

ASSIGNMENT 4

TEAM ID : PNT2022TMID50578

PROJECT NAME : CUSTOMER CARE REGISTRY

STUDENT NAME : P. THANGA RAMANA

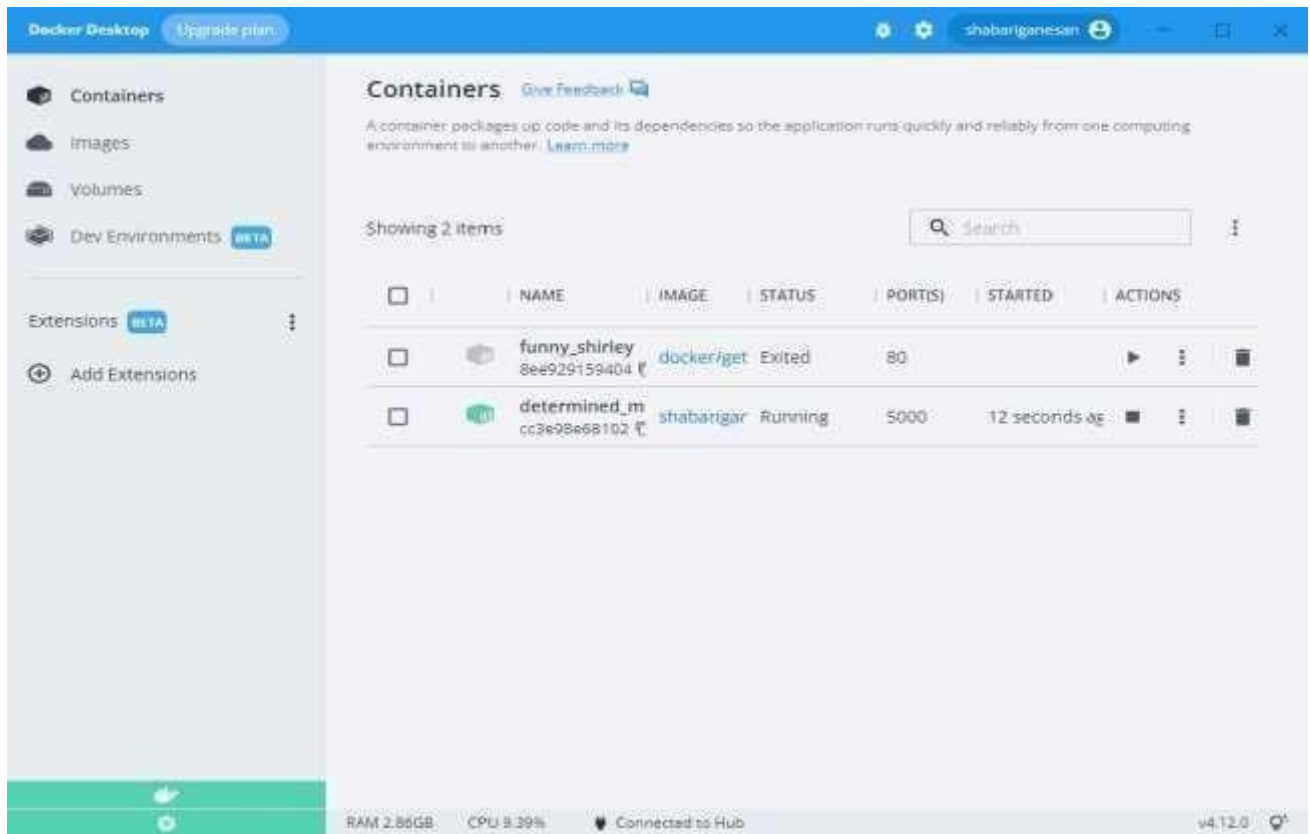
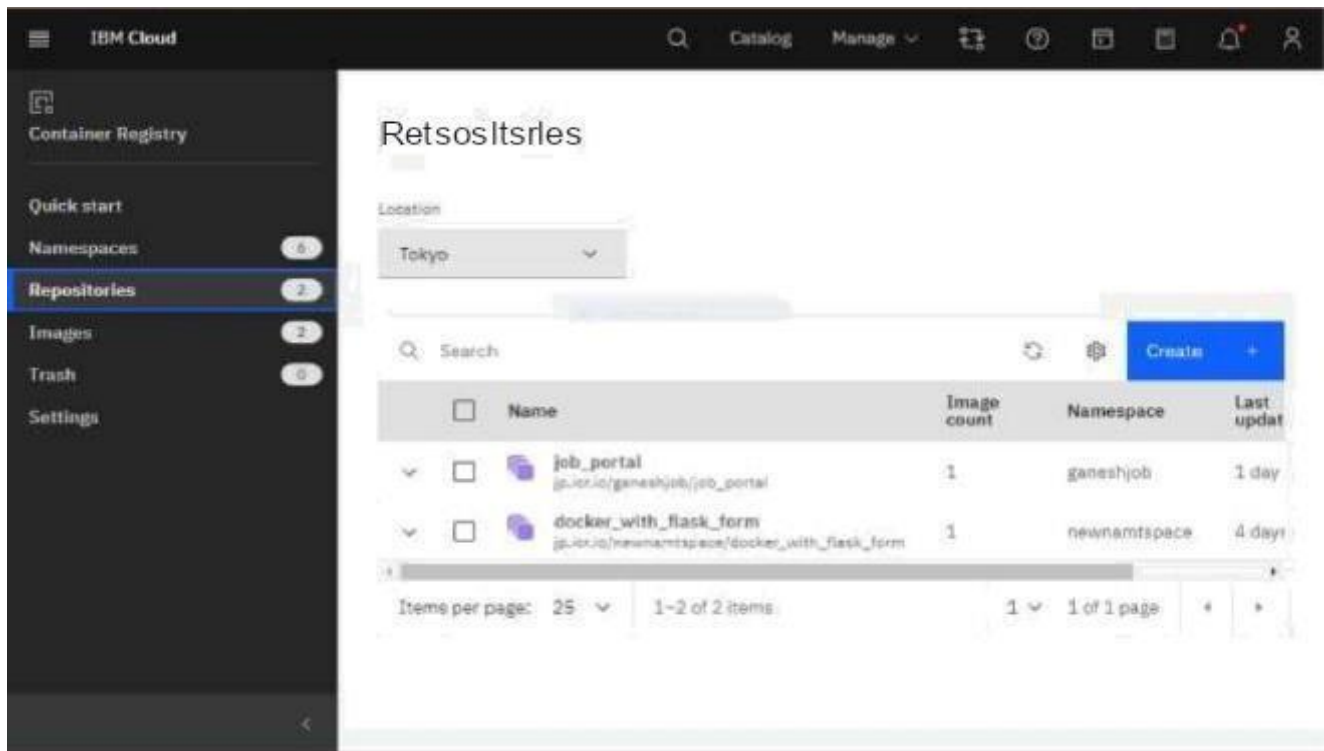
Question-1: pull an image from docker hub and run it in docker playground

