

ASSIGNMENT 4

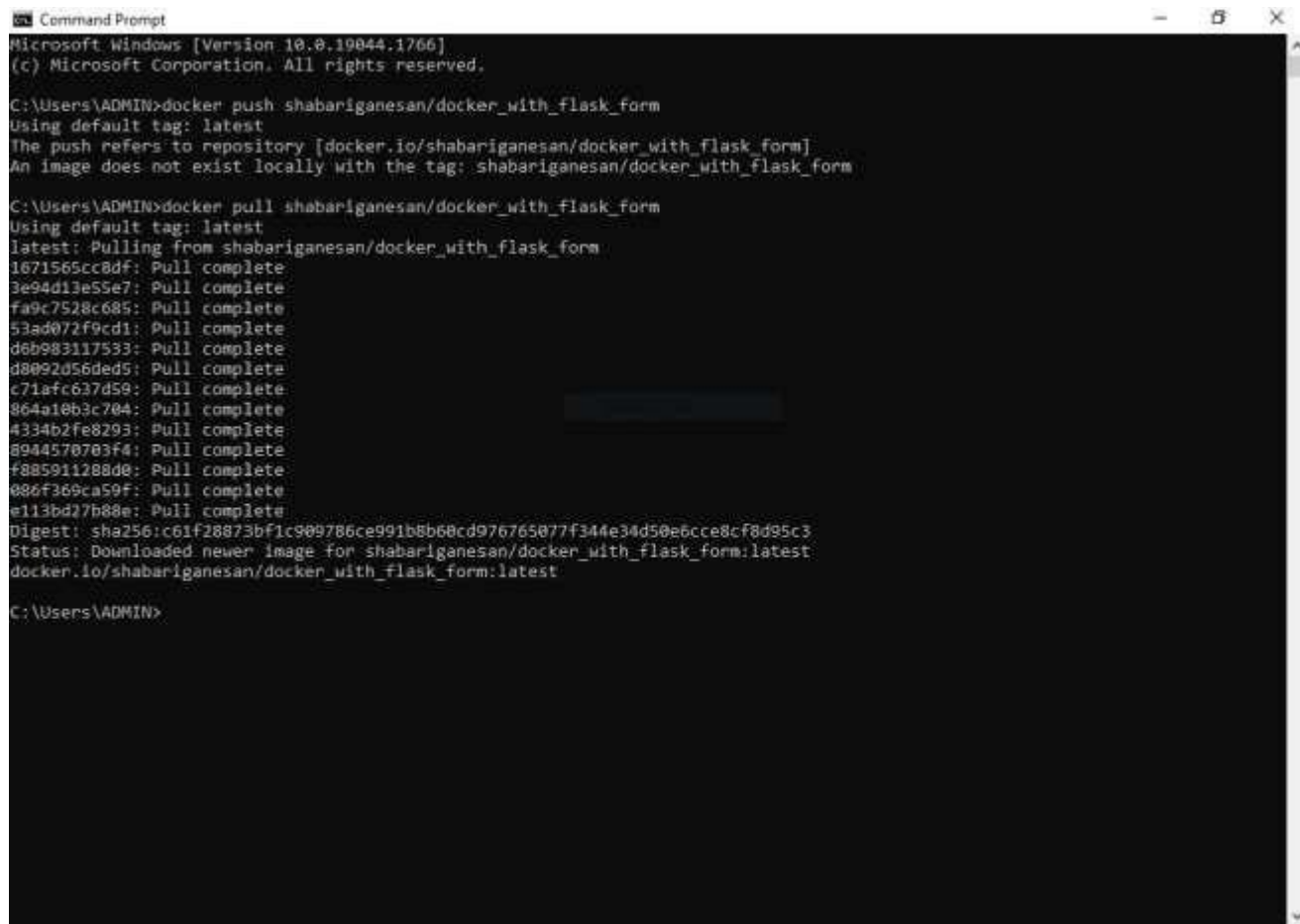
TEAM ID : PNT2022TMID50559

PROJECT NAME : CONTAINMENT ZONE ALERTING APPLICATION

STUDENT NAME : M.MUTHUSELVI

Question-1:

