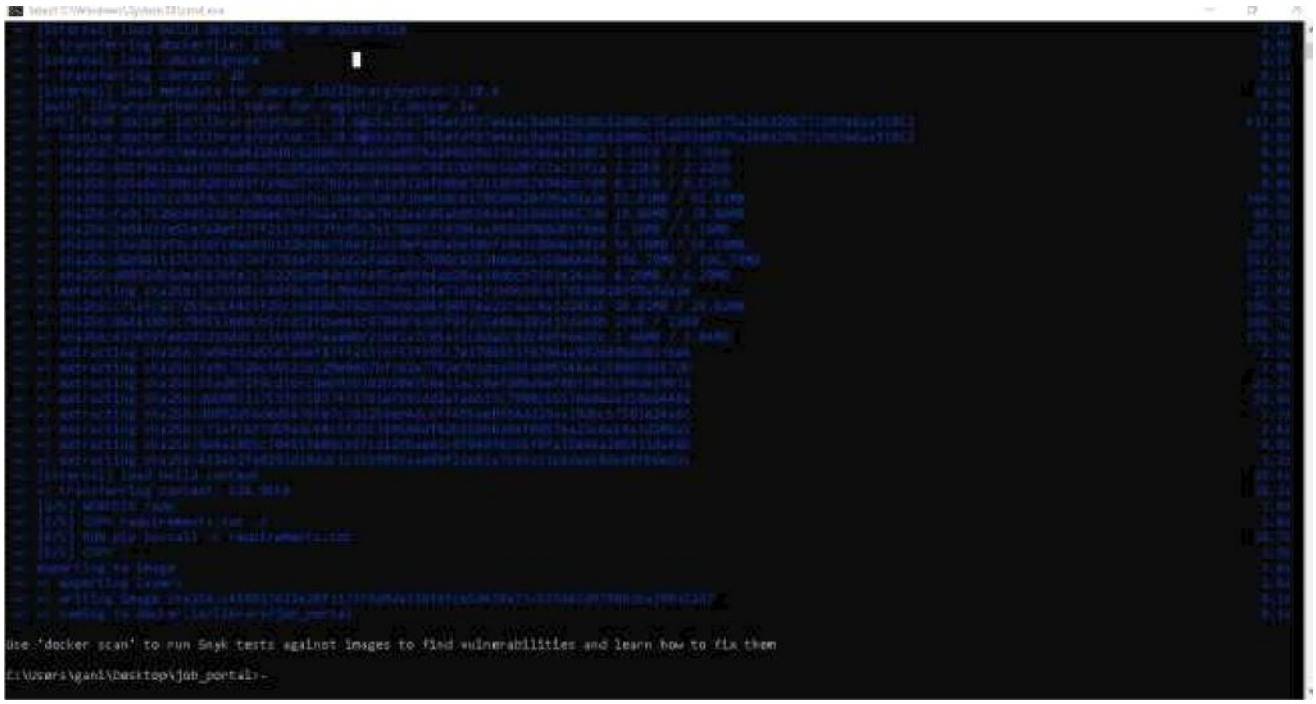


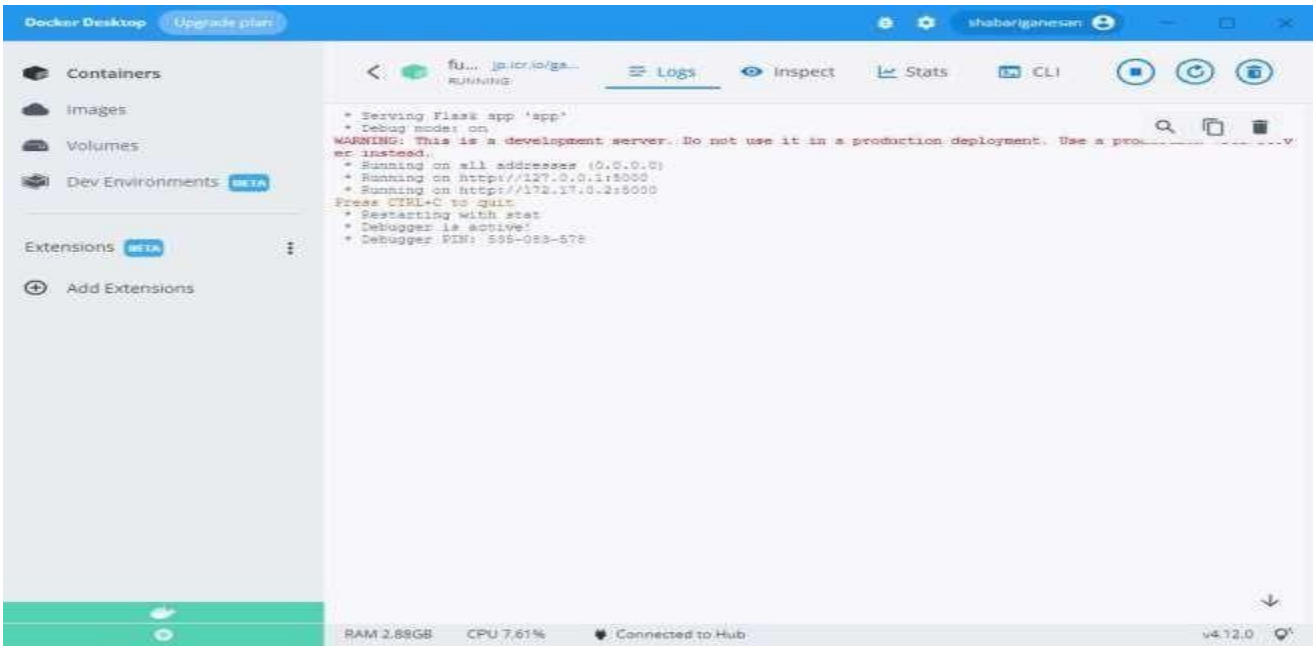
Question-2:

Create a docker file for the jobportal application and deploy it in docker application.

