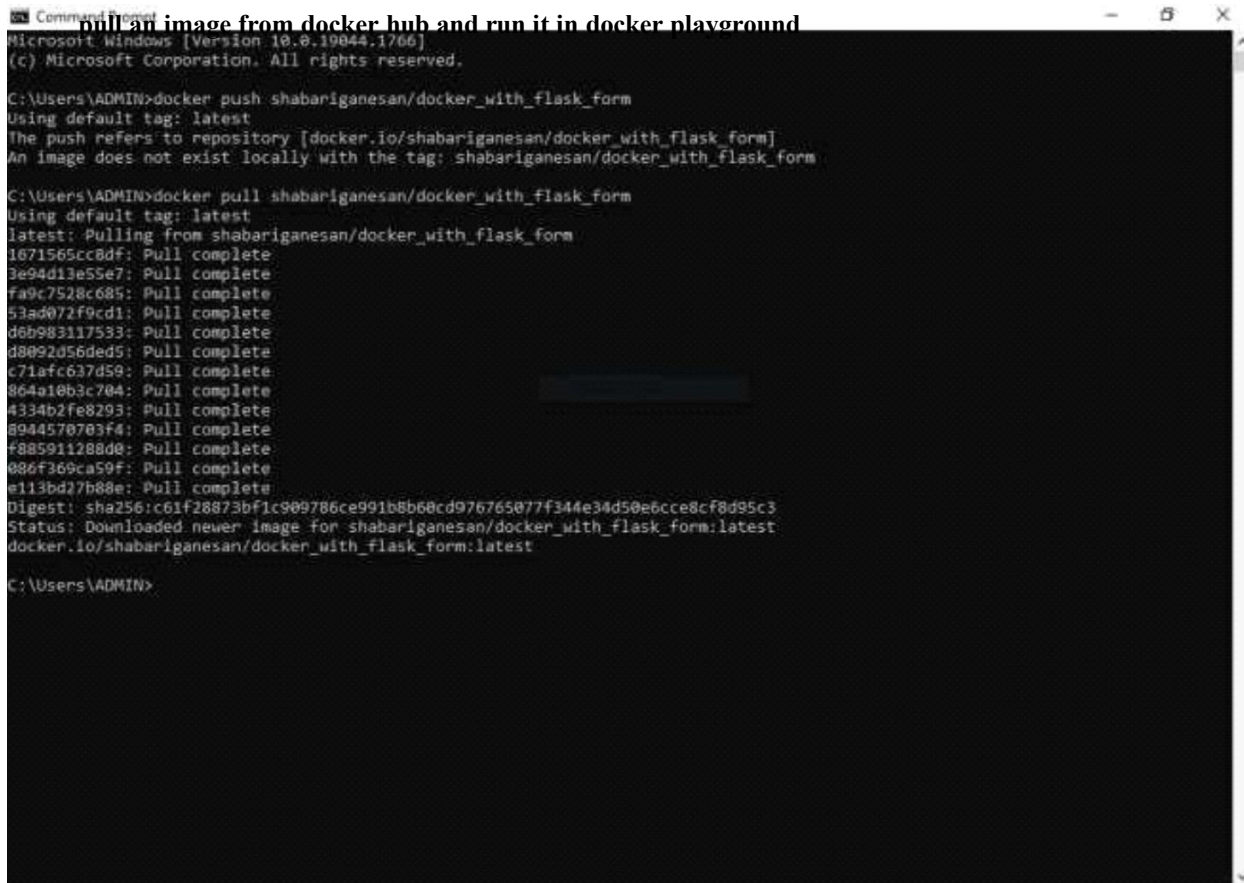# ASSIGNMENT 4

TEAM ID : P N T2 0 2 2 TM ID 1 0 9 0 8

PROJECT NAME : NUTRITION ASSISTANT APPLICATION

NAME : NARESHSHANKAR.A

Question-1:

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

```
Command Prompt                                                            —  ☐  ✕
Microsoft Windows [Version 10.0.19044.1766]
(c) Microsoft Corporation. All rights reserved.

C:\Users\ADMIN>docker push shabariganesan/docker_with_flask_form
Using default tag: latest
The push refers to repository [docker.io/shabariganesan/docker_with_flask_form]
An image does not exist locally with the tag: shabariganesan/docker_with_flask_form

C:\Users\ADMIN>docker pull shabariganesan/docker_with_flask_form
Using default tag: latest
latest: Pulling from shabariganesan/docker_with_flask_form
1671565cc8df: Pull complete
3e94d13e55e7: Pull complete
fa9c7528c685: Pull complete
53ad072f9cd1: Pull complete
d6b983117533: Pull complete
d8092d56ded5: Pull complete
c71afc637d59: Pull complete
864a10b3c704: Pull complete
4334b2fe8293: Pull complete
8944570703f4: Pull complete
f885911288d0: Pull complete
086f369ca59f: Pull complete
e113bd27b88e: Pull complete
Digest: sha256:c61f28873bf1c909786ce991b8b60cd976765077f344e34d50e6cce8cf8d95c3
Status: Downloaded newer image for shabariganesan/docker_with_flask_form:latest
docker.io/shabariganesan/docker_with_flask_form:latest

C:\Users\ADMIN>
```
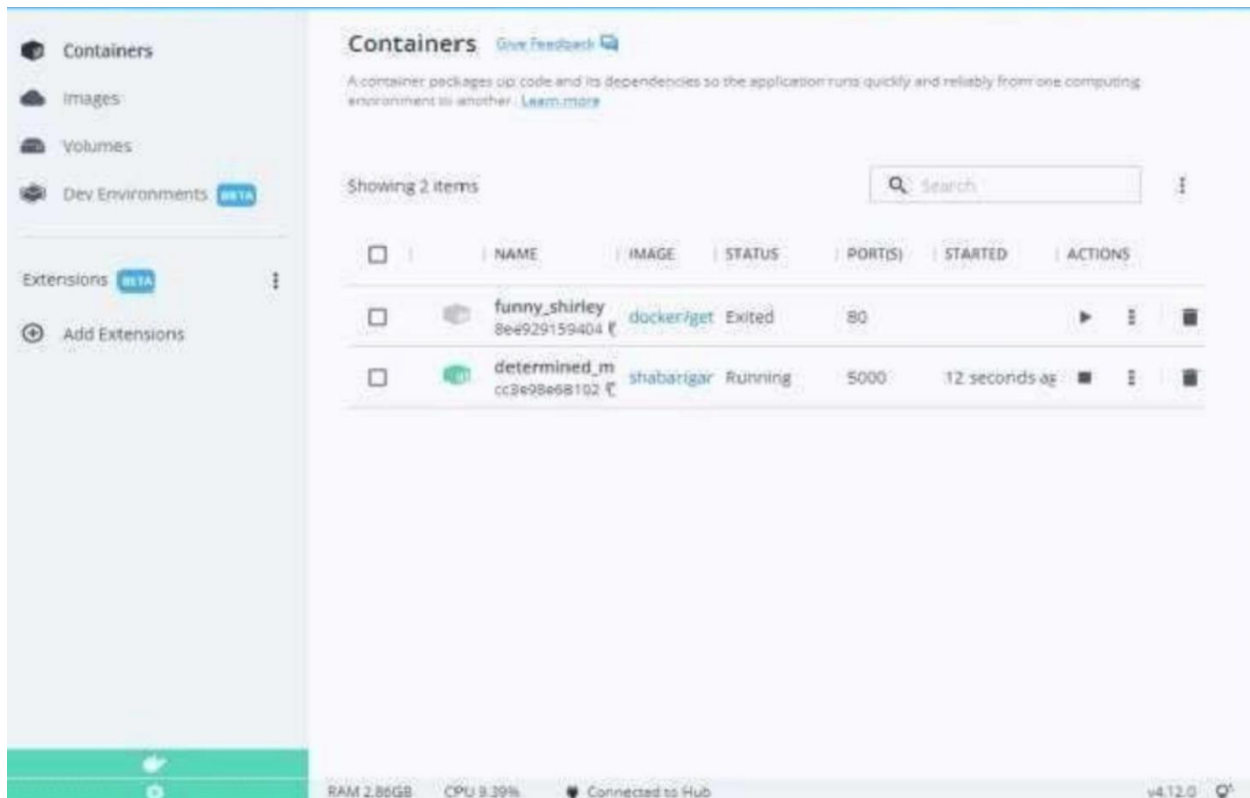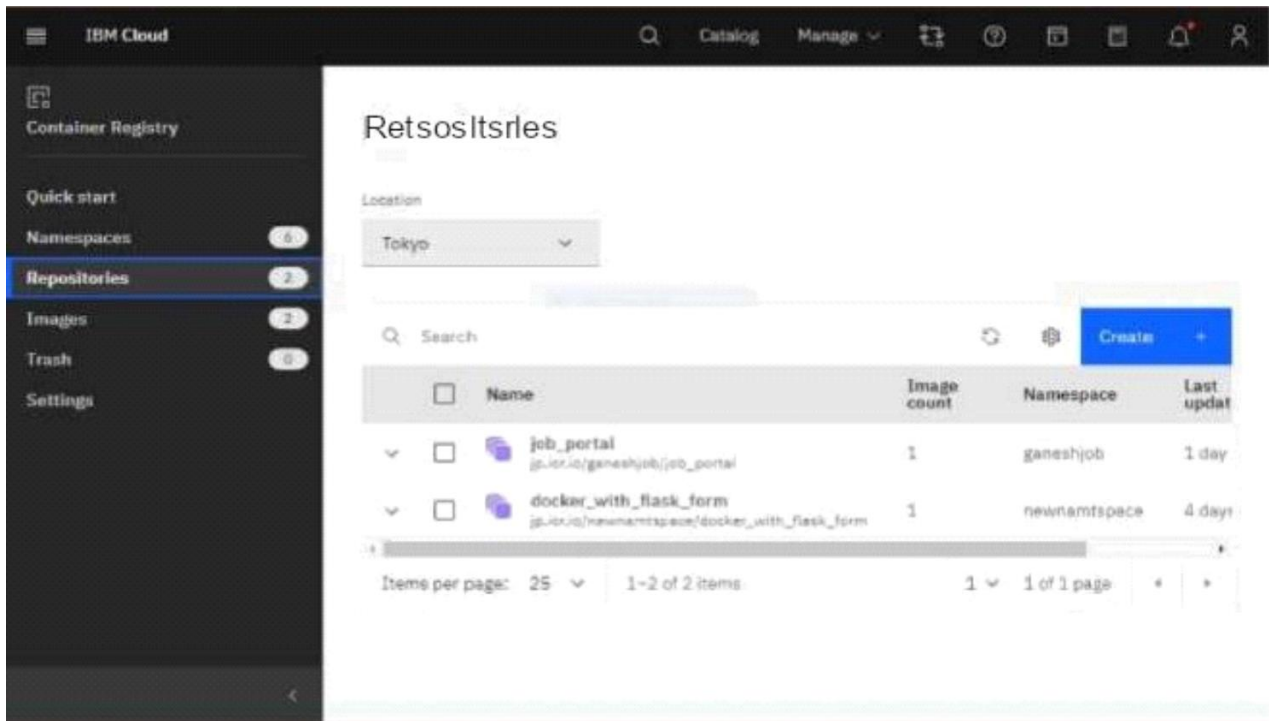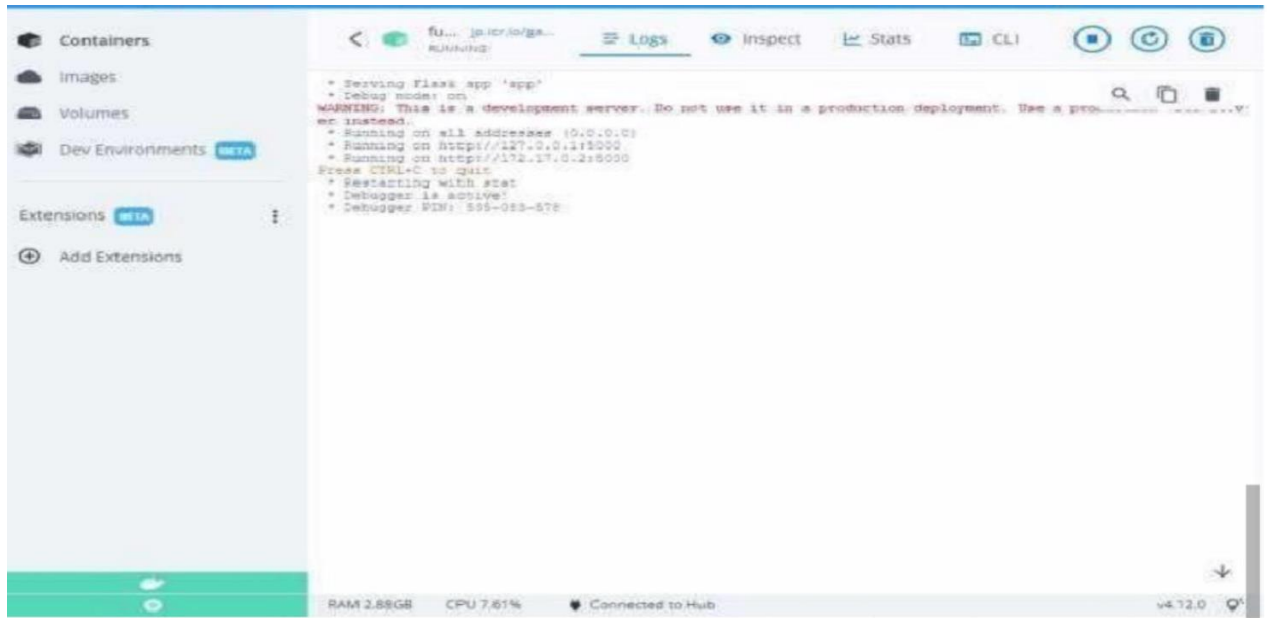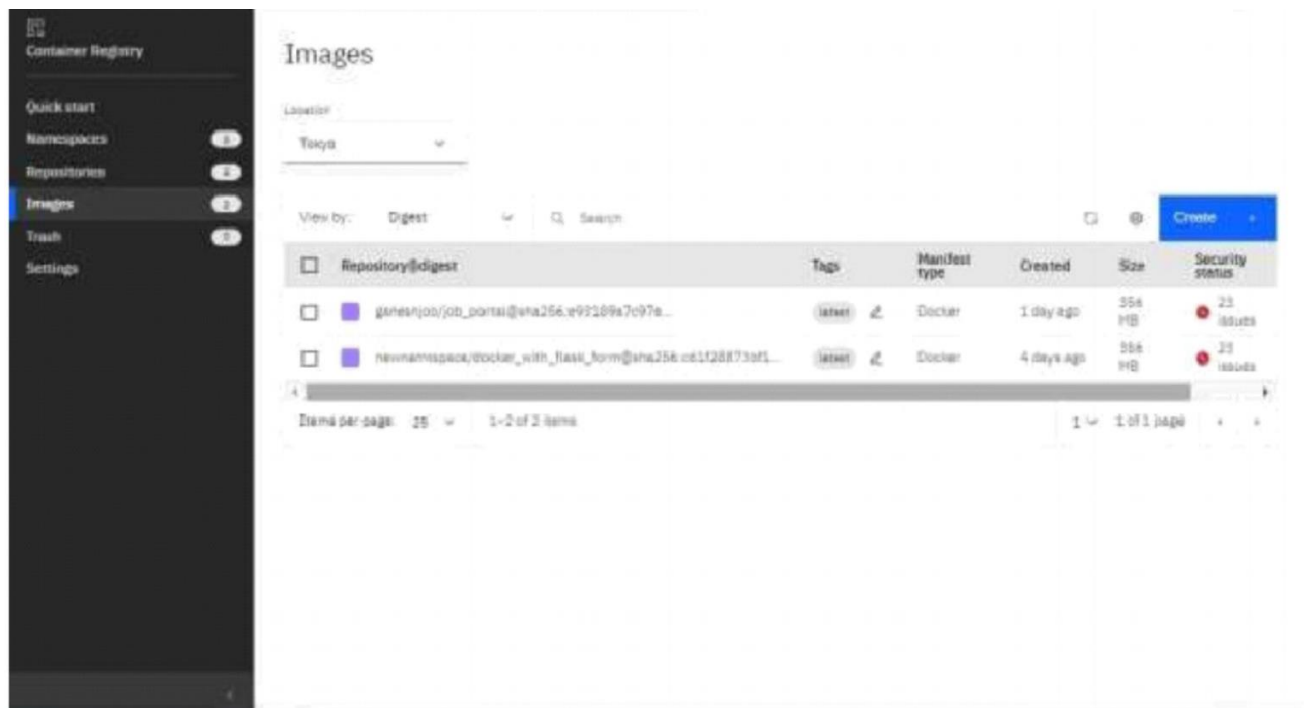
Question-2:

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

```
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
```


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

```
C:\Windows\System32\cmd.exe                                          —  □  ✕
54acb5a6fa8b: Retrying in 1 second
8d51c618126f: Retrying in 1 second
9ff6e4d46744: Waiting
a99d1d47b5a1: Waiting
655ed1b7a428: Waiting
Failed to lookup host: jp.icr.io

C:\Users\gani\Desktop\job_portal>docker push jp.icr.io/ganeshjob/job_portal
Using default tag: latest
The push refers to repository [jp.icr.io/ganeshjob/job_portal]
15e3b158a025: Layer already exists
8be94fb5e186: Pushed
46c2a7e4c12b: Layer already exists
9b72c7835466: Layer already exists
bfc1deb8130e: Layer already exists
1f123106824c: Layer already exists
3d6eb1152931: Pushed
100796cdf3b1: Pushed
54acb5a6fa8b: Retrying in 1 second
8d51c618126f: Pushed
9ff6e4d46744: Pushed
a99d1d47b5a1: Pushed
655ed1b7a428: Pushing [====================================]        89.98MB/124MB
%
C:\Users\gani\Desktop\job_portal>docker push jp.icr.io/ganeshjob/job_portal
Using default tag: latest
The push refers to repository [jp.icr.io/ganeshjob/job_portal]
15e3b158a025: Layer already exists
8be94fb5e186: Layer already exists
46c2a7e4c12b: Layer already exists
9b72c7835466: Layer already exists
bfc1deb8130e: Layer already exists
1f123106824c: Layer already exists
3d6eb1152931: Layer already exists
100796cdf3b1: Layer already exists
54acb5a6fa8b: Pushed
8d51c618126f: Layer already exists
9ff6e4d46744: Layer already exists
a99d1d47b5a1: Layer already exists
655ed1b7a428
latest: digest: sha256:e93109a7c97eeb99d0660854e896cf61aa6eda039998c8c7a2147a796bfc207 size: 3852

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

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

```
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>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       27s

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