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

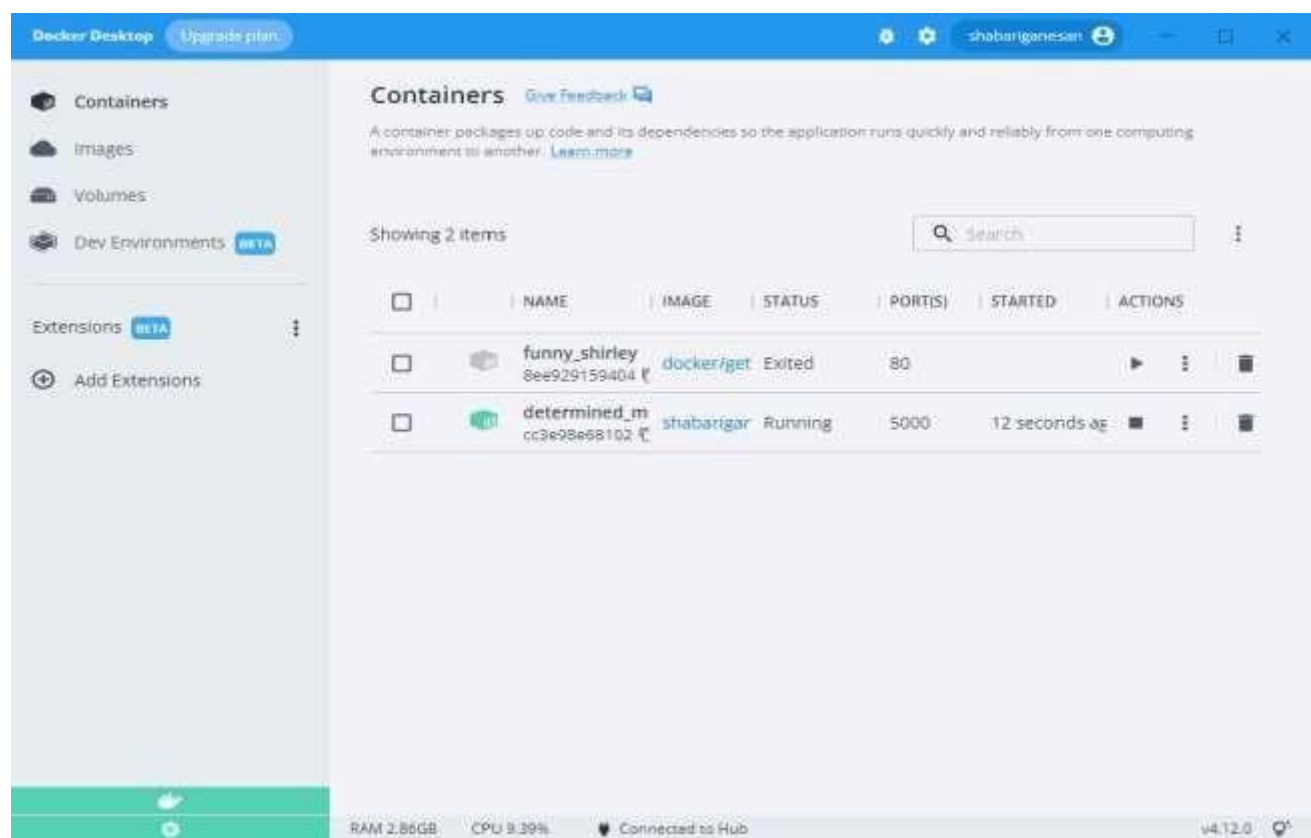
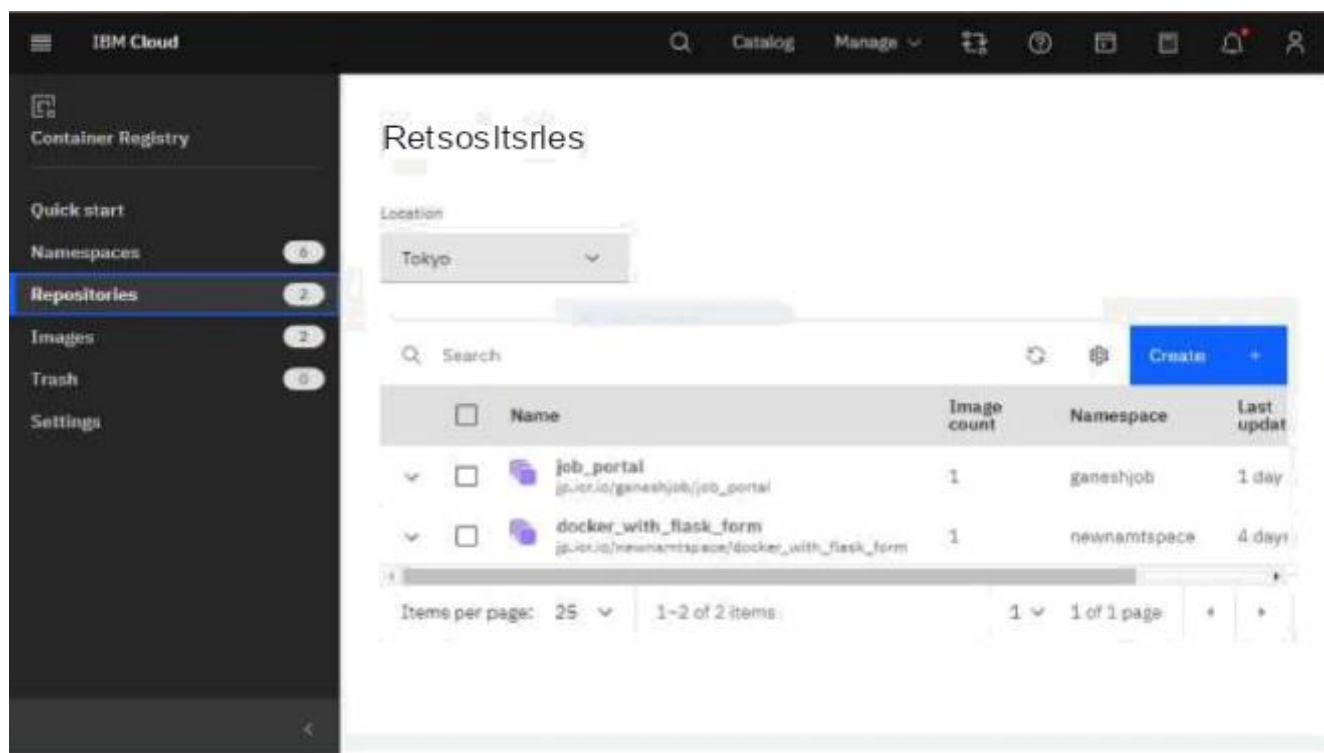
A screenshot of a Windows Command Prompt window. The title bar reads "Command Prompt". The window content shows the following text:

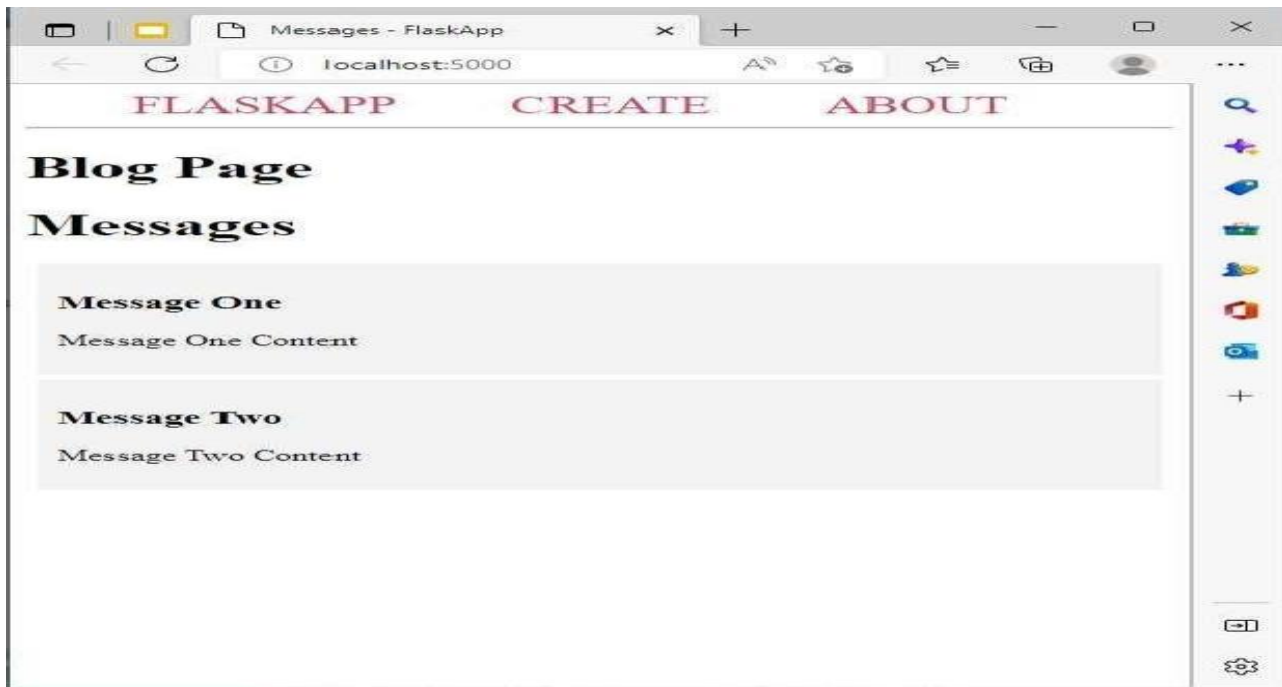
```
Microsoft Windows [Version 10.0.19044.1766]
(c) Microsoft Corporation. All rights reserved.

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>
```



