

ASSIGNMENT 4

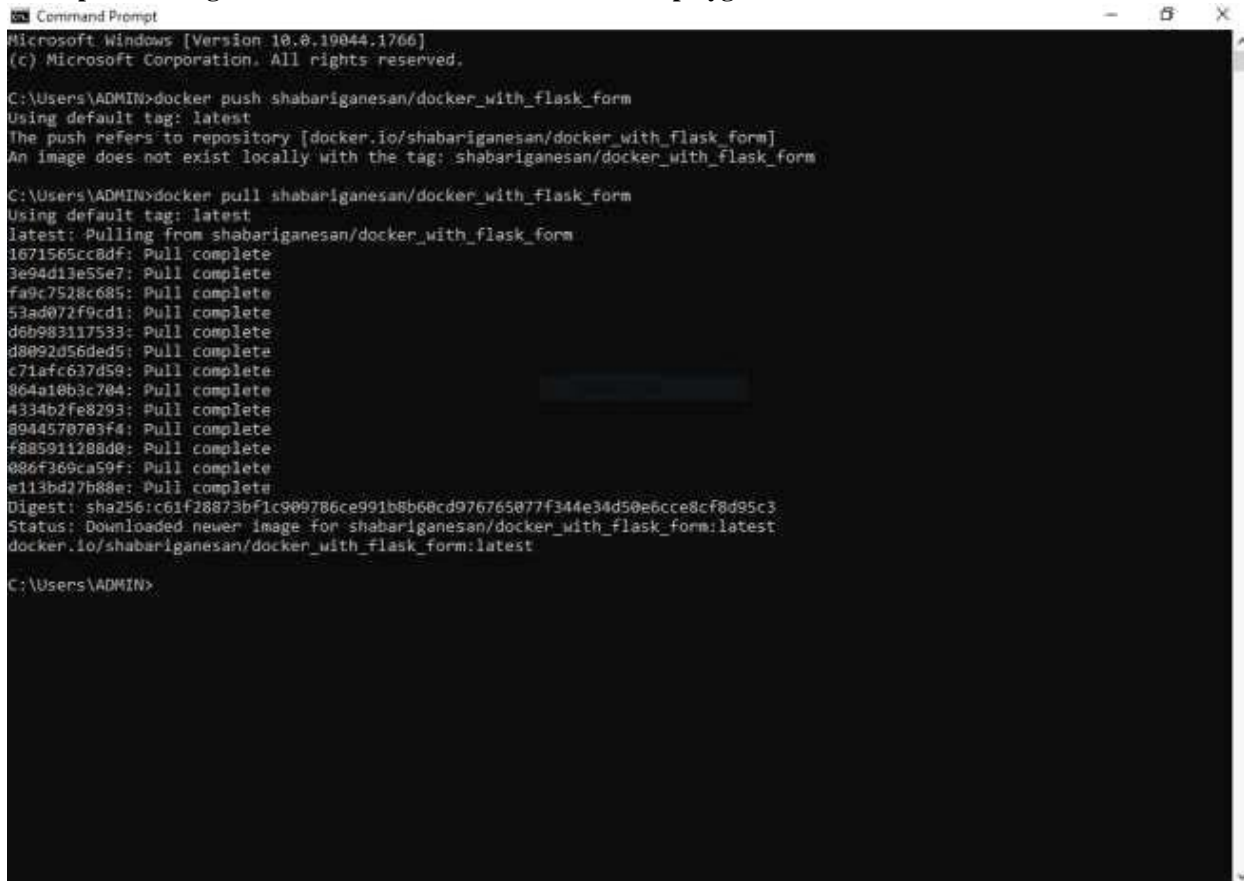
TEAM ID : PNT2022TMID07854

PROJECT NAME : NUTRITION ASSISTANT APPLICATION

NAME : Rachel Fabiana A

Question-1:

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

A screenshot of a Windows Command Prompt window titled 'Command Prompt'. The window shows the execution of Docker commands. First, the user runs 'docker push shabariganesan/docker_with_flask_form', which results in an error: 'The push refers to repository [docker.io/shabariganesan/docker_with_flask_form]' and 'An image does not exist locally with the tag: shabariganesan/docker_with_flask_form'. Then, the user runs 'docker pull shabariganesan/docker_with_flask_form', which successfully pulls the image from Docker Hub. The output shows the image being pulled from 'shabariganesan/docker_with_flask_form' and lists the layers being pulled, each with a 'Pull complete' status. The final output shows the image's digest and status: 'Digest: sha256:c61f28873bflc909786ce991b8b60cd976765077f344e34d50e6cce8cf8d95c3' and 'Status: Downloaded newer image for shabariganesan/docker_with_flask_form:latest'. The prompt ends with 'C:\Users\ADMIN>'.

```
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:c61f28873bflc909786ce991b8b60cd976765077f344e34d50e6cce8cf8d95c3
Status: Downloaded newer image for shabariganesan/docker_with_flask_form:latest
docker.io/shabariganesan/docker_with_flask_form:latest

C:\Users\ADMIN>
```

