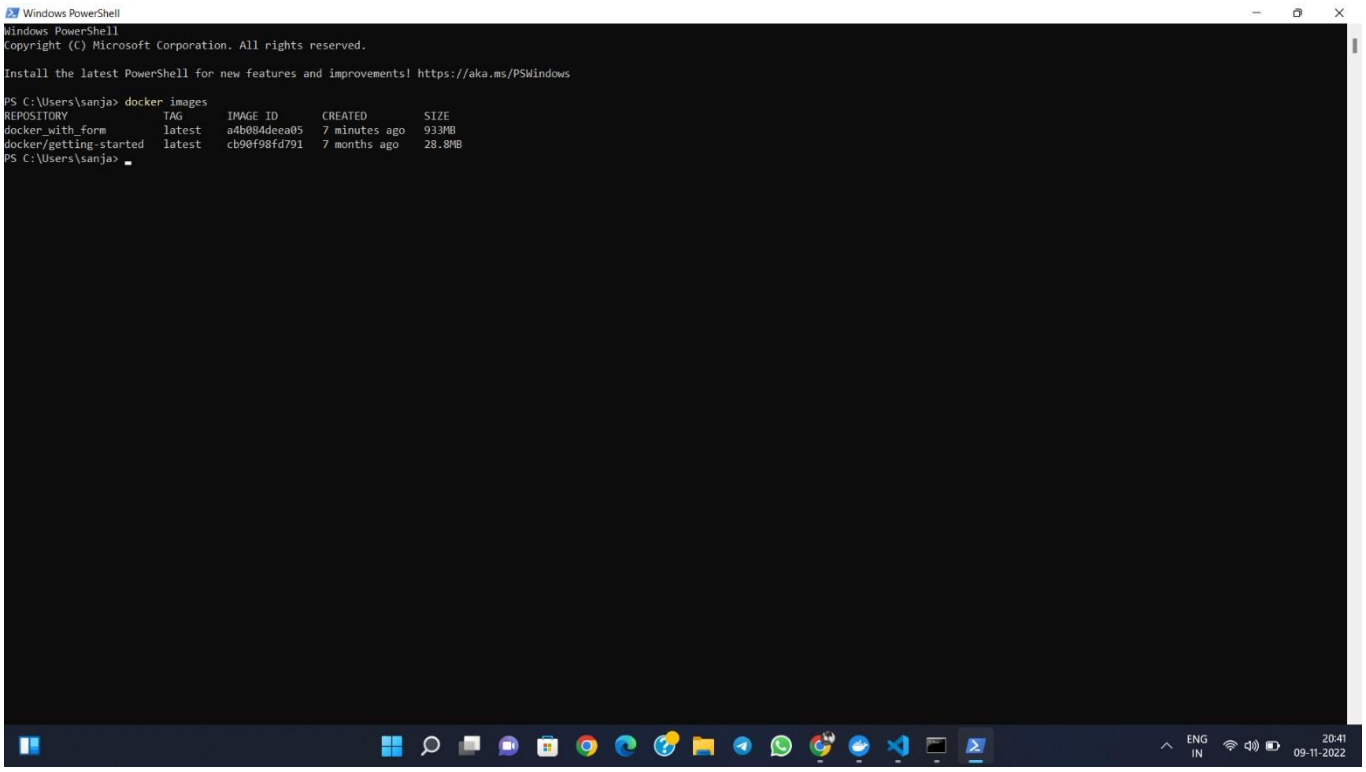
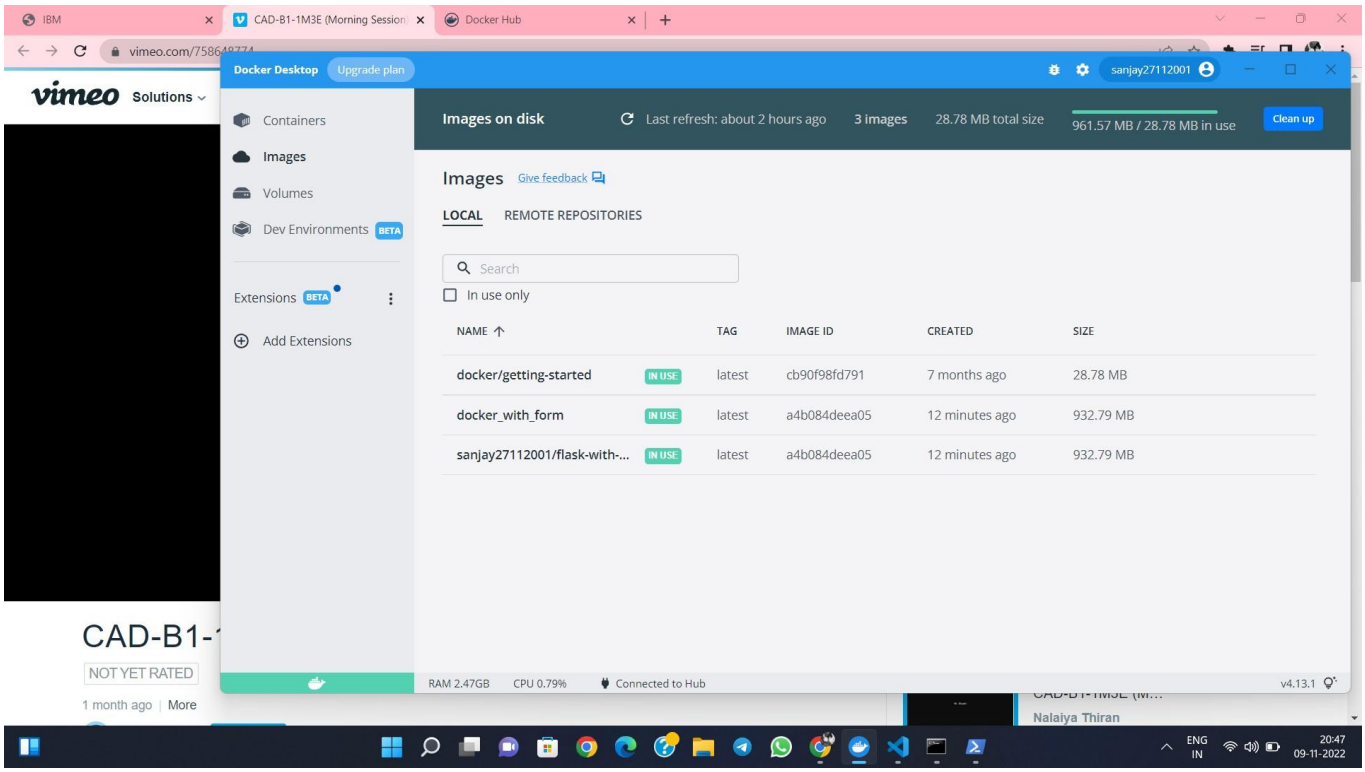
Assignment-4