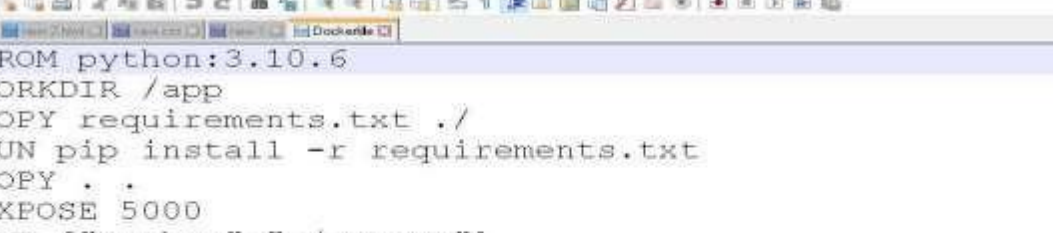


Question-2:

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

```
C:\Windows\system32\cmd.exe
```

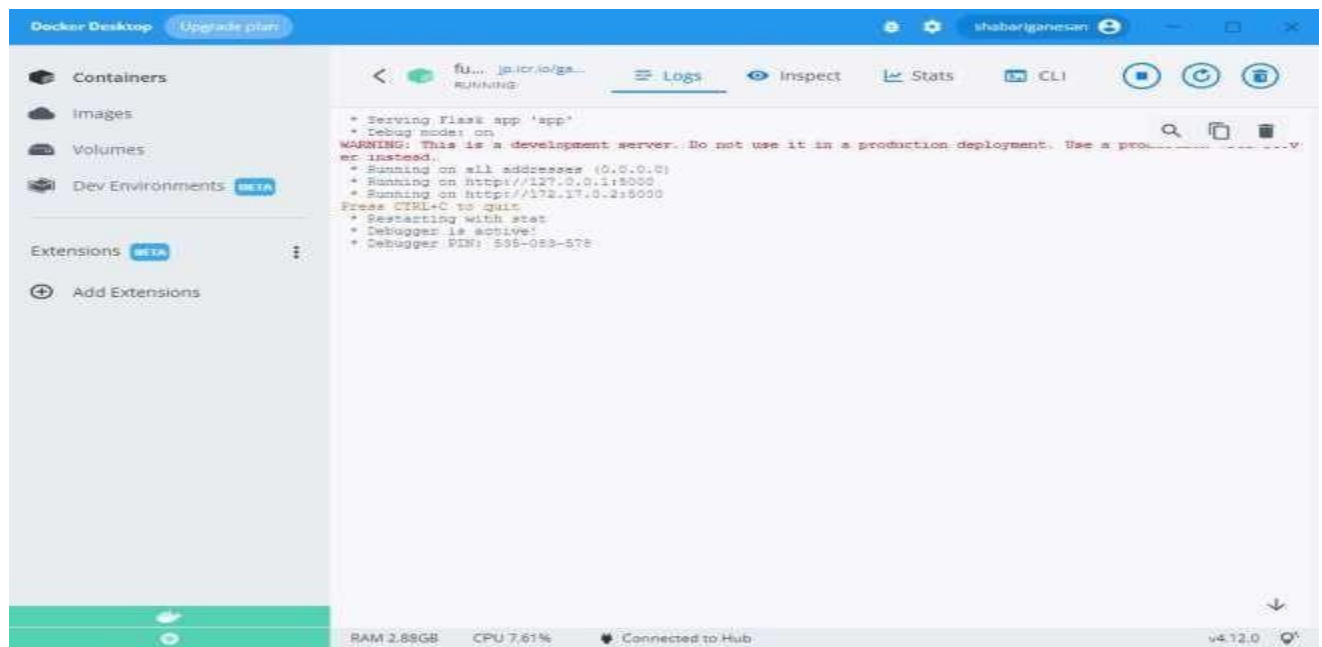
```
C:\Users\ganil\Desktop>job_portal cd ..  
C:\Users\ganil\Desktop>job_portal  
C:\Users\ganil\Desktop>docker build -t job_portal .  
  
"docker build" requires exactly 1 argument.  
See "docker build --help".  
  
usage: docker build [OPTIONS] PATH | URL | -  
  
Build an Image from a Dockerfile  
  
C:\Users\ganil\Desktop>job_portal dir  
Volume in drive C has no label.  
Volume Serial Number is B6A3-108B  
  
Directory of C:\Users\ganil\Desktop\job_portal  
  
10/25/2022   04:59 PM         <DIR>          .  
10/25/2022   04:59 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   04:53 PM         <DIR>      static  
10/25/2022   04:53 PM         <DIR>     templates  
10/25/2022   04:53 PM         <DIR>    __pycache__  
               3 File(s)       474 Bytes  
                5 Dir(s)   77,847,854,876 bytes free  
  
C:\Users\ganil\Desktop>job_portaledocker 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 447.6s (11/11) FINISHED  
=> internal load build definition file Dockerfile  
=> internal load Dockerfile FROM  
=> internal load Dockerignore  
=> transferring context to  
=> internal load metadata for docker.io/library/python:3.8-slim  
=> run /bin/sh -cx cat apt-get update && dpkg-query -f='${Package} ${Version} ${Architecture}\n'=> run /bin/sh -cx curl https://raw.githubusercontent.com/docker-library/docs/master/maintainers.txt &&  
=> commit changes to local repository  
=> push changes to registry  
=>
```