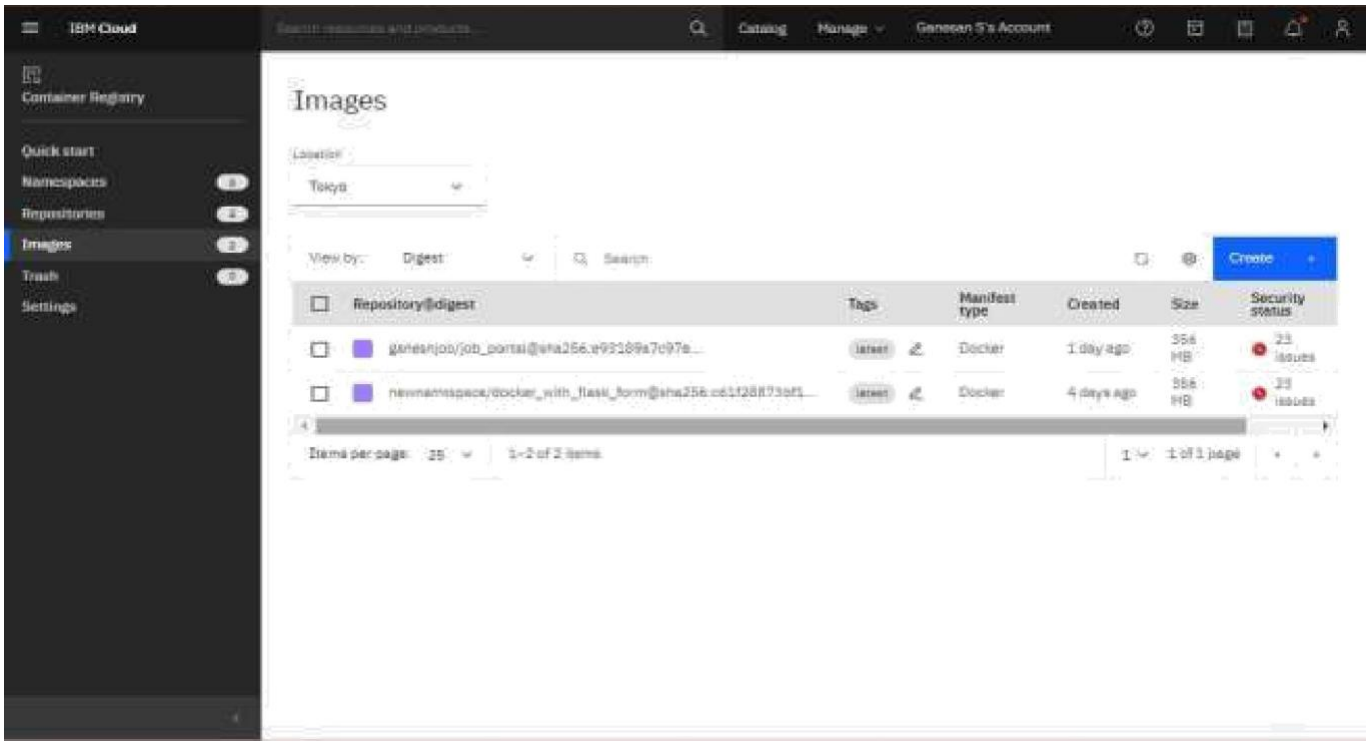


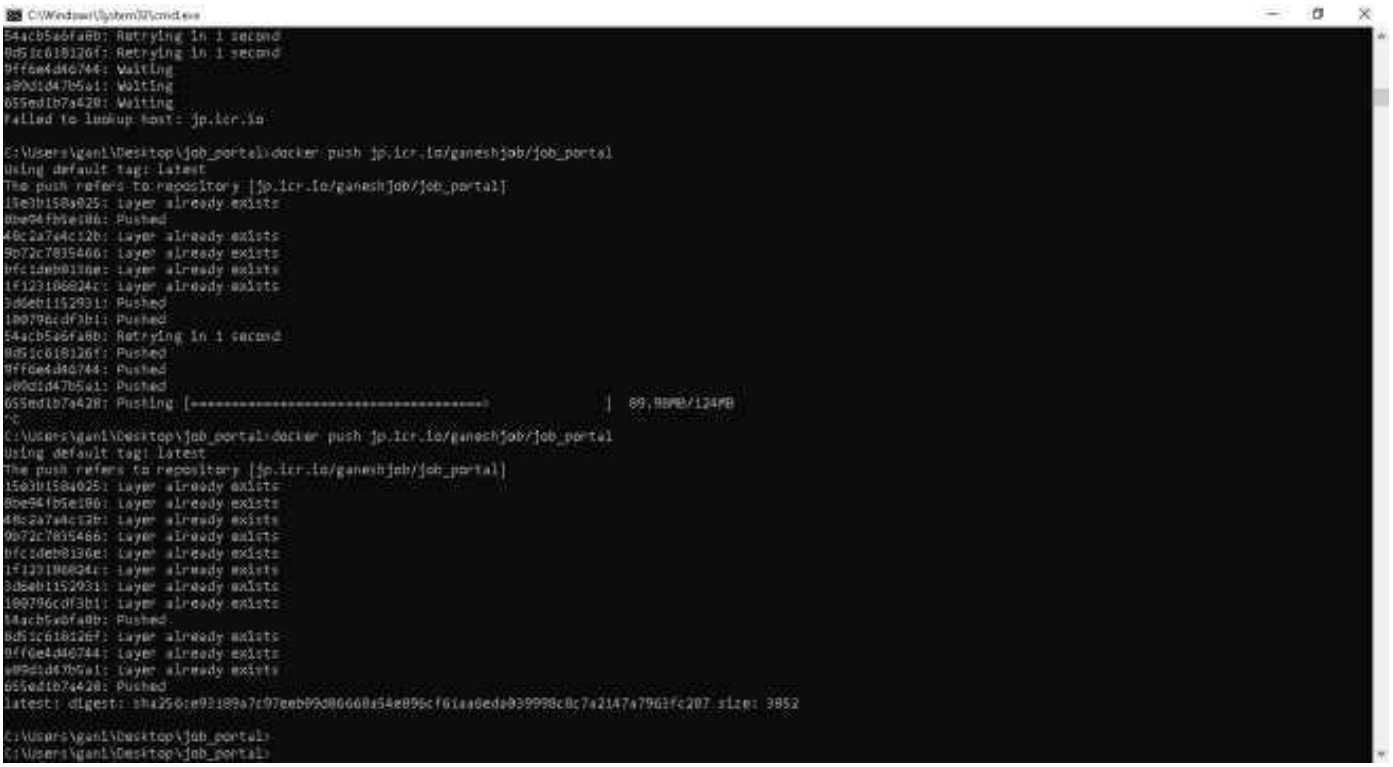

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
Dockerfile
1 FROM python:3.10.6
2 WORKDIR /app
