

ASSIGNMENT 4

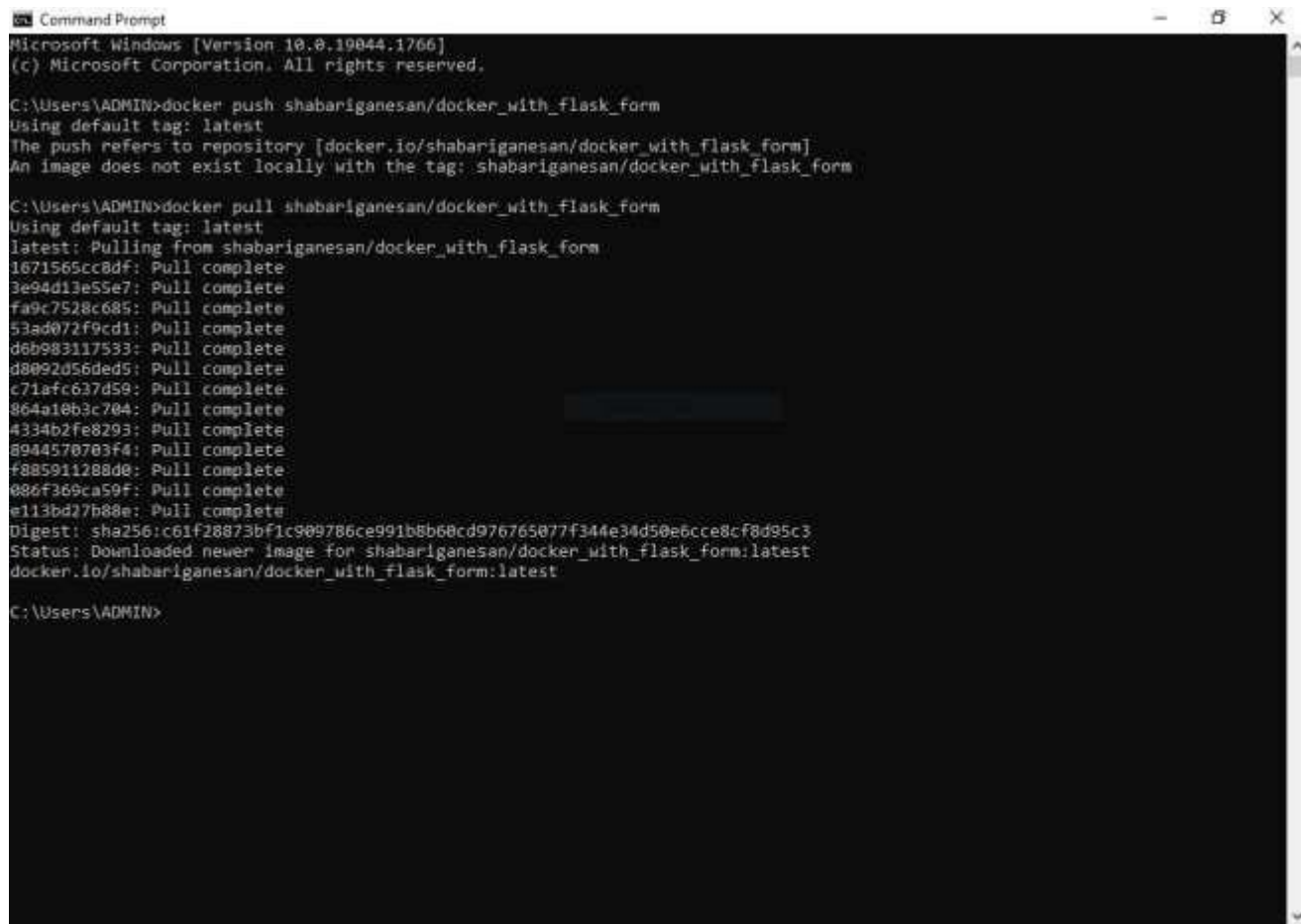
TEAM ID : PNT2022TMID50559

PROJECT NAME : CONTAINMENT ZONE ALERTING APPLICATION

STUDENT NAME : P.AMUTHA

Question-1:

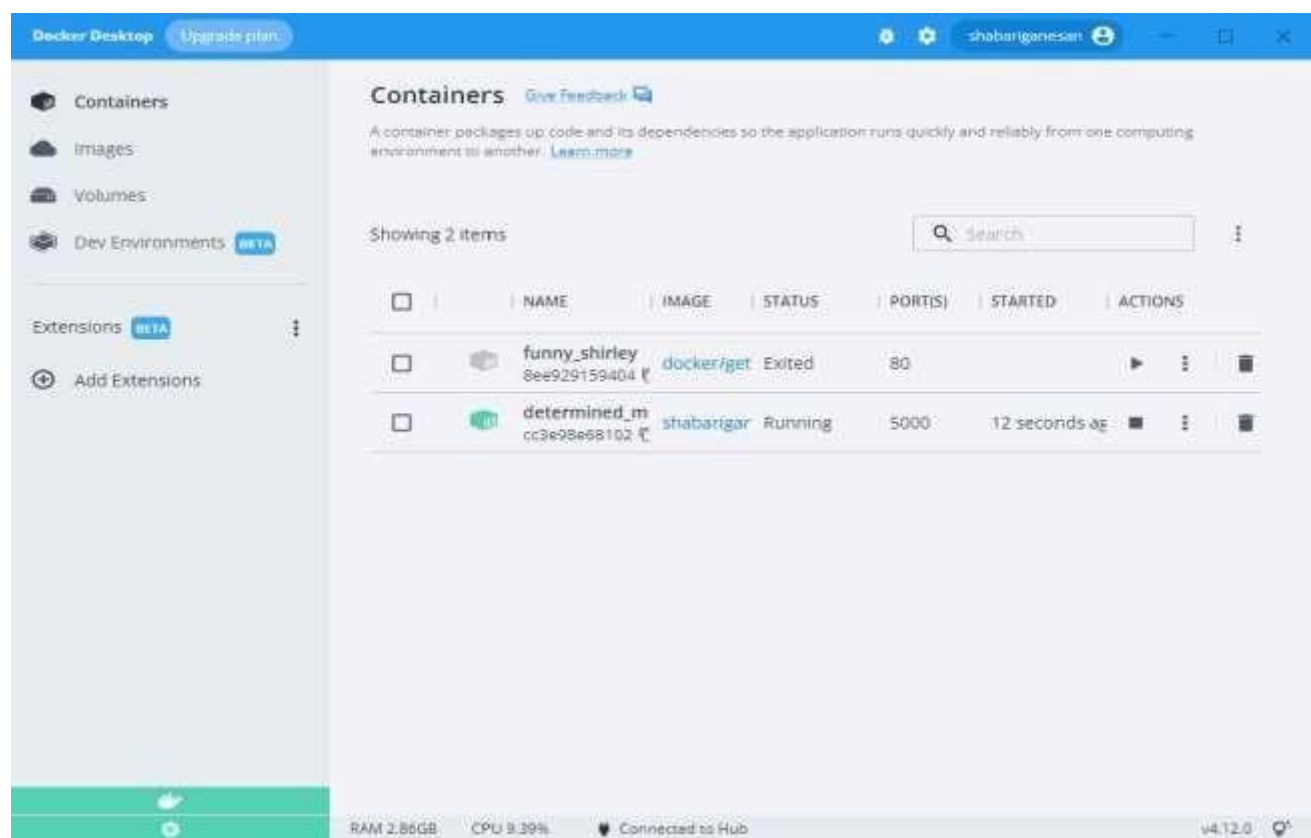
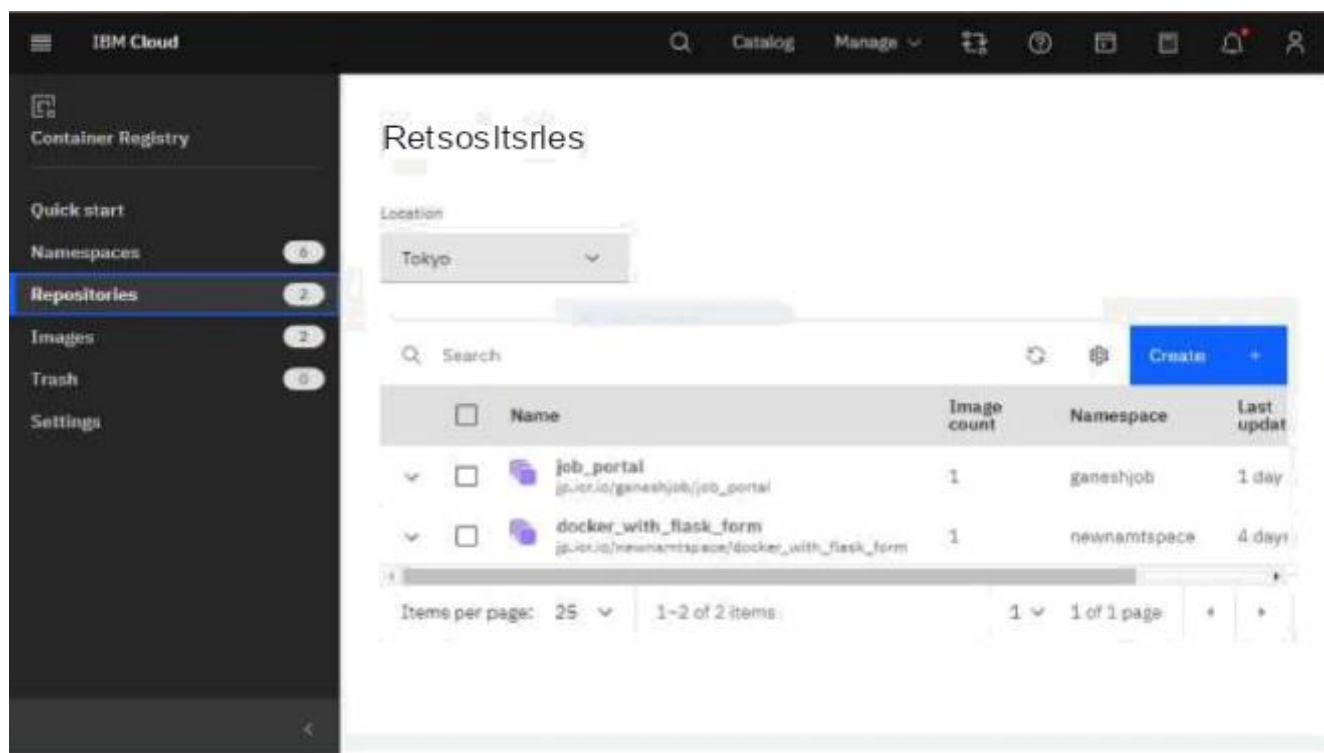