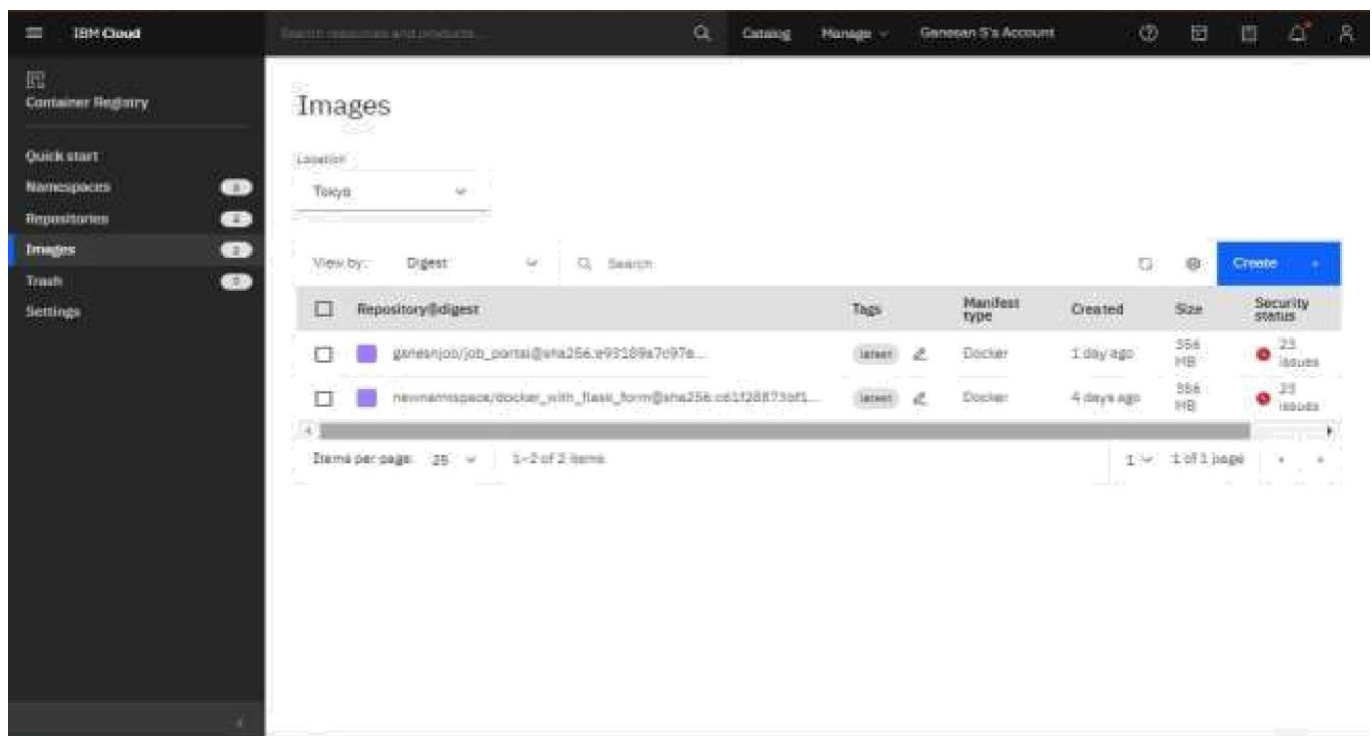
The screenshot shows a Notepad++ window with the title "C:\Users\gan\Desktop\jsh_ganta\Dockerfile - Notepad++". The menu bar includes File, Edit, Search, View, Encoding, Language, Settings, Tools, Macro, Run, Plugins, Window, and Help. The toolbar contains various icons for file operations and editing. The tabs at the top show "Dockerfile" as the active file. The text in the editor is as follows:

```
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
```