IBM Cloud

Container Registry

Quick start

Namespaces 6

Repositories 2

Images 2

Trash 0



Settings

Retsosltsrles

LocationTokyo

Search

Create +

<input type="checkbox"/>	Name	Image count	Namespace	Last update
<input checked="" type="checkbox"/>	 job_portal jp.io/ganeshjob/job_portal	1	ganeshjob	1 day
<input checked="" type="checkbox"/>	 docker_with_flask_form jp.io/newnamespace/docker_with_flask_form	1	newnamespace	4 days

Items per page: 251-2 of 2 items11 of 1 page

Docker Desktop Upgrade plan shobarganesan

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

Search

	NAME	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
<input type="checkbox"/>	funny_shirley 8ee929159404	docker/get	Exited	80		
<input type="checkbox"/>	determined_m cc3e98e68102	shabargar	Running	5000	12 seconds ago	

RAM 2.86GB CPU 9.39% Connected to Hub v4.12.0

Messages - FlaskApp

localhost:5000

FLASKAPP CREATE ABOUT


Blog Page

Messages

Message One
Message One Content

Message Two
Message Two Content

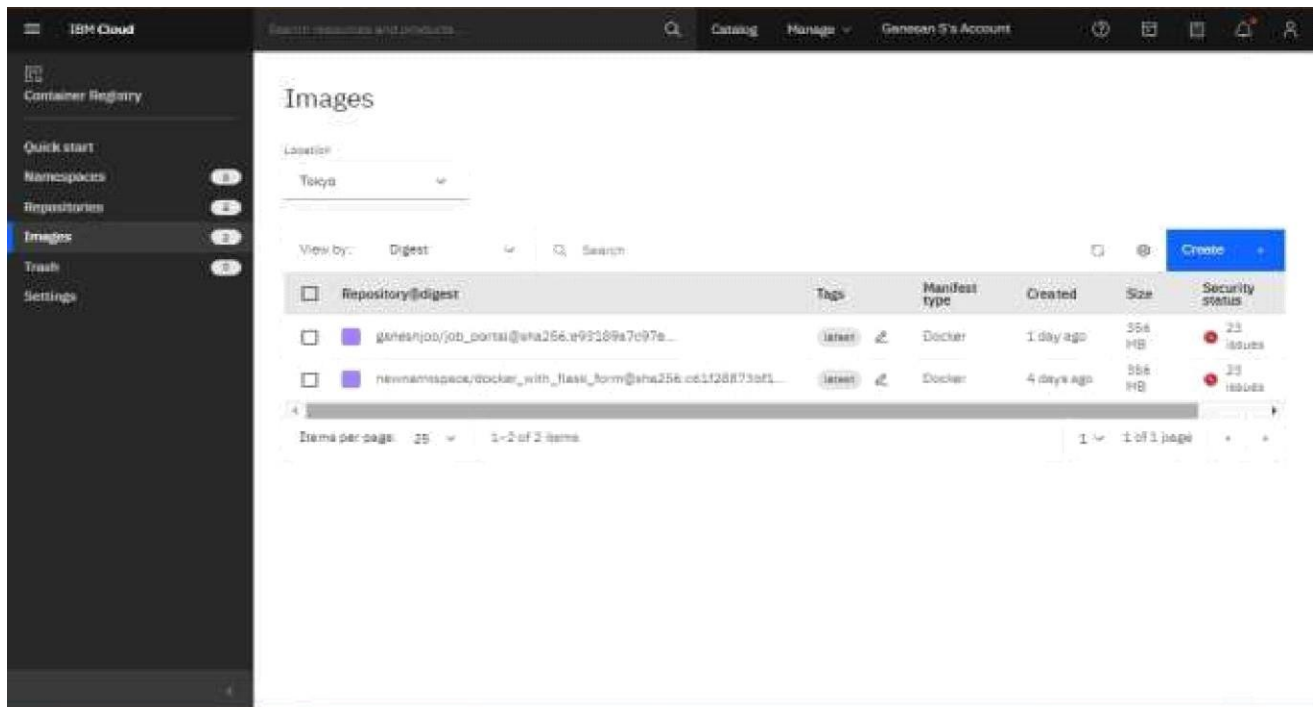
Question-2:

[illegible]

The screenshot shows a Notepad++ window with the title "C:\Users\gan\Desktop\get_github\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 text area displays 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 Windows taskbar at the bottom shows the search bar and several application icons.