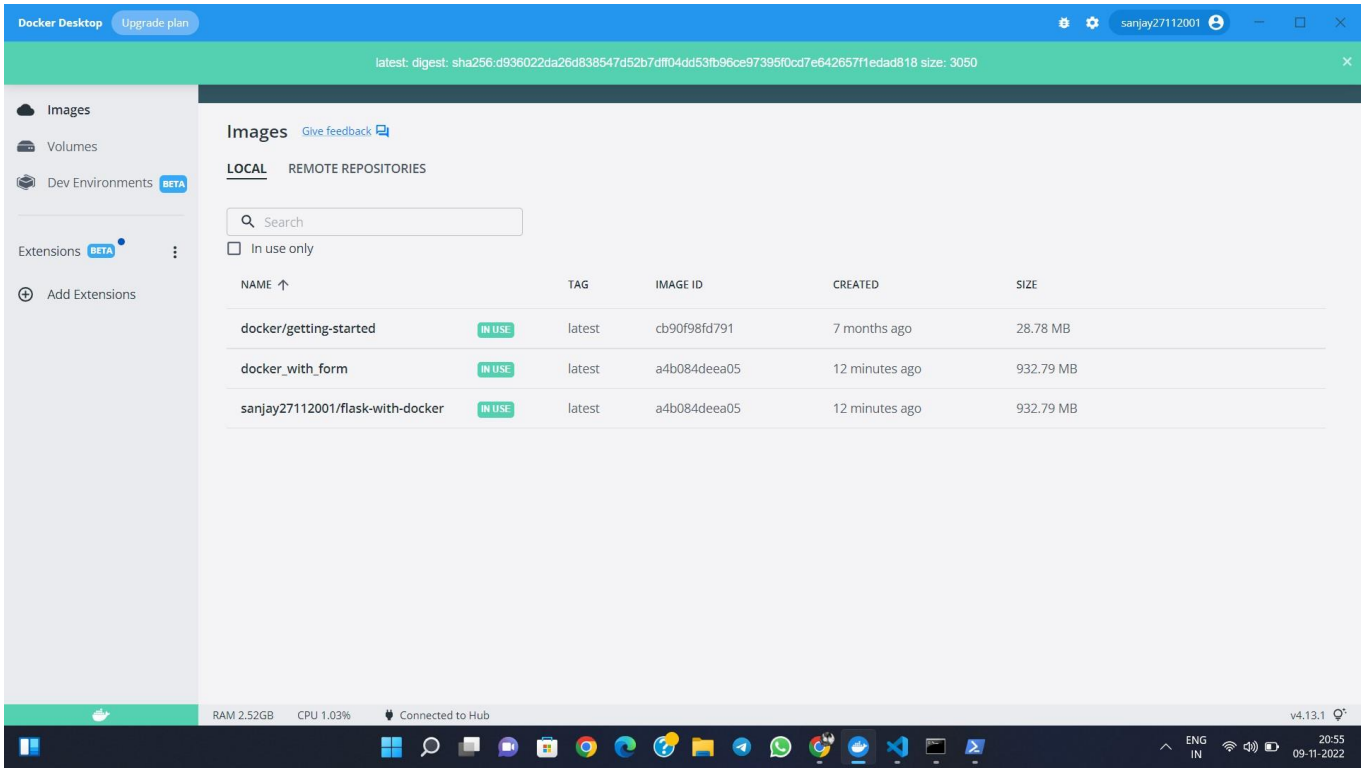
Assignment Date	29 October 2022
Student Name	Vikram R
Student Roll Number	610519104112
Maximum Marks	2 Marks

