

## Assignment -4

Assignment Date	17 November 2022
Student Name	Rabiya Barvin M
Student Roll Number	912819104040
Maximum Marks	2 Marks

1. Pull an Image from docker hub and run it in docker playground.

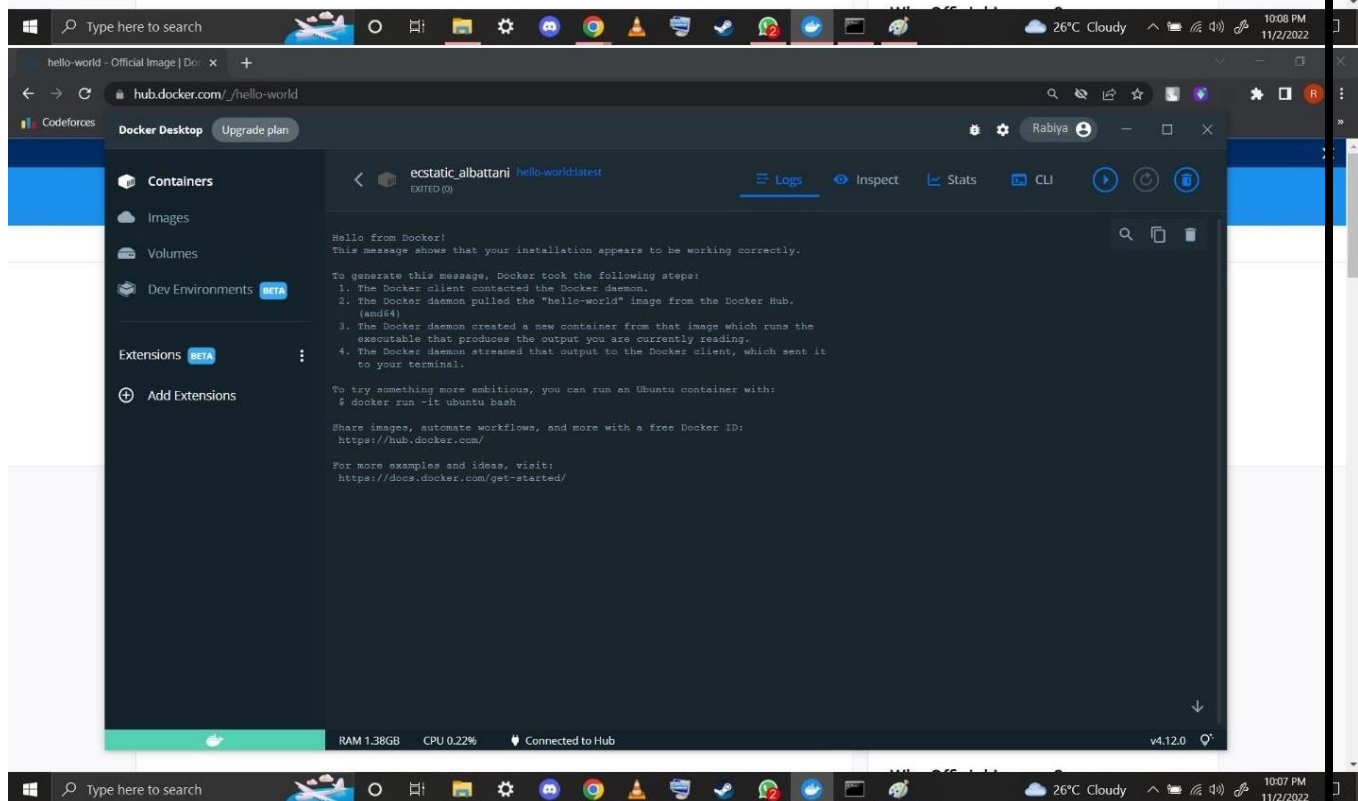
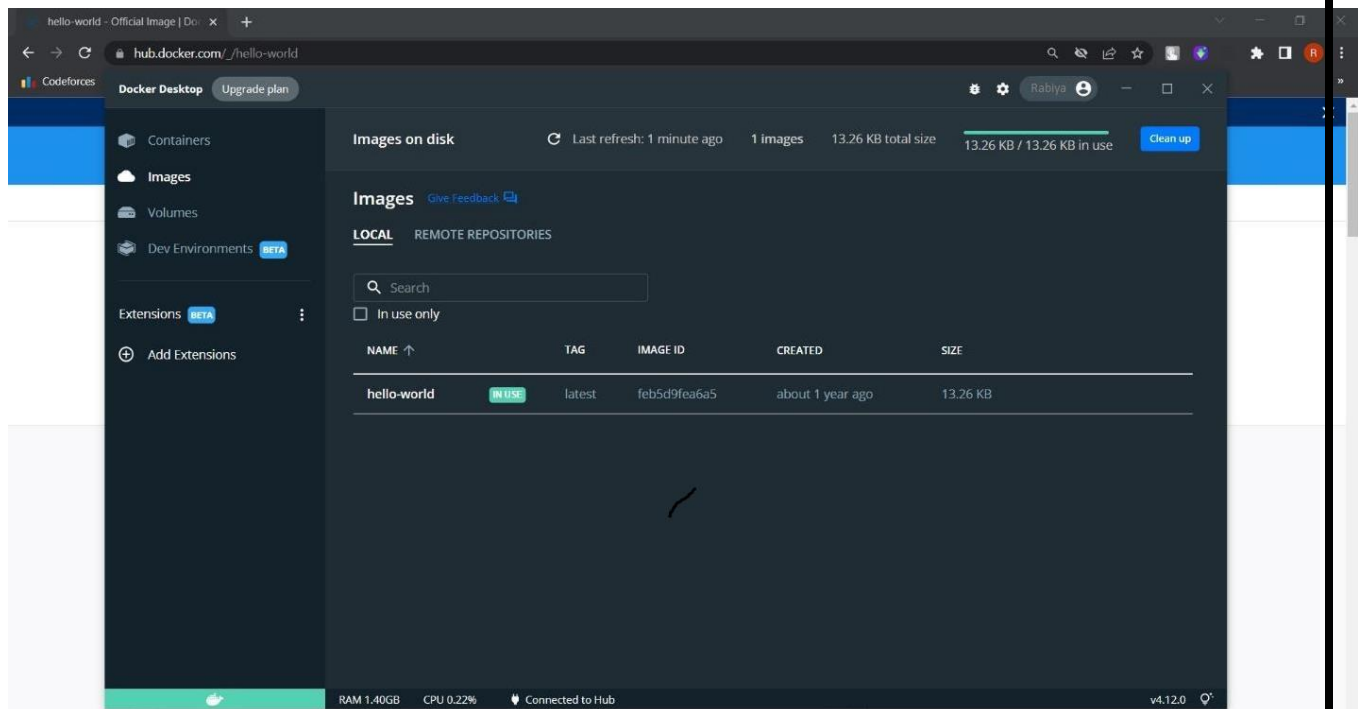
The screenshot shows a web browser displaying the Docker Hub page for the 'hello-world' official image. The page includes a search bar, navigation links, and a 'Quick reference' section. Overlaid on the browser is a Windows Command Prompt window showing the following commands and output:

```
Microsoft Windows [Version 10.0.19044.2130]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Assig>docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
2db29710123e: Pull complete
Digest: sha256:e18f0a777aefabe047a671ab3ec3eed05414477c951ab1a6f352a06974245fe7
Status: Downloaded newer image for hello-world:latest
docker.io/library/hello-world:latest

C:\Users\Assig>
```