3 COPY requirements.txt ./
4 RUN pip install -r requirements.txt
5 COPY . .
6 EXPOSE 5000
7 CMD ["python","./app.py"]
8
to search


Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
C:\Users\gani\Desktop\job_portal>

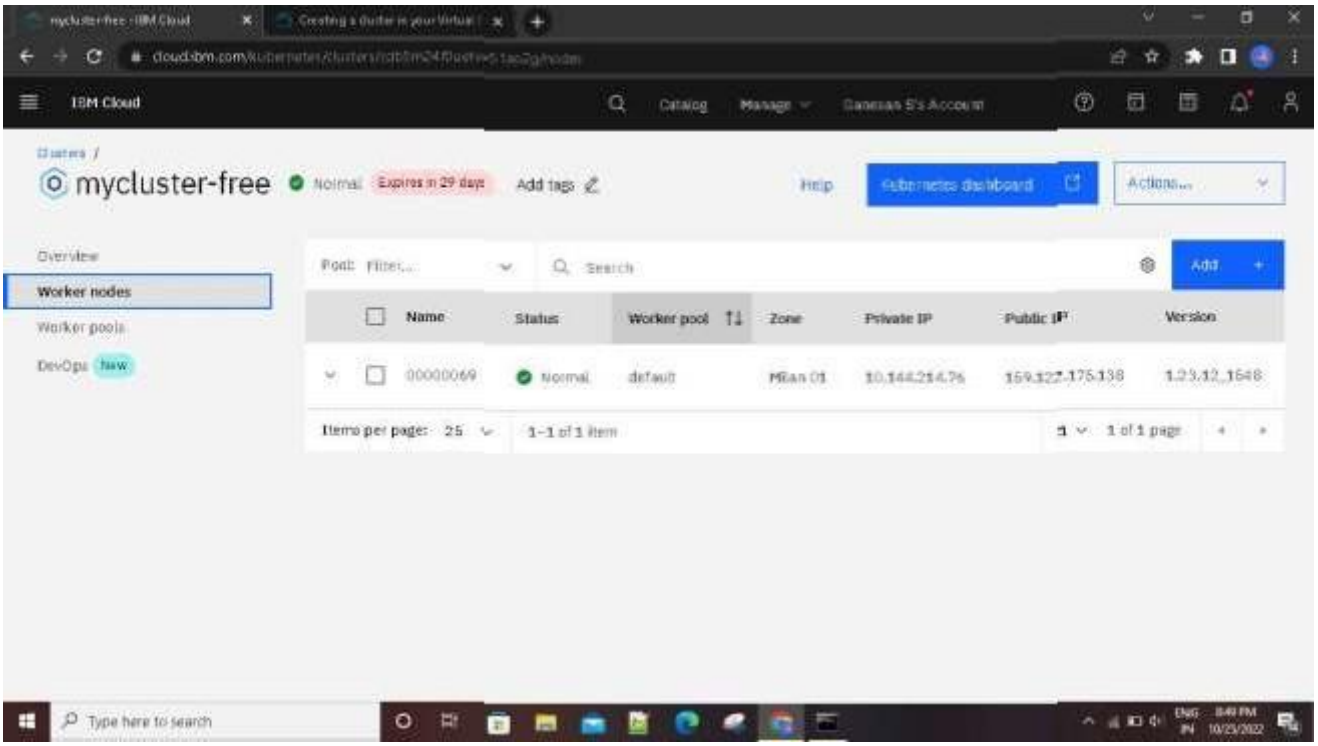


Question-3:Create a Ibm container registry and deploy helloworld app or jobportalapp