Question:

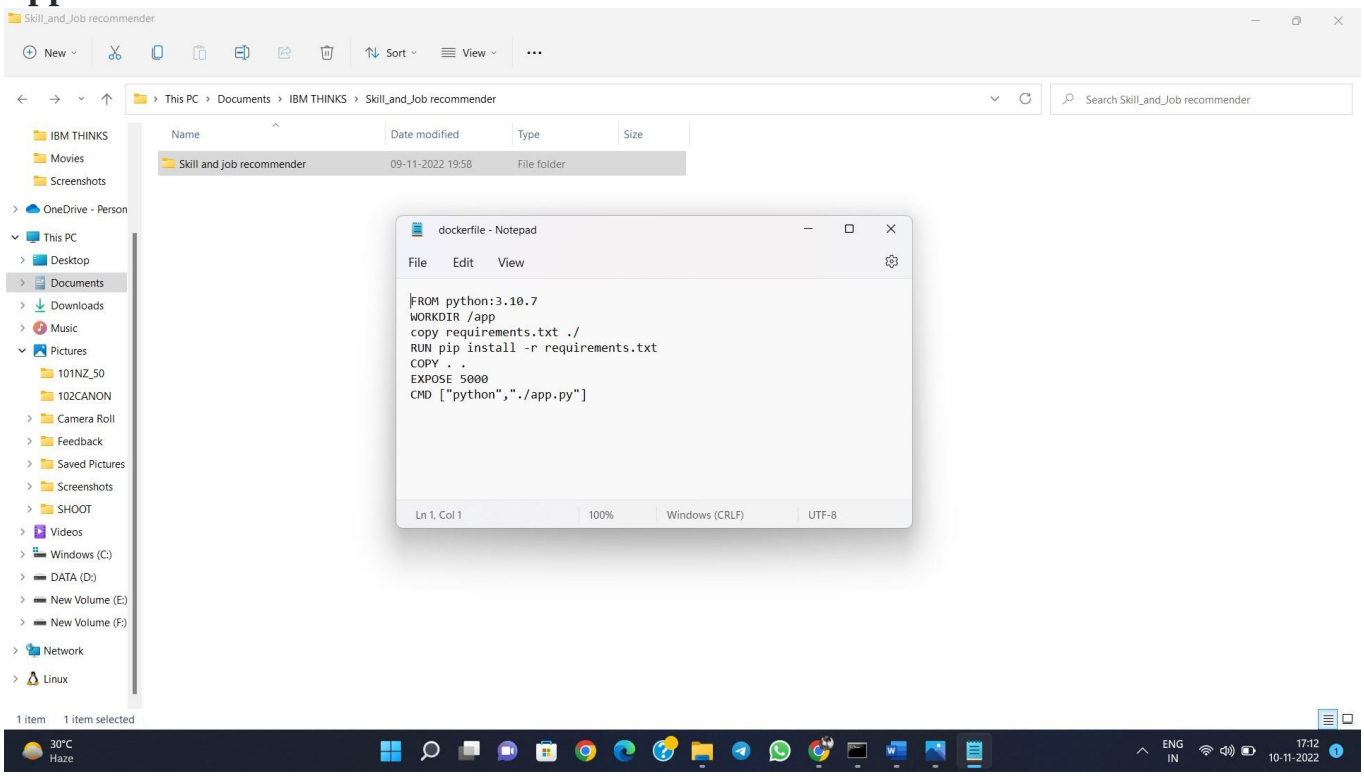
1. Pull an Image from docker hub and run it in docker playground.



