Assignment-4

Assignment Date	29 October 2022
Student Name	Ranjith R
Student Roll Number	732719104034
Maximum Marks	2 Marks

Question:

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

   Pull an image from docker hub.

Repositories   Starred   Contributed

Displaying 2 of 2 repositories

dharshinipk/getting-started

By dharshinipk • Updated a day ago   1   0
                                                   Download Stars

image

dharshinipk/flask-with-docker

By dharshinipk • Updated a day ago   0
                                                        Stars

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   Q Search

		NAME	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
☐		funny_shirley 8ee929159404	docker/get	Exited	80		► ⋮ ■
☐		determined_m cc3e98e68102	shabarigar	Running	5000	12 seconds ag	■ ⋮ ■

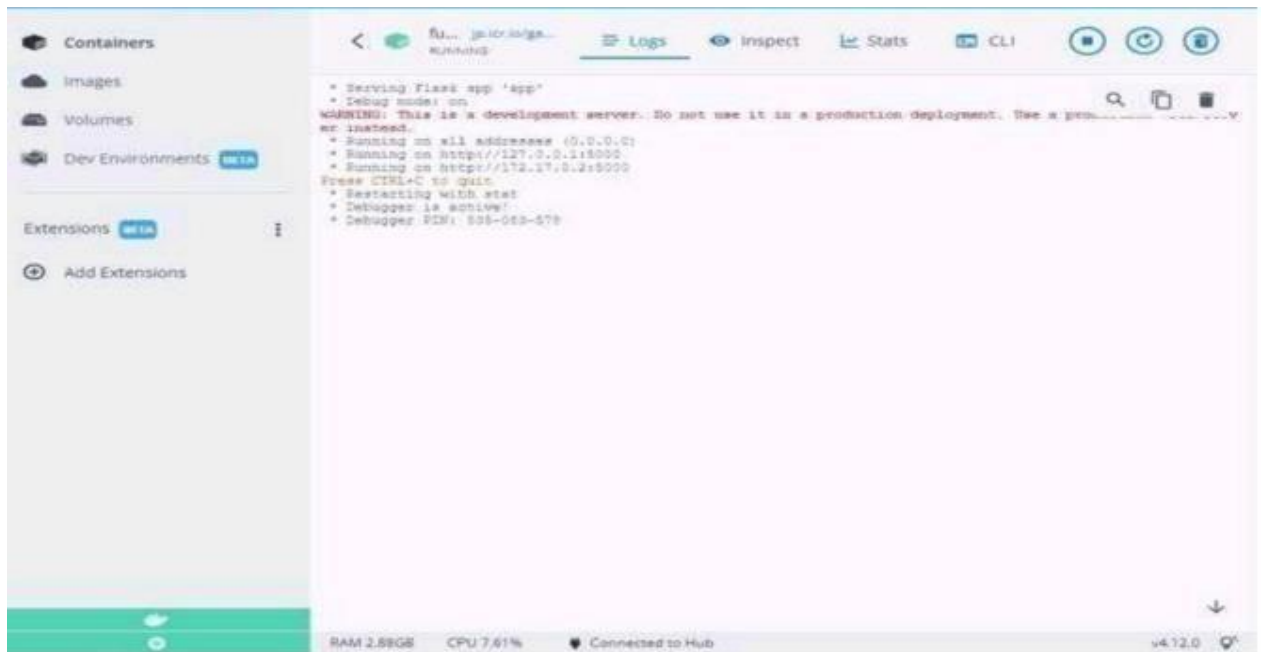RAM 2.86GB   CPU 9.39%   ● Connected to Hub   v4.12.0