pull an image from docker hub and run it in docker playground

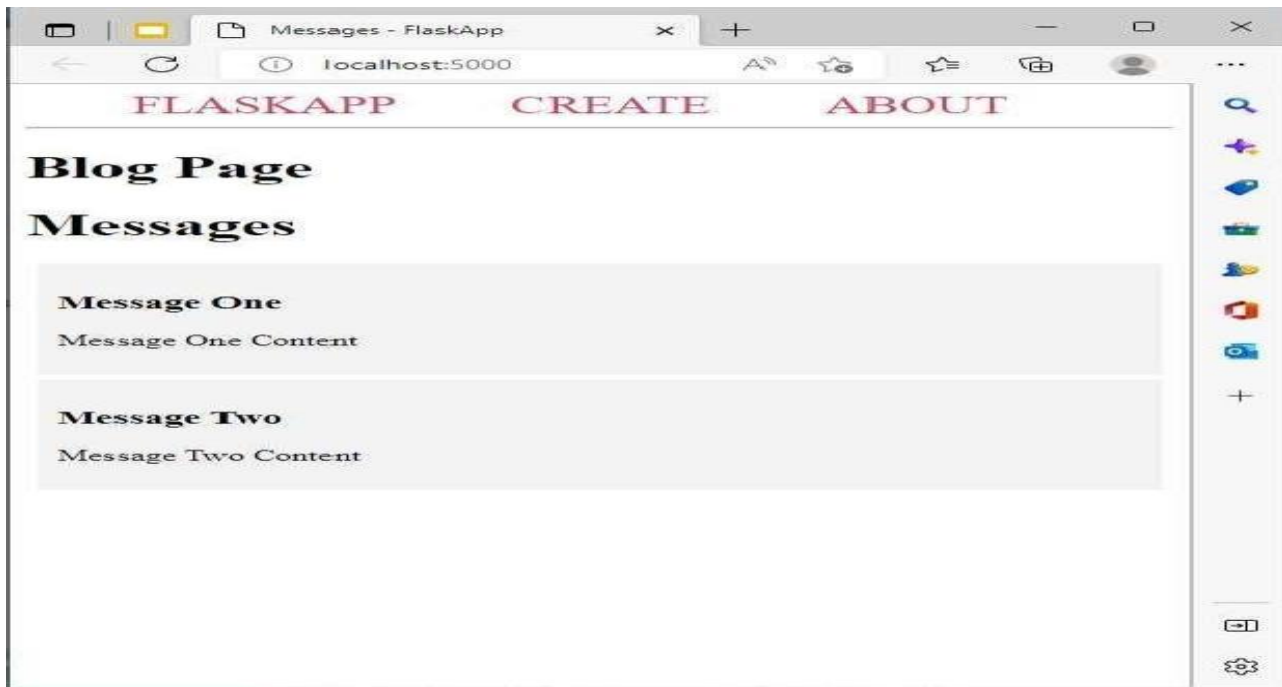
A screenshot of a Windows Command Prompt window. The title bar reads "Command Prompt". The text inside shows the following sequence of commands and outputs:
Microsoft Windows [Version 10.0.19044.1766]
(c) Microsoft Corporation. All rights reserved.

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
f885011288d0: Pull complete
080f369ca59f: Pull complete
e113bd27b88e: Pull complete
Digest: sha256:c61f28873bf1c909786ce991b5b60cd976765077f344e34d50e6cce8cf8d95c3
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.

```
C:\Windows\system32\cmd.exe
C:\Users\ganil\Desktop\job_portal>cd ..
C:\Users\ganil\Desktop>cd job_portal
C:\Users\ganil\Desktop\job_portal>docker build -t job_portal
'docker build' requires exactly 1 argument.
See 'docker build --help'.