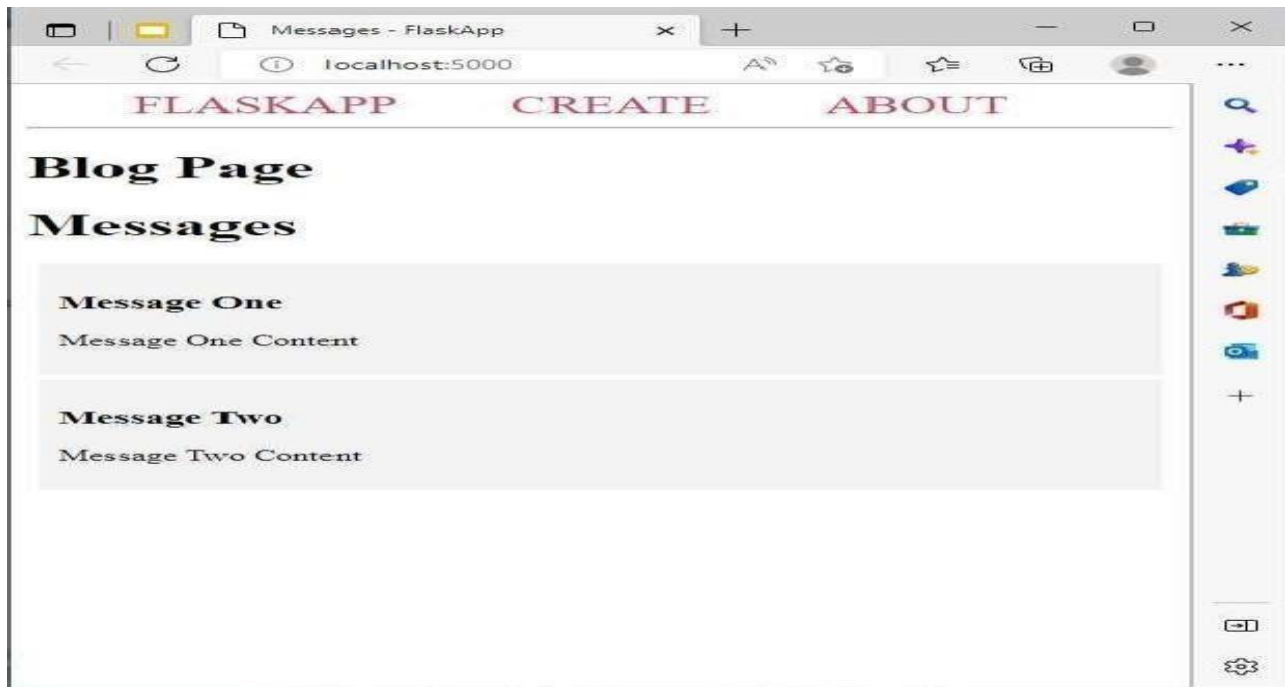
```
Command Prompt
Microsoft Windows [Version 10.0.19044.1766]
(c) Microsoft Corporation. All rights reserved.

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.