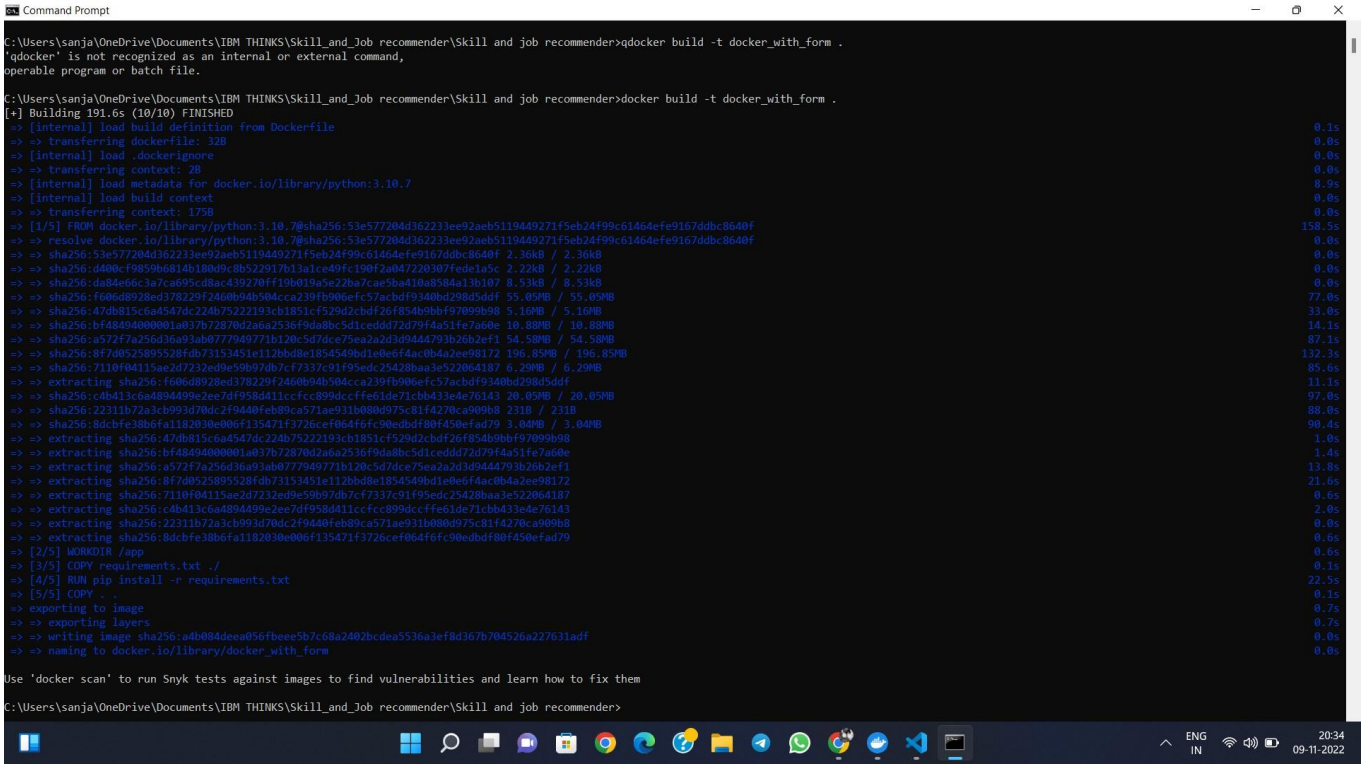

IBM
CAD-B1-1M3E (Morning Session)
Docker Hub
vimeo.com/758648774
vimeo Solutions
Docker Desktop
Upgrade plan
sanjay27112001
Containers
Images
Volumes
Dev Environments BETA
Extensions BETA
Add Extensions
Images on disk
Last refresh: about 2 hours ago
3 images
28.78 MB total size
961.57 MB / 28.78 MB in use
Clean up
Images
Give feedback
LOCAL
REMOTE REPOSITORIES
Search
In use only
NAME
TAG
IMAGE ID
CREATED
SIZE
docker/getting-started
IN USE
latest
cb90f98fd791
7 months ago
28.78 MB
docker_with_form
IN USE
latest
a4b084deea05
12 minutes ago
932.79 MB
sanjay27112001/flask-with-...
IN USE
latest
a4b084deea05
12 minutes ago
932.79 MB
RAM 2.47GB
CPU 0.79%
Connected to Hub
v4.13.1
CAD-B1-
NOT YET RATED
1 month ago
More
Nalaiya Thiran
ENG
IN
20:47
09-11-2022


Docker Desktop
Upgrade plan
sanjay27112001
latest: digest: sha256:d936022da26d838547d52b7dff04dd53fb96ce97395f0cd7e642657f1edad818 size: 3050
Images
Volumes
Dev Environments BETA
Extensions BETA
Add Extensions
Images
Give feedback
LOCAL
REMOTE REPOSITORIES
Search
In use only
NAME
TAG
IMAGE ID
CREATED
SIZE
docker/getting-started
IN USE
latest
cb90f98fd791
7 months ago
28.78 MB
docker_with_form
IN USE
latest
a4b084deea05
12 minutes ago
932.79 MB
sanjay27112001/flask-with-docker
IN USE
latest
a4b084deea05
12 minutes ago
932.79 MB
RAM 2.52GB
CPU 1.03%
Connected to Hub
v4.13.1
ENG
IN
20:55
09-11-2022