usage: docker build [OPTIONS] PATH | URL | -

Build an image from a Dockerfile

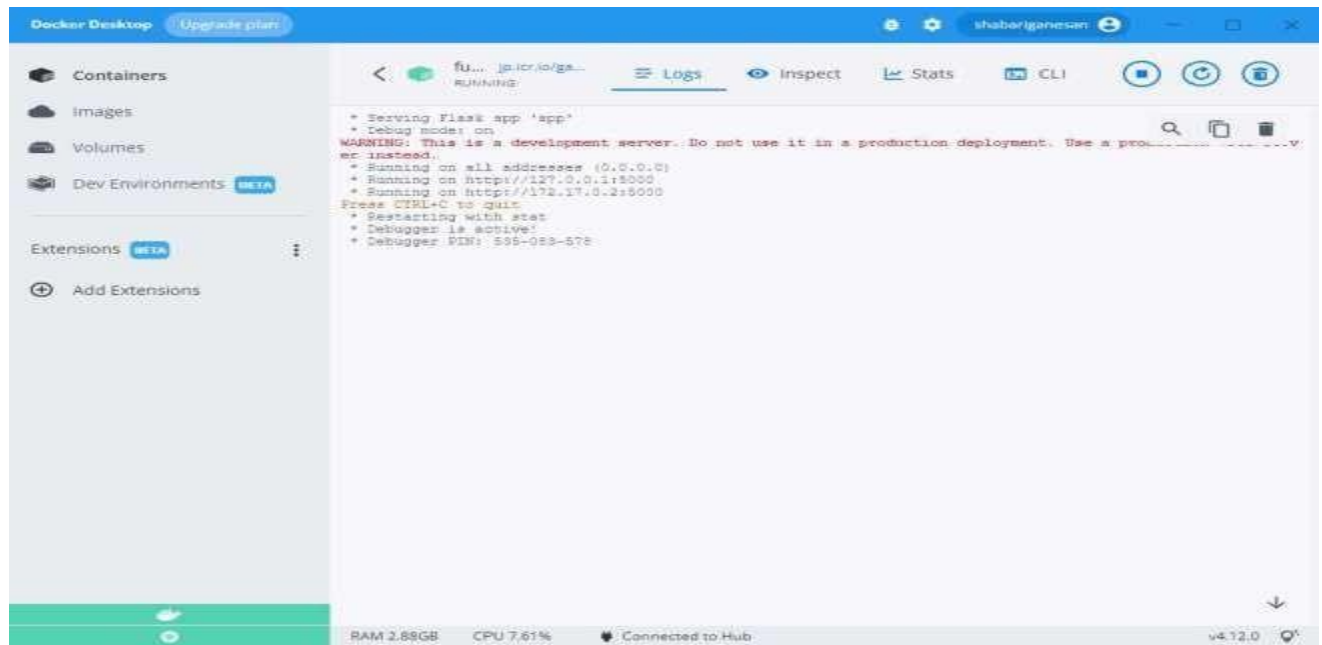
C:\Users\ganil\Desktop\job_portal>dir
Volume in drive C has no label.
Volume Serial Number is B6A3-10B8

Directory of C:\Users\ganil\Desktop\job_portal

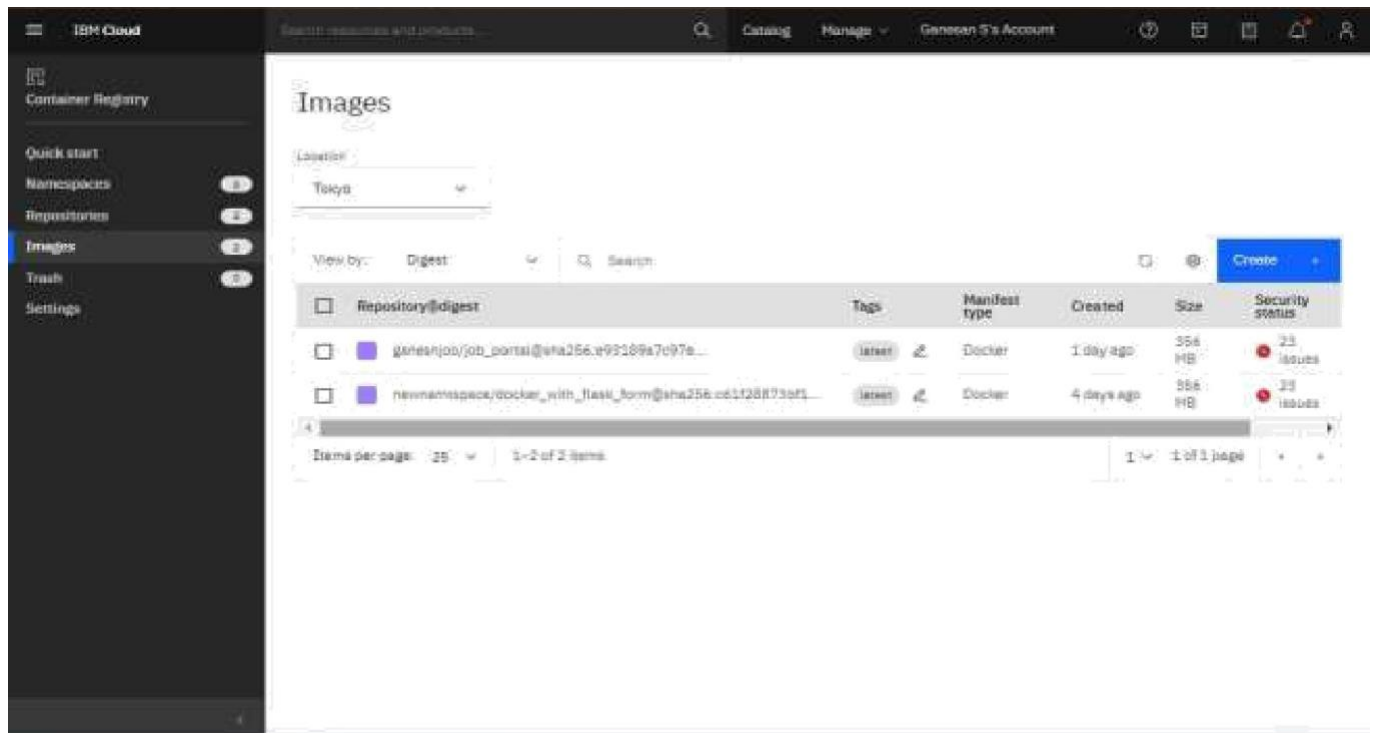
10/25/2022  04:58 PM    <DIR>          .
10/25/2022  04:58 PM    <DIR>          ..
10/25/2022  04:11 PM             320 app.py
10/22/2022  10:48 PM            148 Dockerfile
10/22/2022  10:48 PM              $requirements.txt
10/25/2022  04:58 PM    <DIR>          static
10/25/2022  04:58 PM    <DIR>          templates
10/25/2022  04:59 PM    <DIR>          __pycache__
               3 File(s)           474 Bytes
               5 Dir(s)   77,847,854,876 bytes free

C:\Users\ganil\Desktop\job_portal>docker build -t job_portal
Invalid argument "job_portal." for "-t, --tag" flag: invalid reference format
See 'docker build --help'.

C:\Users\ganil\Desktop\job_portal>docker build -t job_portal .
[*] Building 46f.6s (11/11) FINISHED