```
C:\Users\ganil\Desktop>cmd /c cd job_portal
```

```
C:\Users\ganil\Desktop>cd job_portal
```

```
C:\Users\ganil\Desktop\job_portal>docker build -t job_portal
```

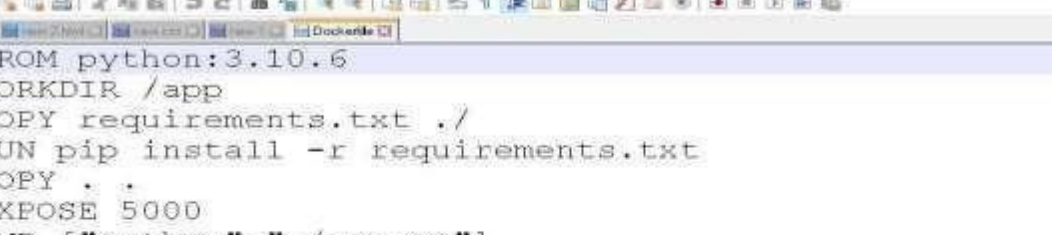
```
"docker build" requires exactly 1 argument.  
See 'docker build --help'.
```

```
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 86A3-10B6  
  
Directory of C:\Users\ganil\Desktop\job_portal  
  
10/25/2022 04:50 PM <DIR> .  
10/25/2022 04:53 PM <DIR> ..  
10/25/2022 04:11 PM      320 apply  
10/22/2022 10:48 PM     148 Dockerfile  
10/22/2022 10:48 PM          $ requirements.txt  
10/25/2022 04:53 PM <DIR> static  
10/25/2022 04:53 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 467.6s (11/11) FINISHED
```