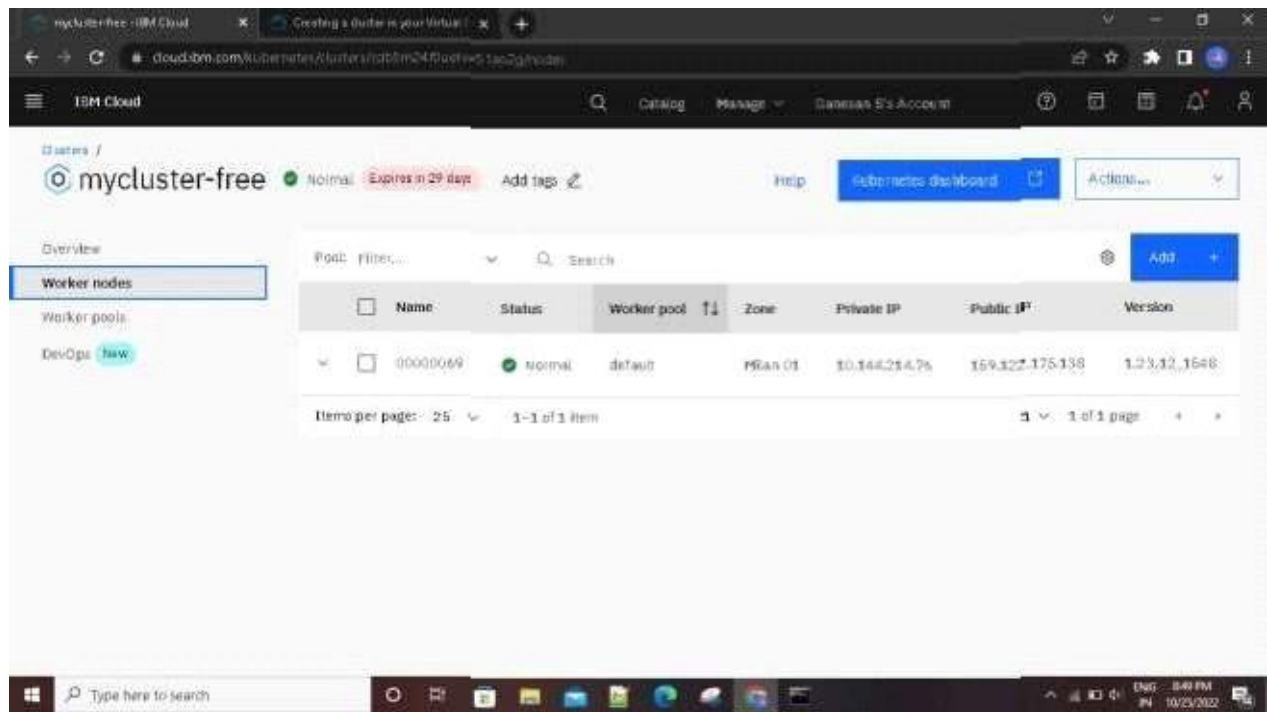
```

C:\Windows\system32\cmd.exe
54acb5e6fa8b: Retrying in 1 second
8d51c618126f: Retrying in 1 second
9ff6e4d6744: Waiting
e89d1d47b5e1: Waiting
055ed1b7a428: Waiting
Failed to lookup host: jp.icr.io

C:\Users\ganil\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]
15eb158e025: Layer already exists
80e64f0e186: Pushed
48c2a7e4c12b: Layer already exists
9b72c7835466: Layer already exists
bfcdab0130e: Layer already exists
15123106024: Layer already exists
3d6e11152931: Pushed
190796cdf3b1: Pushed
54acb5e6fa8b: Retrying in 1 second
8d51c618126f: Pushed
9ff6e4d6744: Pushed
e89d1d47b5e1: Pushed
055ed1b7a428: Pushing [=====] | 89.89MB/124MB
C:\Users\ganil\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]
15eb158e025: Layer already exists
80e64f0e186: Layer already exists
48c2a7e4c12b: Layer already exists
9b72c7835466: Layer already exists
bfcdab0130e: Layer already exists
15123106024: Layer already exists
3d6e11152931: Layer already exists
190796cdf3b1: Layer already exists
54acb5e6fa8b: Pushed
8d51c618126f: Layer already exists
9ff6e4d6744: Layer already exists
e89d1d47b5e1: Layer already exists
055ed1b7a428: Pushed
latest: digest: sha256:e99189a7c97e0eb9306660a54e896cf61aadede039998c8c7a2147a7961fc207 size: 3952
C:\Users\ganil\Desktop\job_portal>
C:\Users\ganil\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>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 127.0.0.1:8081
^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  cnone  *          *            80         27m

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

```