=> Internal build definition file Dockerfile
=> Internal build definition file Dockerfile
=> Internal build definition file Dockerfile
=> Transferring context to
=> Internal build metadata for docker-buildx/python:3.9.16
=> Copying context/repo-url: https://github.com/docker/buildx
=> Copying context/repo-url: https://github.com/docker/buildx
=> Copying context/repo-url: https://github.com/docker/buildx
=> Copying context/repo-url: https://github.com/docker/buildx
```

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

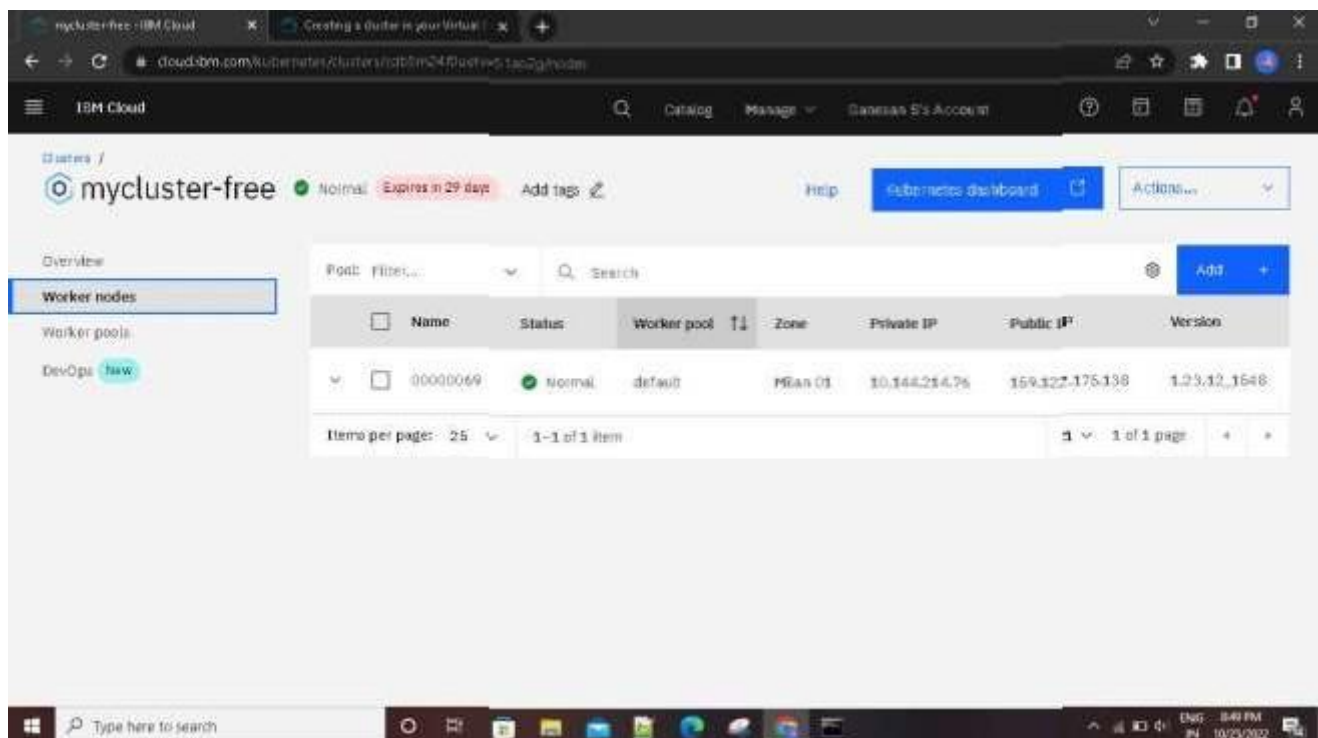


```
C:\Windows\system32\cmd.exe
54acb5a6fa8b: Retrying in 1 second
8d51c618126f: Retrying in 1 second
9ff6e4d6744: Waiting
a89cd47b5a1: Waiting
655ed1b7a428: Waiting
Failed to lookup host: jp.icr.io

C:\Users\gan1\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]
1563b1584025: layer already exists
8be94fb5e186: Pushed
48c2a74c12b: layer already exists
9b72c7815466: layer already exists
bfc1de8136e: layer already exists
1f123106824c: layer already exists
3d6eb1152931: Pushed
100796cdf3b1: Pushed
54acb5a6fa8b: Retrying in 1 second
8d51c618126f: Pushed
9ff6e4d6744: Pushed
a89cd47b5a1: Pushed
655ed1b7a428: Pushing [=====] 89.88MB/124MB
^C
C:\Users\gan1\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]
1563b1584025: layer already exists
8be94fb5e186: layer already exists
48c2a74c12b: layer already exists
9b72c7815466: layer already exists
bfc1de8136e: layer already exists
1f123106824c: layer already exists
3d6eb1152931: layer already exists
100796cdf3b1: layer already exists
54acb5a6fa8b: Pushed
8d51c618126f: layer already exists
9ff6e4d6744: layer already exists
a89cd47b5a1: layer already exists
655ed1b7a428: Pushed
latest: digest: sha256:e93189a7c07eeb9306668a54e899cf61aa6eda039998c8c7a2147a7963fc207 size: 3952

C:\Users\gan1\Desktop\job_portal>
C:\Users\gan1\Desktop\job_portal>
```

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    AGE
flask-app-ingress  <none>   *
ADDRESS      PORTS    AGE
80           27%

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

```