```
>>> Internal: local build 3d1f1d11ae fave_dockerfile              1.4s  
>>> Internal: local Dockerfile: 170s  
>>> Internal: local .dockerignore                                0.1s  
>>> Transitive: context diff                                       0.1s  
>>> Internal: local metadata for docker-buildx+python@v1.8.1     0.1s  
>>> BuildX: docker/python@v1.8.1                                     4.9s  
>>> [STEP 1/4] FROM docker.io/docker/buildx:latest                 133.5s  
>>> [STEP 2/4] WORKDIR /app                                         0.1s  
>>> [STEP 3/4] COPY . .                                             0.1s  
>>> [STEP 4/4] RUN python manage.py collectstatic                  4.2s
```

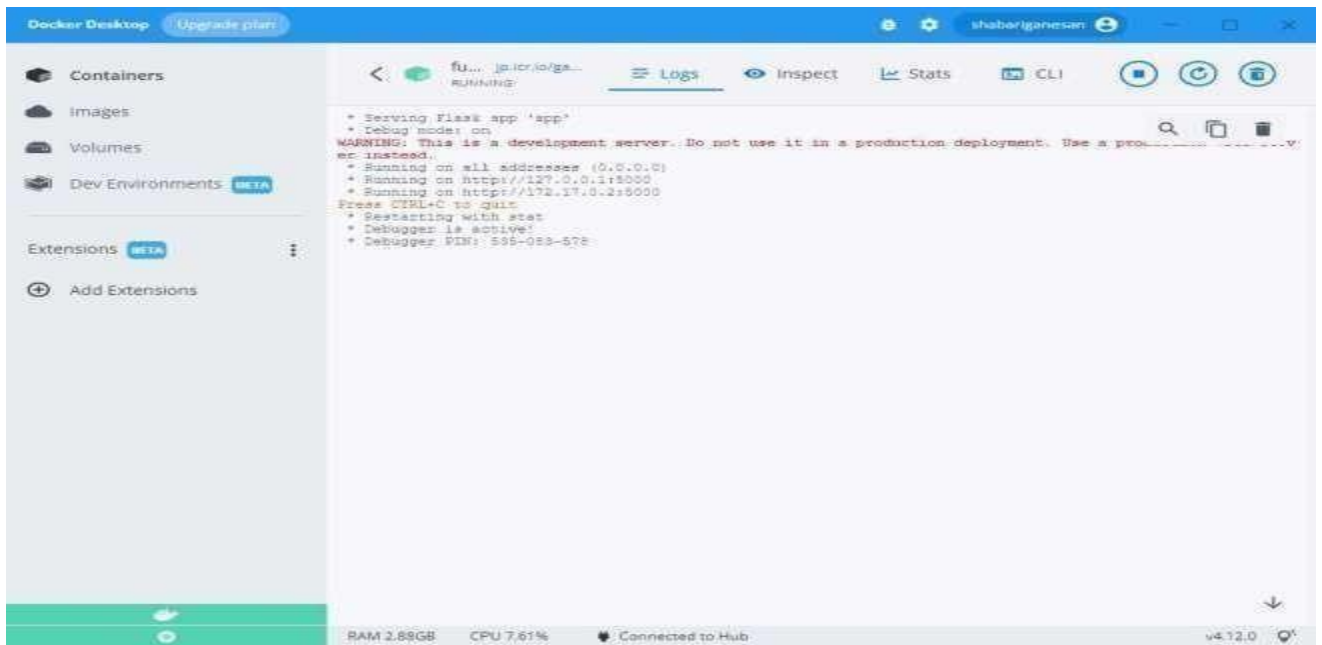


The screenshot shows a Notepad++ window with the title "C:\Users\gaid\Desktop\josh_gaita\0dockerfile - Notepad++". The menu bar includes File, Edit, Search, View, Encoding, Language, Settings, Tools, Macro, Run, Plugins, Window, and