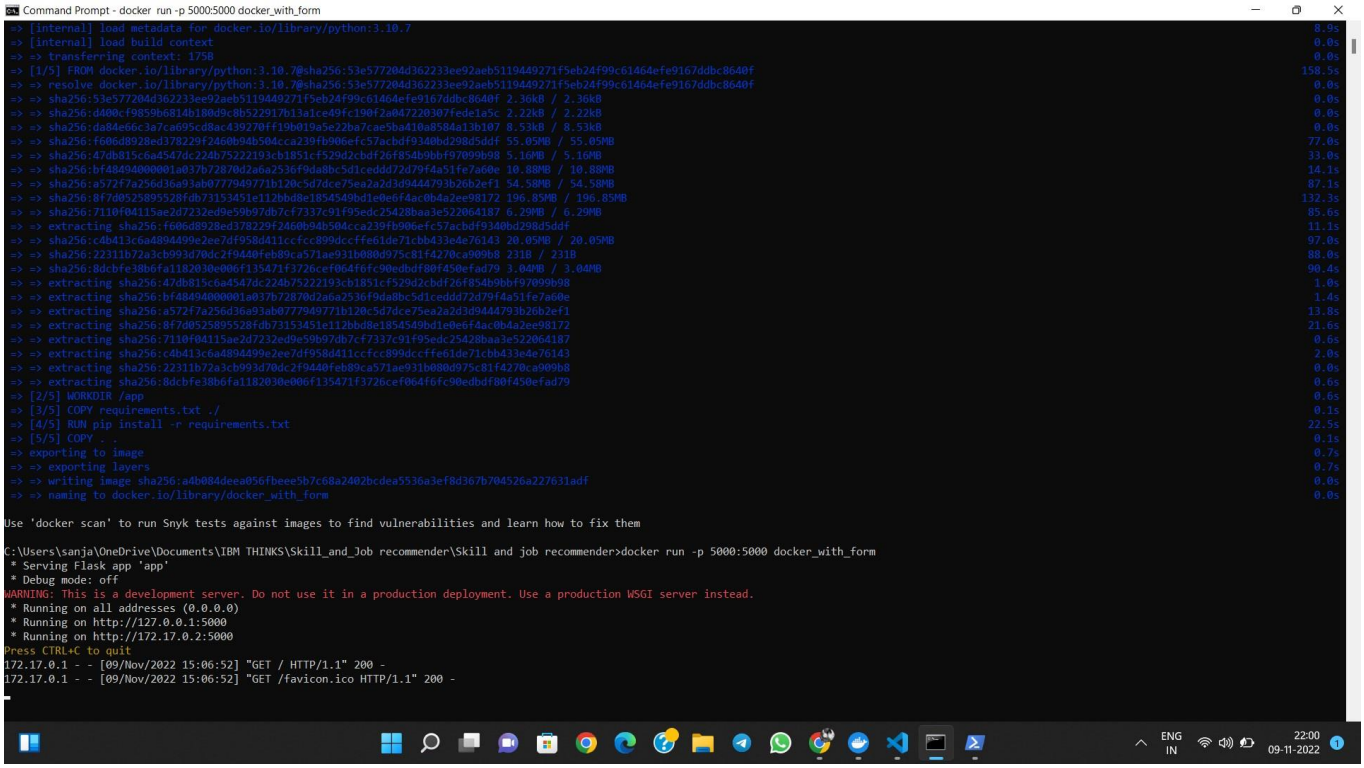
2.Create a docker file for the job portal application and deploy it in Docker desktop application.