Question-4: Create a kubernetes cluster in ibm cloud and deploy helloworld image or jobportal image and also expose the same app to run in noteport



C:\Windows\System32\cmd.exe

```
10/16/2022  12:28 PM             3,721 windows shortcut.txt
08/25/2022  08:40 PM             2,897 YouTube.lnk
              24 File(s)    804,677,196 bytes
               9 Dir(s)  79,221,886,976 bytes free

C:\Users\gani\Desktop>cd deploy
The system cannot find the path specified.

C:\Users\gani\Desktop>kubectl apply -f kubernetes/depoly.yaml
error: the path "kubernetes/depoly.yaml" does not exist

C:\Users\gani\Desktop>kubectl apply -f depoly.yaml
error: the path "depoly.yaml" does not exist

C:\Users\gani\Desktop>kubectl apply -f C:\Users\gani\Desktop\deploy.yaml
deployment.apps/flask-app created

C:\Users\gani\Desktop>
```

C:\Windows\System32\cmd.exe

```
C:\Windows\system32>kubectl expose deployment flask-app --type=NodePort --name=flask_service
The Service "flask_service" is invalid: metadata.name: Invalid value: "flask_service": a DNS-1035 label must consist of lower case alphanumeric characters or '-', start
 with an alphabetic character, and end with an alphanumeric character (e.g. 'my-name',  or 'abc-123', regex used for validation is '[a-z]([-a-z0-9]*[a-z0-9])?')

C:\Windows\system32>kubectl expose deployment flask-app --type=NodePort --name=flask_service
The Service "flask_service" is invalid: metadata.name: Invalid value: "flask_service": a DNS-1035 label must consist of lower case alphanumeric characters or '-', start
 with an alphabetic character, and end with an alphanumeric character (e.g. 'my-name',  or 'abc-123', regex used for validation is '[a-z]([-a-z0-9]*[a-z0-9])?')

C:\Windows\system32>kubectl expose deployment flask-app --type=NodePort --name=flask_service
The Service "flask_service" is invalid: metadata.name: Invalid value: "flask_service": a DNS-1035 label must consist of lower case alphanumeric characters or '-', start
 with an alphabetic character, and end with an alphanumeric character (e.g. 'my-name',  or 'abc-123', regex used for validation is '[a-z]([-a-z0-9]*[a-z0-9])?')

C:\Windows\system32>kubectl expose deployment flask-app --type=NodePort --name=flask-service
Error from server (AlreadyExists): services "flask-service" already exists

C:\Windows\system32>
C:\Windows\system32>kubectl -n kubernetes-dashboard get depploy
^C
C:\Windows\system32>kubectl -n kubernetes-dashboard get deploy
No resources found in kubernetes-dashboard namespace.

C:\Windows\system32>kubectl -n kubernetes-dashboard get deploy
No resources found in kubernetes-dashboard namespace.

C:\Windows\system32>kubectl proxy
Starting to serve on 127.0.0.1:8001
^C
C:\Windows\system32>kubectl -n kubernetes-dashboard get deplou
^C
C:\Windows\system32>kubectl -n kubernetes-dashboard get deploy
No resources found in kubernetes-dashboard namespace.

C:\Windows\system32>kubectl -n kubernetes-dashboard get pods
No resources found in kubernetes-dashboard namespace.

C:\Windows\system32>kubectl expose deployment flask-app --type=NodePort --name=flask-service
Error from server (AlreadyExists): services "flask-service" already exists

C:\Windows\system32>kubectl get ing
NAME                CLASS    HOSTS   ADDRESS   PORTS   AGE
flask-app-ingress   <none>   *                 80      27m

C:\Windows\system32>kubectl get svc
NAME                TYPE        CLUSTER-IP       EXTERNAL-IP   PORT(S)        AGE
```