Help. The toolbar contains various icons for file operations and editing. The text area contains the following Dockerfile content:

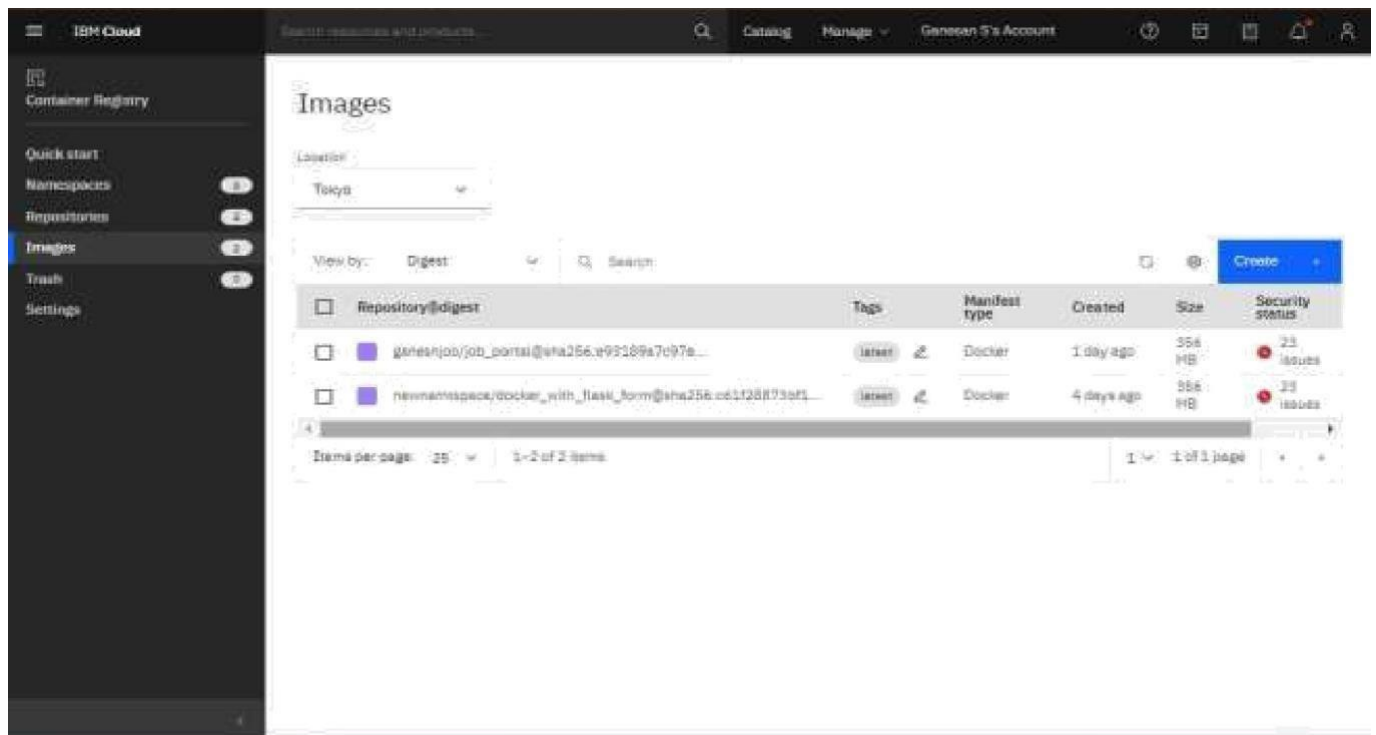
```
1 FROM python:3.10.6
2 WORKDIR /app
3 COPY requirements.txt ./
4 RUN pip install -r requirements.txt
5 COPY . .
6 EXPOSE 5000
7 CMD ["python", "./app.py"]
8
```

The taskbar at the bottom shows the Windows Start button, a search bar with the text "to search", and several application icons including File Explorer, Edge, and others. The system tray on the right shows the date and time as "ENG 11/11/2023 11:11".

[illegible]



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



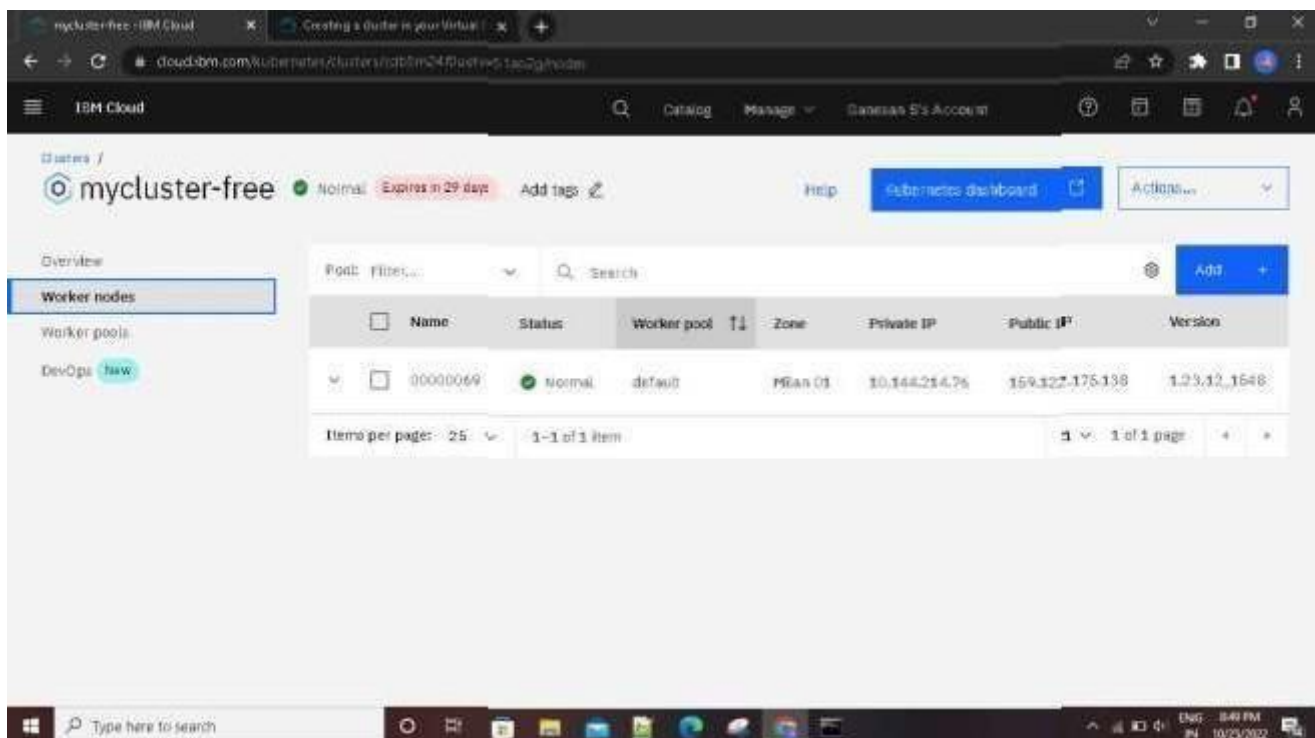
```
C:\Windows\system32\cmd.exe
54acb5a6fab0: Retrying in 1 second
8d51c618126f: Retrying in 1 second
0ff6e4d6744: Waiting
a905d47b5a1: Waiting
655ed1b7a428: Waiting
Failed to lookup host: jp.icr.io