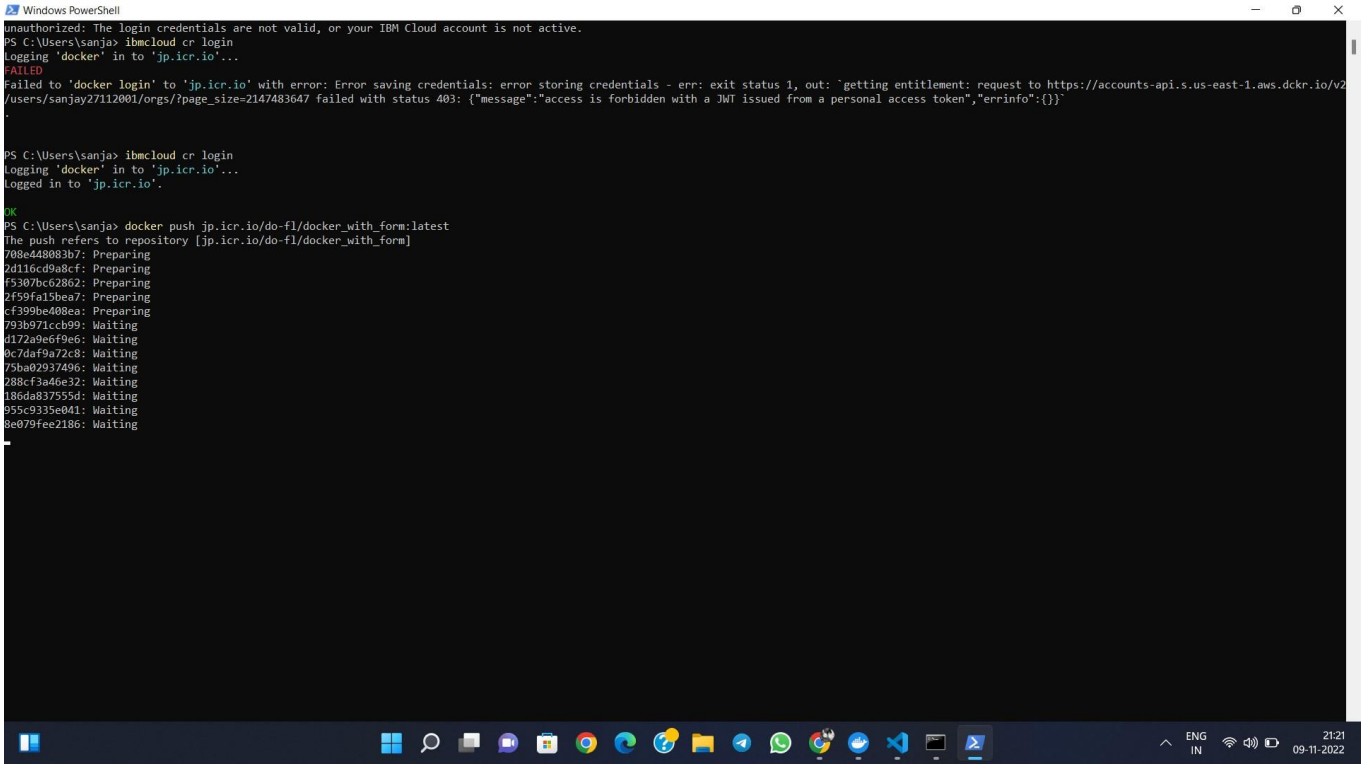
Deploy in docker application

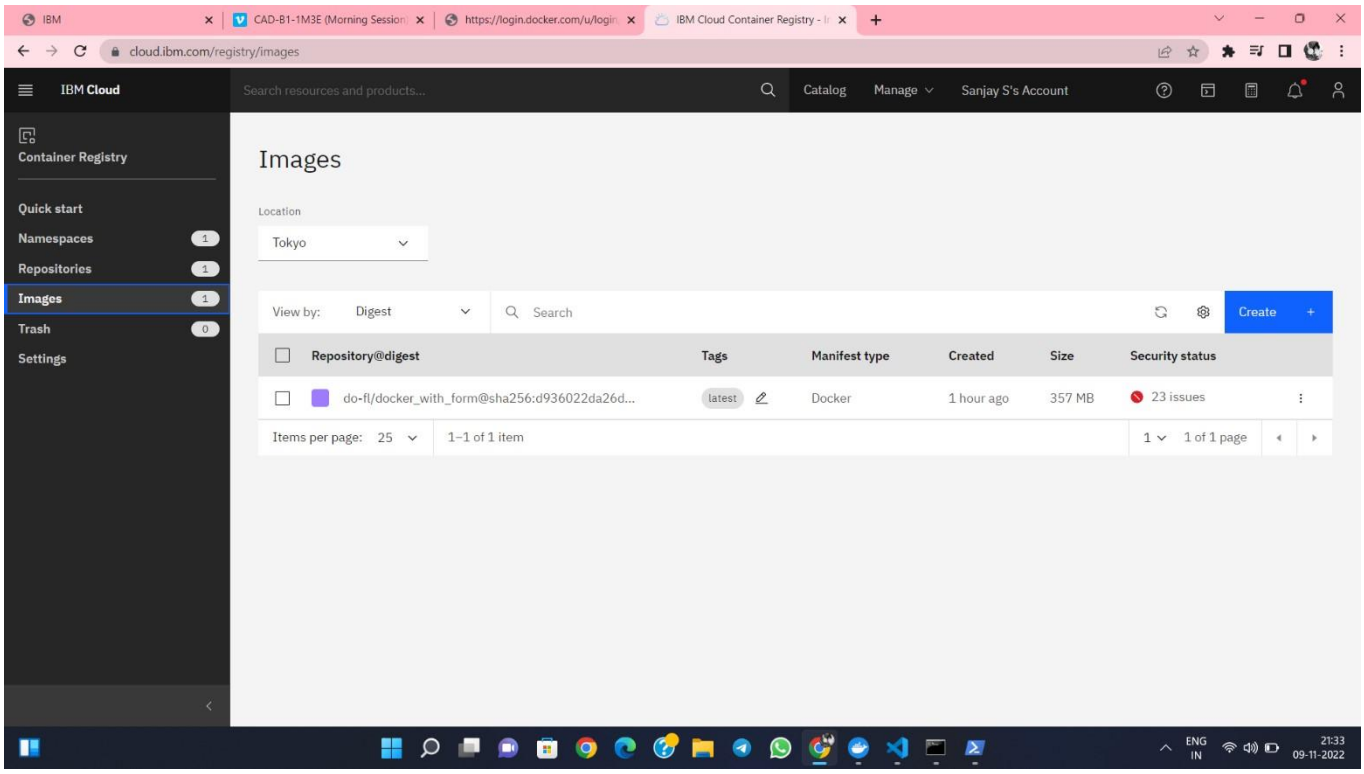


Running in docker desktop

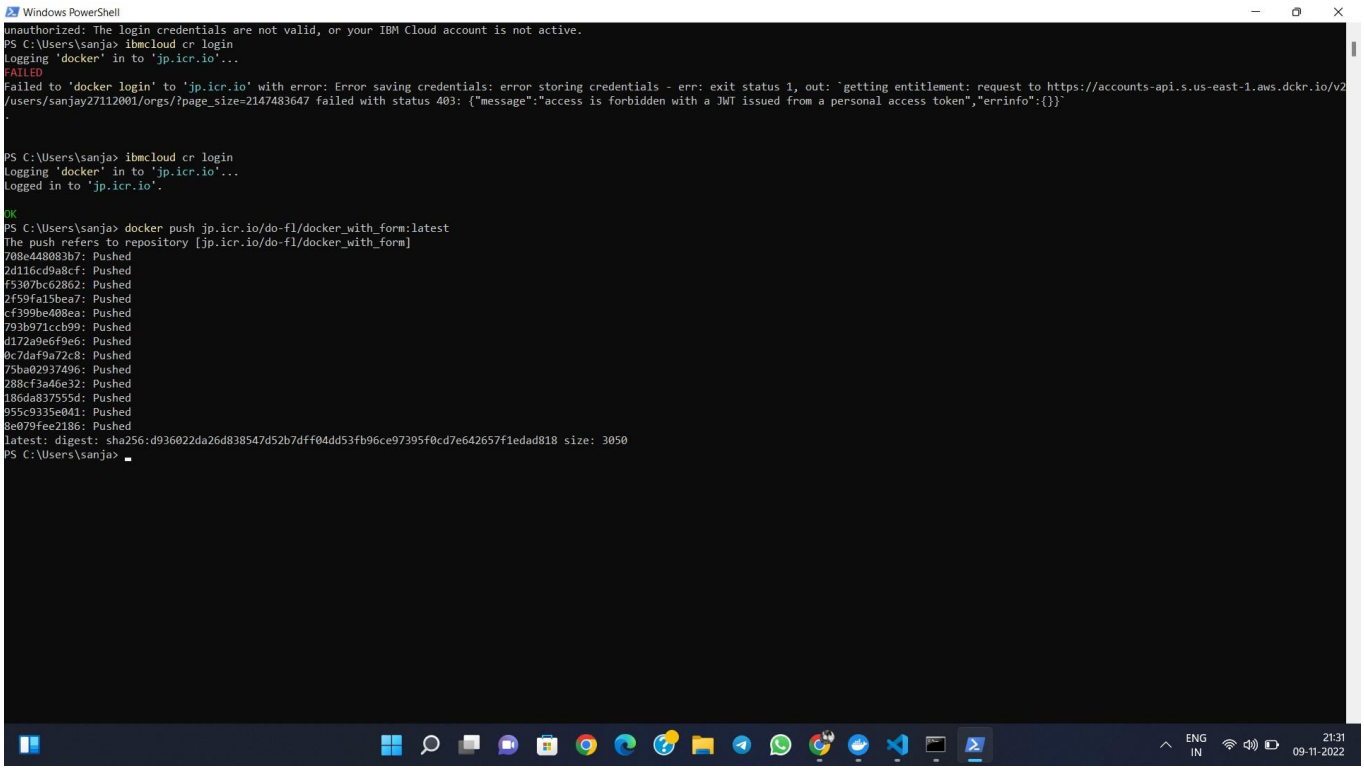


3. Create a IBM container registry and deploy hello world app or job portal app.