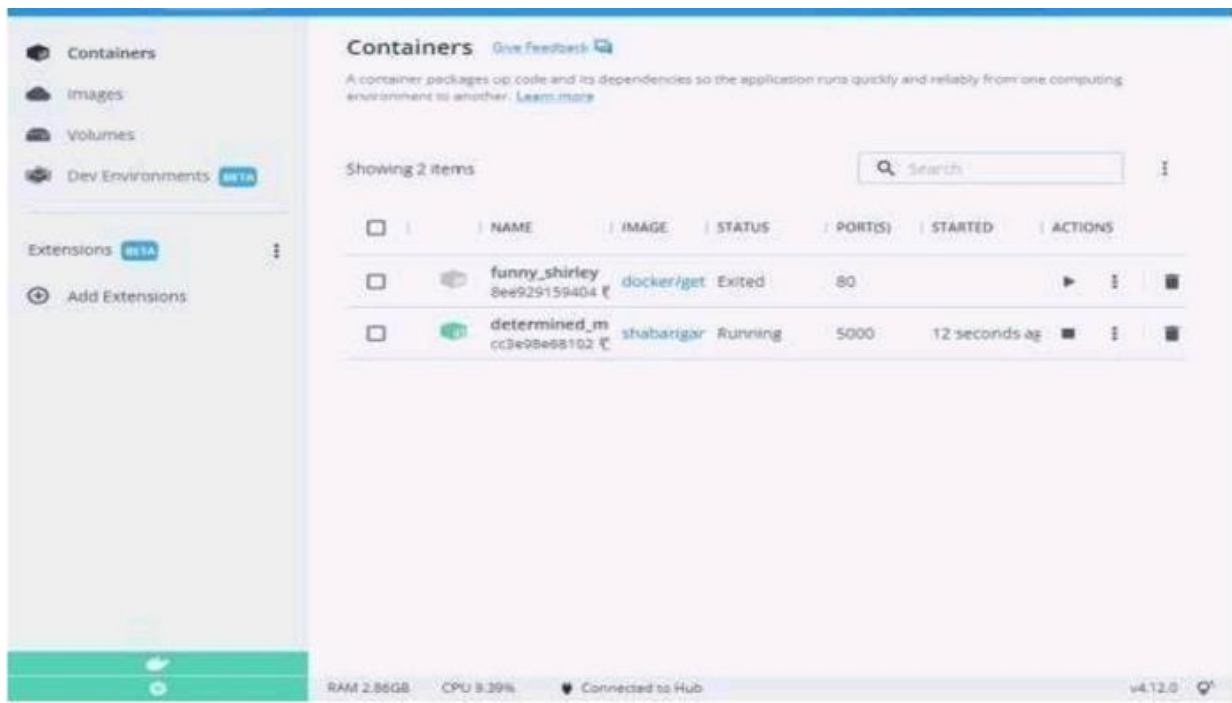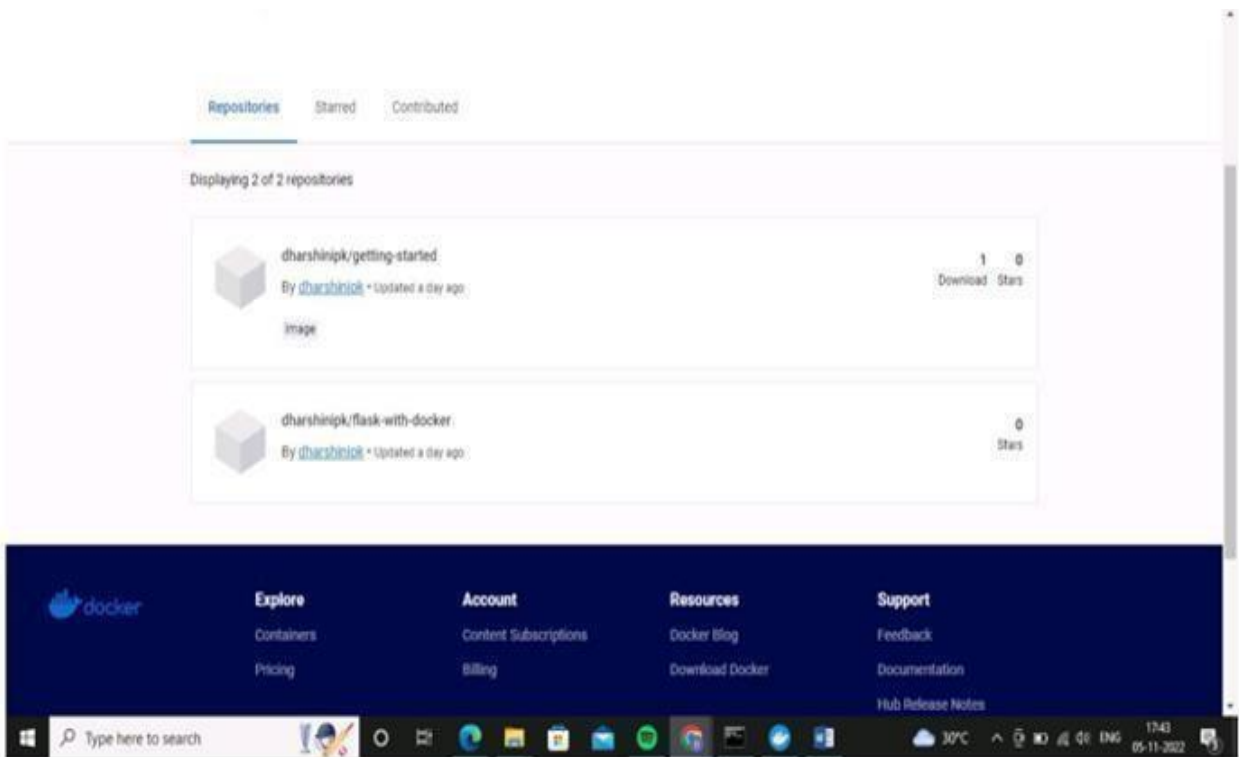
2. Create a docker file for the jobportal application and deploy it in Docker desktop application.
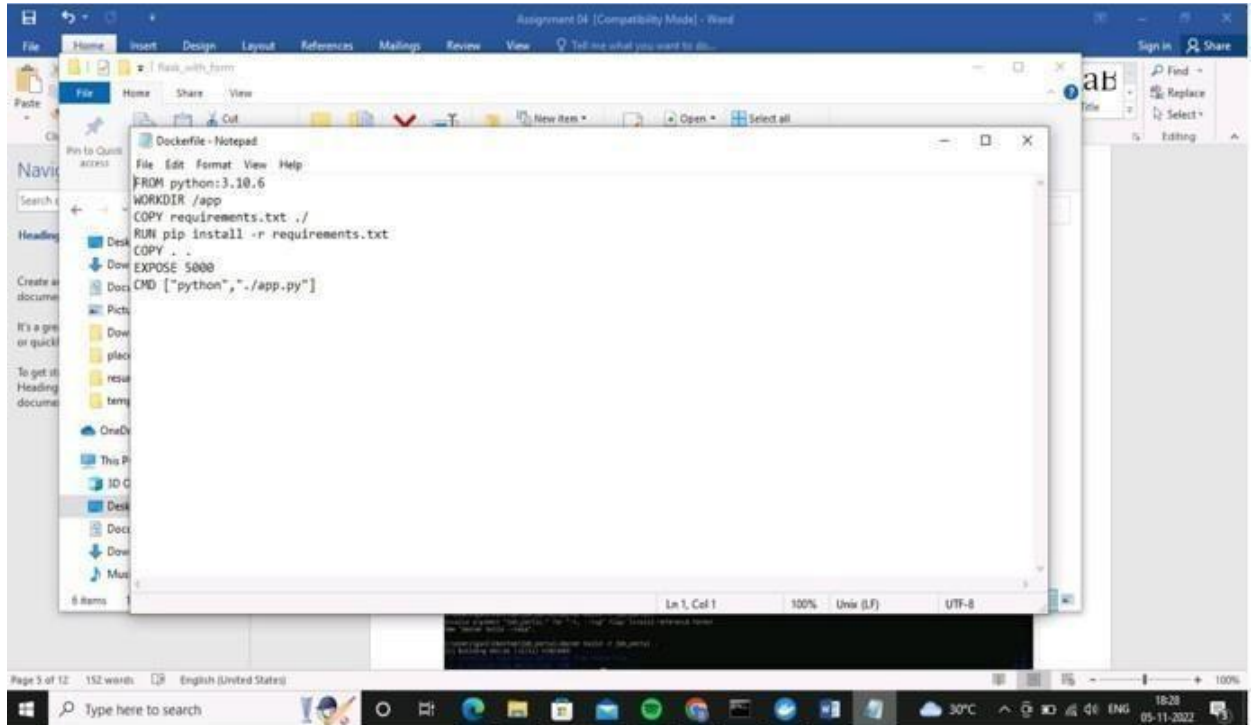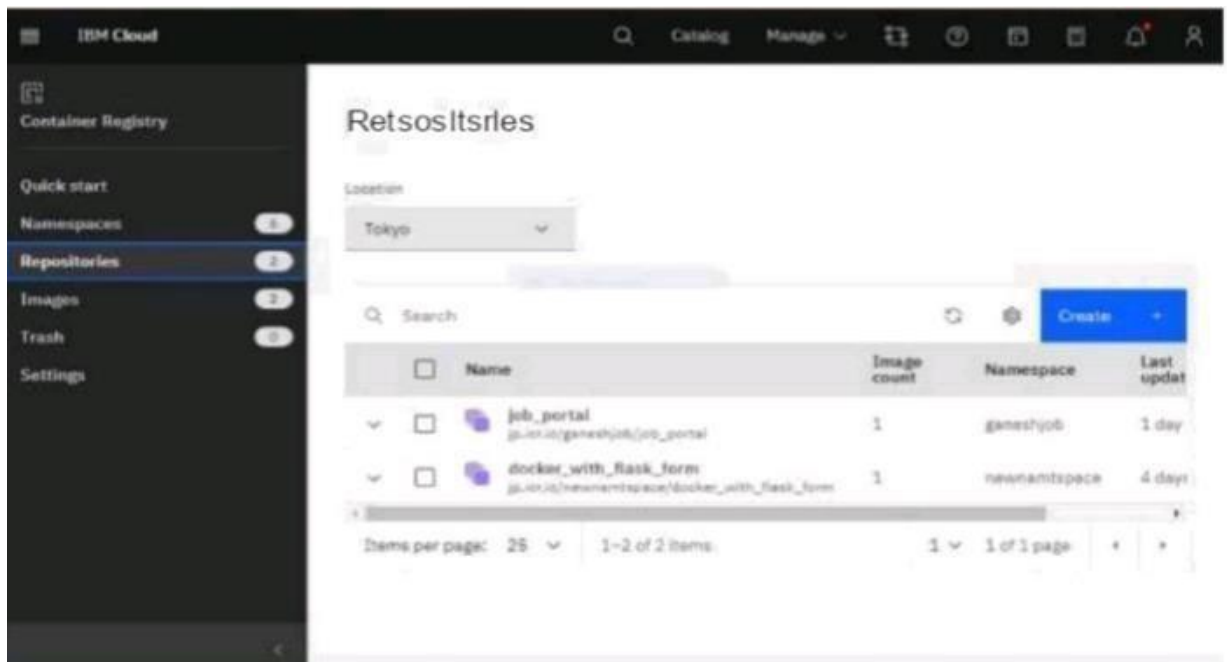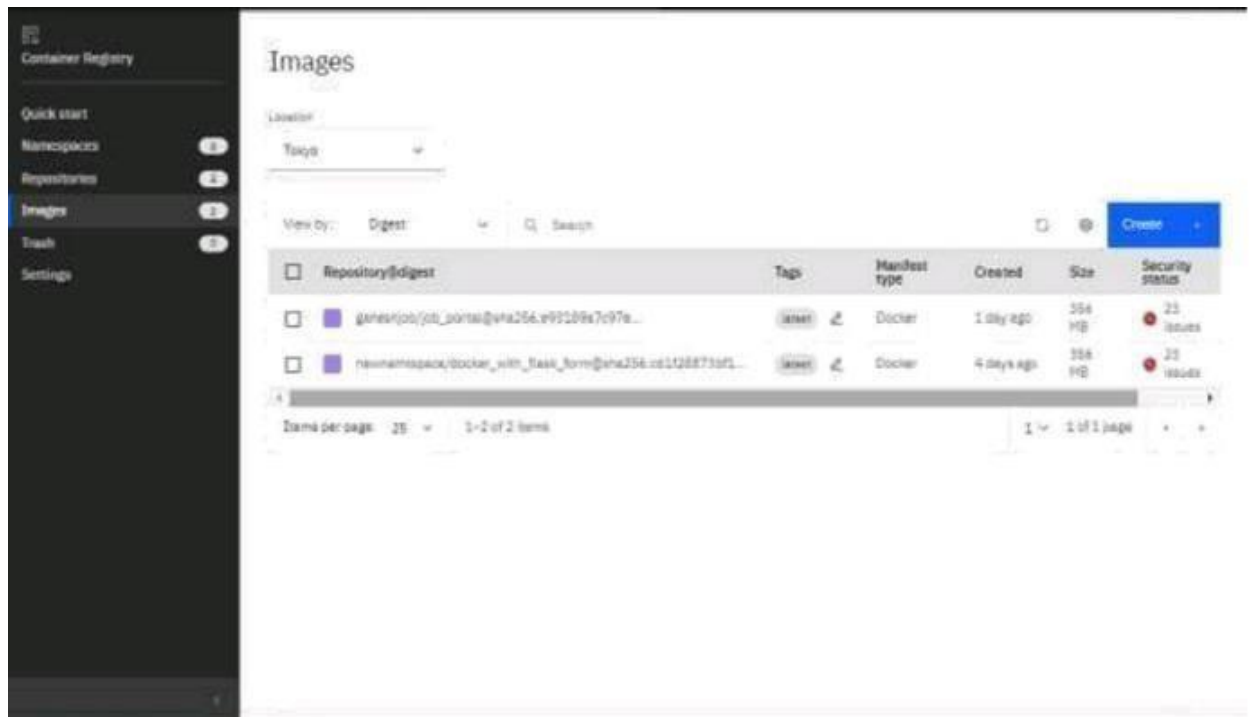