[illegible]



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

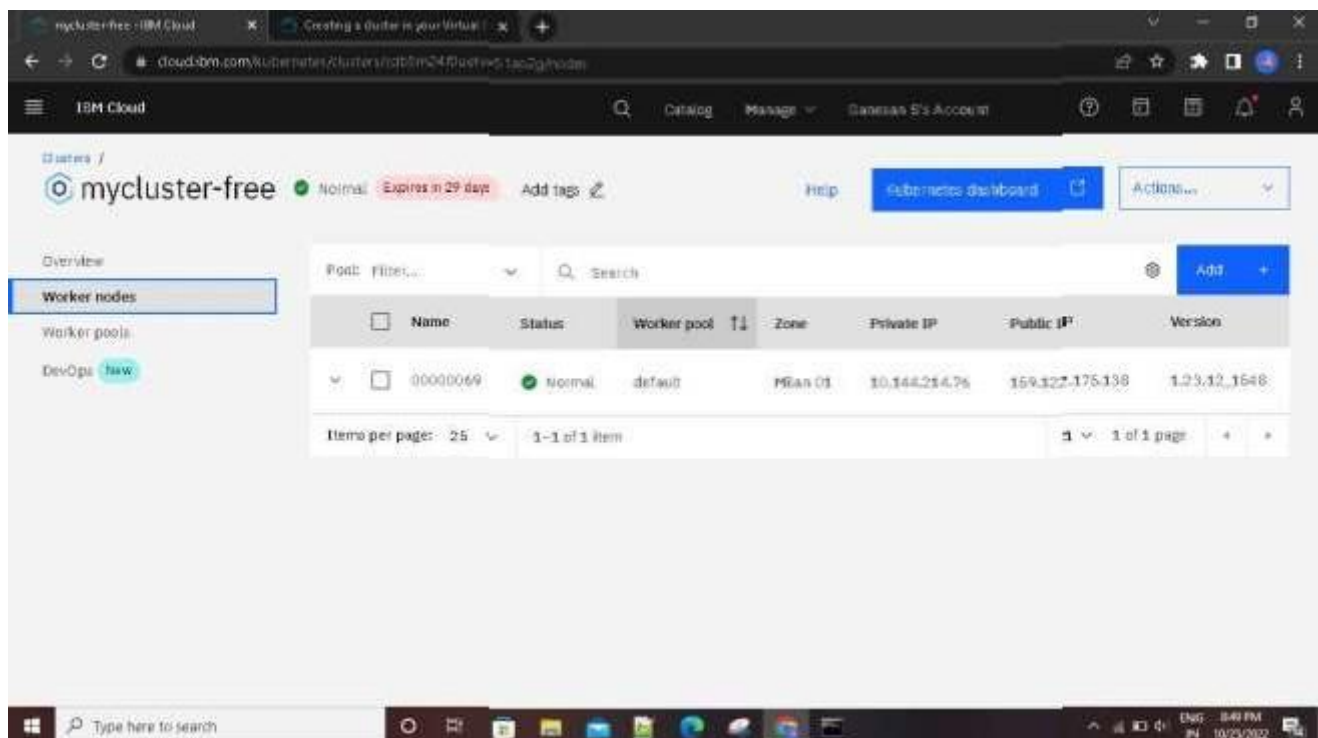


```
C:\Windows\system32\cmd.exe
54acb5a6fa8b: Retrying in 1 second
8d51c618126f: Retrying in 1 second
9ff6e4d6744: Waiting
a89cd47b5a1: Waiting
655ed1b7a428: Waiting
Failed to lookup host: jp.icr.io

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>   *

```

NAME	CLASS	STATUS	ADDRESS	PORTS	AGE
flask-app-ingress	<none>	*		80	27s

```

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

```