C:\Users\gan\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]
13e3b1584025: layer already exists
0be54fb5e186: Pushed
48c2a744c12b: layer already exists
8b72c7835466: layer already exists
0fc1deb0136e: layer already exists
1f123186824c: layer already exists
3d6eb1152931: Pushed
180796cd73b1: Pushed
54acb5a6fab0: Retrying in 1 second
8d51c618126f: Pushed
0ff6e4d6744: Pushed
a905d47b5a1: Pushed
655ed1b7a428: Pushing [=====] 89.88MB/124MB
rc

C:\Users\gan\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]
13e3b1584025: layer already exists
0be54fb5e186: layer already exists
48c2a744c12b: layer already exists
8b72c7835466: layer already exists
0fc1deb0136e: layer already exists
1f123186824c: layer already exists
3d6eb1152931: layer already exists
180796cd73b1: layer already exists
54acb5a6fab0: Pushed
8d51c618126f: layer already exists
0ff6e4d6744: layer already exists
a905d47b5a1: layer already exists
655ed1b7a428: Pushed
latest: digest: sha256:e93189a7c07eeb92d86668a54e895cf61a46eda39998c8c7a2147a7961fc207 size: 3952

C:\Users\gan\Desktop\job_portal>
C:\Users\gan\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 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 deploy
No resources found in kubernetes-dashboard namespace.

C:\Windows\system32>kubectl proxy
Starting to serve on 127.0.0.1:8080
^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  cncn    *          *            80         27s

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

```