The Command Prompt output indicates that the 'hello-world' image was successfully pulled from the Docker Hub library. The status shows 'Downloaded newer image for hello-world:latest'.



2. Create a docker file for the job and skill recommender application and deploy it in Docker desktop application.

## Dockerfile:

FROM

python:3.6

WORKDIR /app

ADD. /app

COPY requirements.txt /app

```
RUN python3 -m pip install -r
```

```
requirements.txt
```

```
RUN python3 -m pip
```

```
install ibm_db
```

EXPOSE 5000

```
CMD ["python","app1.py"]
```

[illegible]

```
Command Prompt - docker run f3d9015a21f3

C:\Users\Assig\Desktop\IBM-Project\Jobportal>docker images
REPOSITORY                                TAG                                IMAGE ID            CREATED             SIZE
<none>                                    <none>                            f3d9015a21f3       2 minutes ago      1.08GB
hubproxy.docker.internal:5000/docker/desktop-kubernetes  kubernet...-v1.25.0-cni-v1.1.1-critools-v1.24.2-cri-dockerd-v0.2.5-1-debian  2042e761d17a       2 months ago       363MB
k8s.gcr.io/kube-apiserver                  v1.25.0                           4d2edfd10d3e       2 months ago       128MB
k8s.gcr.io/kube-scheduler                  v1.25.0                           bef2cf311509       2 months ago       59.6MB
k8s.gcr.io/kube-controller-manager         v1.25.0                           1a54c86c03a6       2 months ago       117MB
k8s.gcr.io/kube-proxy                      v1.25.0                           58a9a0c6d90f       2 months ago       61.7MB
k8s.gcr.io/pause                           3.8                               4873874c08ef       4 months ago       711kB
k8s.gcr.io/etcd                            3.5.4-0                           a8a176a5d5d6       5 months ago       300MB
k8s.gcr.io/coredns                         v1.9.3                             5185b96f0bec       5 months ago       48.8MB
docker/desktop-vpnkit-controller           v2.0                               8c2c38aa676e       18 months ago      21MB
docker/desktop-storage-provisioner         v2.0                               99f89471f470       18 months ago      41.9MB

C:\Users\Assig\Desktop\IBM-Project\Jobportal>docker run f3d9015a21f3
* Serving Flask app 'app' (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: off
* Running on all addresses.
  WARNING: This is a development server. Do not use it in a production deployment.
* Running on http://172.17.0.2:5000/ (Press CTRL+C to quit)
```

JOBPOTAL | HOME

Not secure | 172.20.10.6:5000/login

Codeforces Facebook - नवीन रीटिंग YouTube RARBG Rarbg Index... Twitch I track the TV shows... Gmail Instagram TorrentBD : Welcome Yahoo SkymoviesHD.in [JS... Circle Network ]

sheep-logo

LOGOUT REGISTER MY JOBS

### Available Jobs

Python

Skills for python

Apply Now

Docker Desktop Upgrade plan

Rabiya

jovial\_proskuriakova f3d9015a21f3 EXITED (137)

Logs

Inspect

Stats

CLI

\* Serving Flask app 'app' (lazy loading)

\* Environment: production

WARNING: This is a development server. Do not use it in a production deployment.