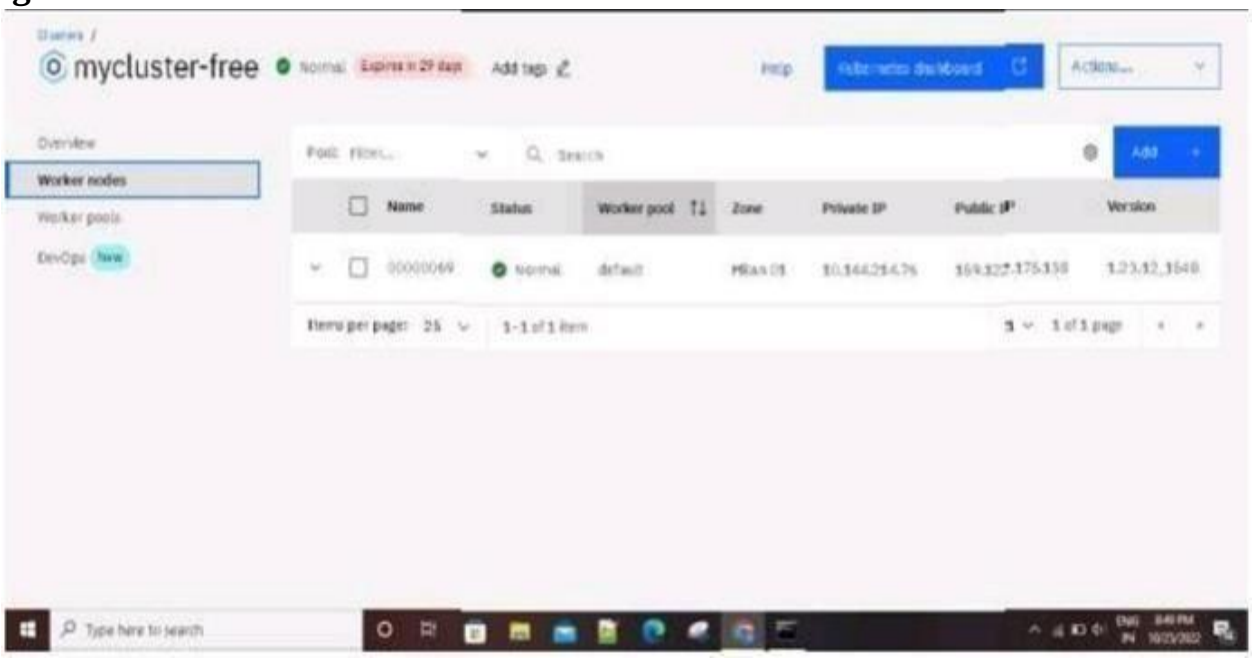


Deploy hello world or job portal

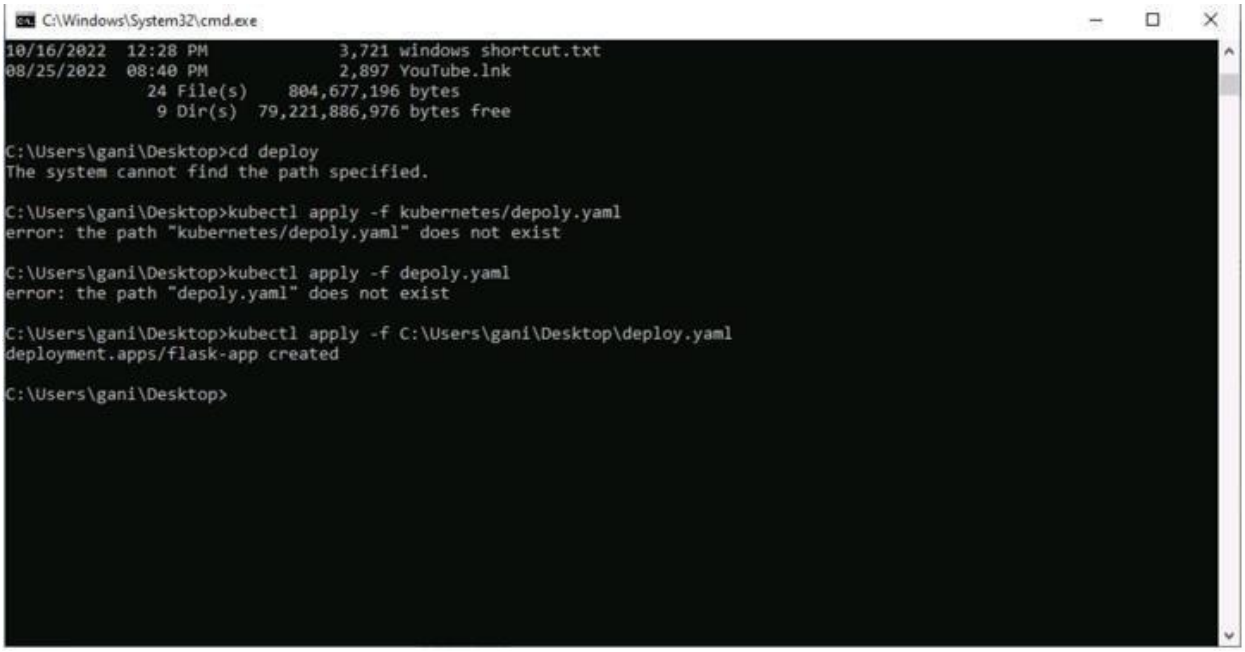


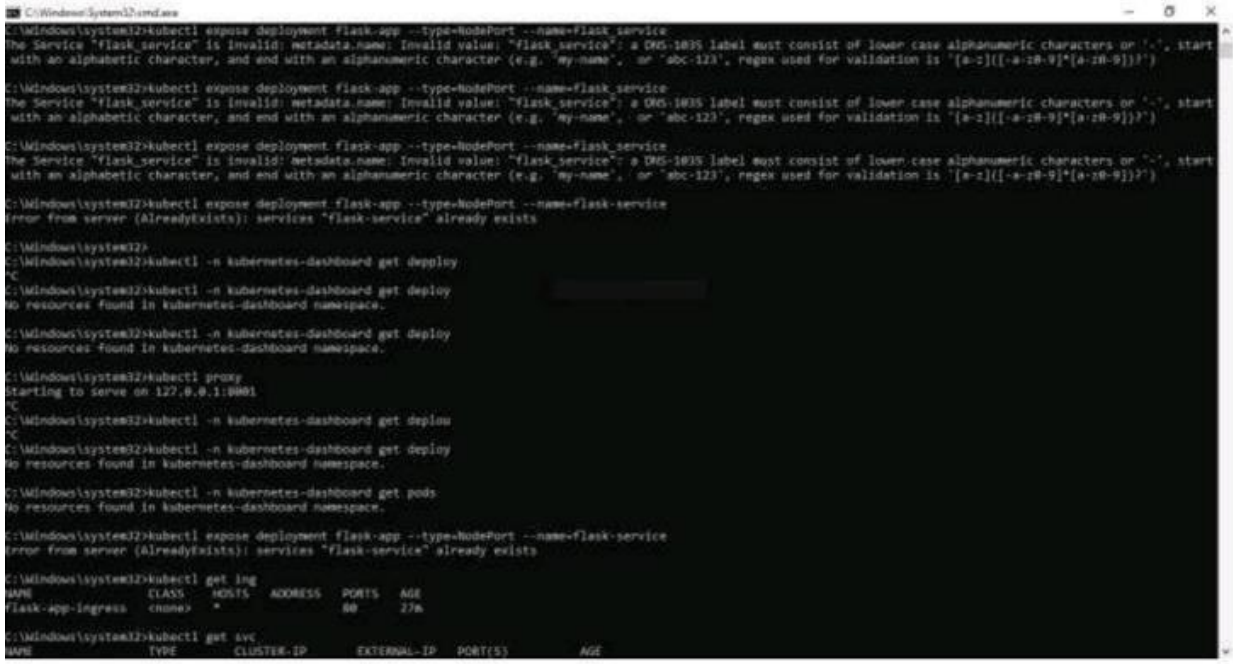
4. Create a Kubernetes cluster in IBM cloud and deploy hello world image or job portal image and also expose the same app to run in node port.

Creating a Kubernetes cluster in IBM cloud



Expose the same app to run in noteport




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 dwpploy
^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