Deploy in docker application

Running in docker desktop

3. Create a IBM container registry and deploy helloworld app or jobportalapp.

Deploy helloworld or jobportal

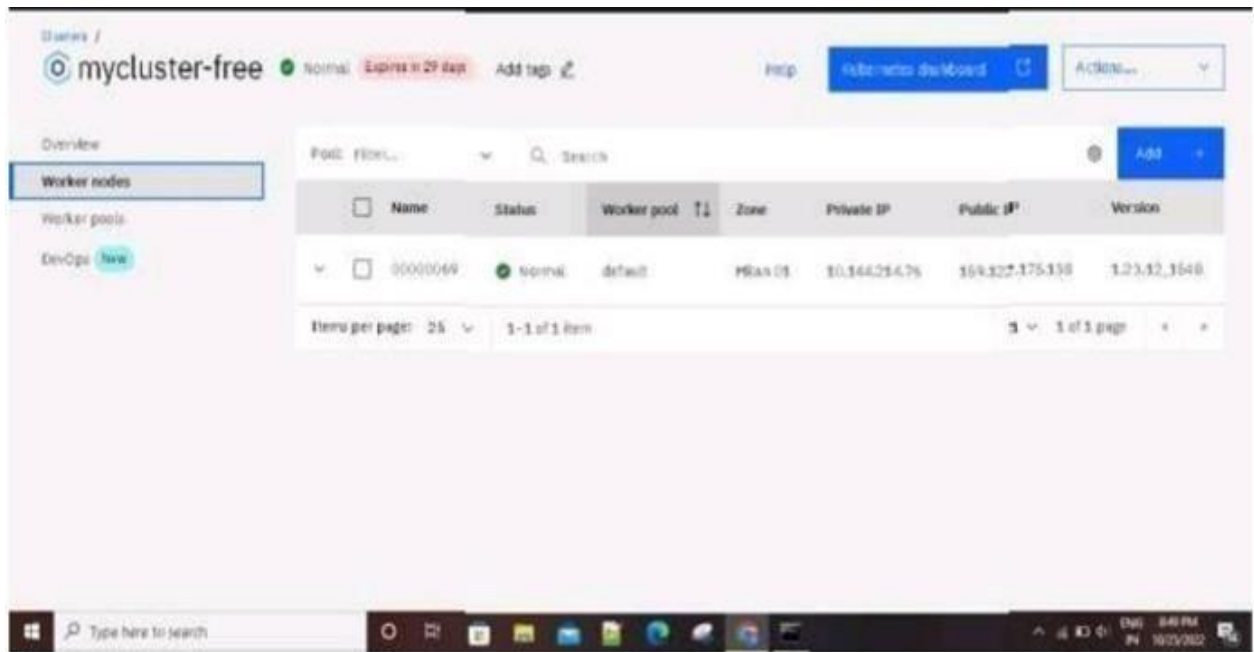
4. **Create a Kubernetes cluster in IBM cloud and deploy helloworld image or jobportal image and also expose the same app to run in nodeport.**

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 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 deploy
^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
```