Use a production WSGI server instead.

\* Debug mode: off

\* Running on all addresses.

WARNING: This is a development server. Do not use it in a production deployment.

\* Running on http://172.17.0.2:5000/ (Press CTRL+C to quit)

EXT

RAM 4.89GB CPU 2.44% Connected to Hub v4.12.0

### 3. Create a IBM container registry and deploy job and skill recommender app.

```
Command Prompt
Microsoft Windows [Version 10.0.19044.2130]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Assig>ibmcloud login
API endpoint: https://cloud.ibm.com

Email> 19cs039@syedengg.co.in

Password>
Authenticating...
OK

Targeted account: Rabiya's Account (3828f847bb644584acc551e935d0e383)

Select a region (or press enter to skip):
1. au-syd
2. in-che
3. jp-osa
4. jp-tok
5. kr-seo
6. eu-de
7. eu-gb
8. ca-tor
9. us-south
10. us-east
11. br-sao
Enter a number>

API endpoint: https://cloud.ibm.com
Regions:
User: 19cs039@syedengg.co.in
Account: Rabiya (3828f847bb644584acc551e935d0e383)
Resource group: No resource group targeted, use 'ibmcloud target -g RESOURCE_GROUP'
CF API endpoint:
Org:
Space:

C:\Users\Assig>
```

```
Command Prompt
C:\Users\Assig>ibmcloud cr login
Logging 'docker' in to 'icr.io'...
Logged in to 'icr.io'.

OK

C:\Users\Assig>docker tag f3d9015a21f3 icr.io/thaslima/jobportal

C:\Users\Assig>docker push icr.io/thaslima/jobportal
Using default tag: latest
The push refers to repository [icr.io/thaslima/jobportal]
21d8888e119b: Pushed
e45859251a61: Pushed
ba5faf349894: Pushed
21a1adcafa41: Pushed
4c702597ab0c: Pushed
aa4c808c19f0: Pushed
0ba9f090e8ba: Pushed
3a607d99af9f: Pushed
1a38e7a1fcc2: Pushed
c3a0d930d24: Pushed
26a504e63be4: Pushed
8bf42db0de72: Pushed
31892cc314cb: Pushed
11936051f93b: Pushed
latest: digest: sha256:910c91f1fe2226ae9306e48d02426c6c513bf54cfad9b960a8cb02bcb0926143 size: 3260

C:\Users\Assig>
```

IBM Cloud Container Registry

cloud.ibm.com/registry/repos

CodeforcesFacebook - राग रंन...YouTubeRARBG Rarbg Index...TwitchTrack the TV shows...GmailInstagramTorrentID: WelcomeYahooSkymoviesHD.in [S...Circle Network |

IBM Cloud

Search resources and products...

CatalogManageRabiya's Account

Container Registry

Quick start

Namespaces1

Repositories1

Images1

Trash0

Settings


Repositories

Location

Global

Search

Create

Name	Image count	Namespace	Last updated
 jobportal icr.io/shahibhasan/jobportal	1	Rabiya	

Items per page: 251-1 of 1 item

11 of 1 page

Type here to search

32°C Cloudy12:04 PM11/3/2022

4. Create a Kubernetes cluster in IBM cloud and deploy job portal image and also expose the same app to run in nodeport.

The screenshot displays the Kubernetes Dashboard interface. The breadcrumb navigation at the top indicates the path: Workloads > Pods > jobportal-5d9d6b7594-xnd9v. The left sidebar contains a navigation menu with categories like Workloads, Service, and Config and Storage. The main content area is divided into three sections: Metadata, Resource information, and Conditions.

**Metadata**

Name	Namespace	Created	Age	UID
jobportal-5d9d6b7594-xnd9v	default	Nov 3, 2022	37 seconds ago	c7ca5e6d-6505-4321-a0c7-90418c630ce2

**Labels**

app: flasknode pod-template-hash: 5d9d6b7594

**Annotations**

cni.projectcalico.org/containerID cni.projectcalico.org/podIP: 172.30.141.206/32 cni.projectcalico.org/podIPs: 172.30.141.206/32 kubernetes.io/psp: ibm-privileged-psp

**Resource information**

Node	Status	IP	QoS Class	Restarts	Service Account
10.144.212.158	ErrImagePull	172.30.141.206	BestEffort	0	default

**Image Pull Secrets**

all-icr-io

**Conditions**

The bottom of the dashboard shows a Windows taskbar with various application icons and a system tray displaying the date and time as 1:00 PM on 11/3/2022.