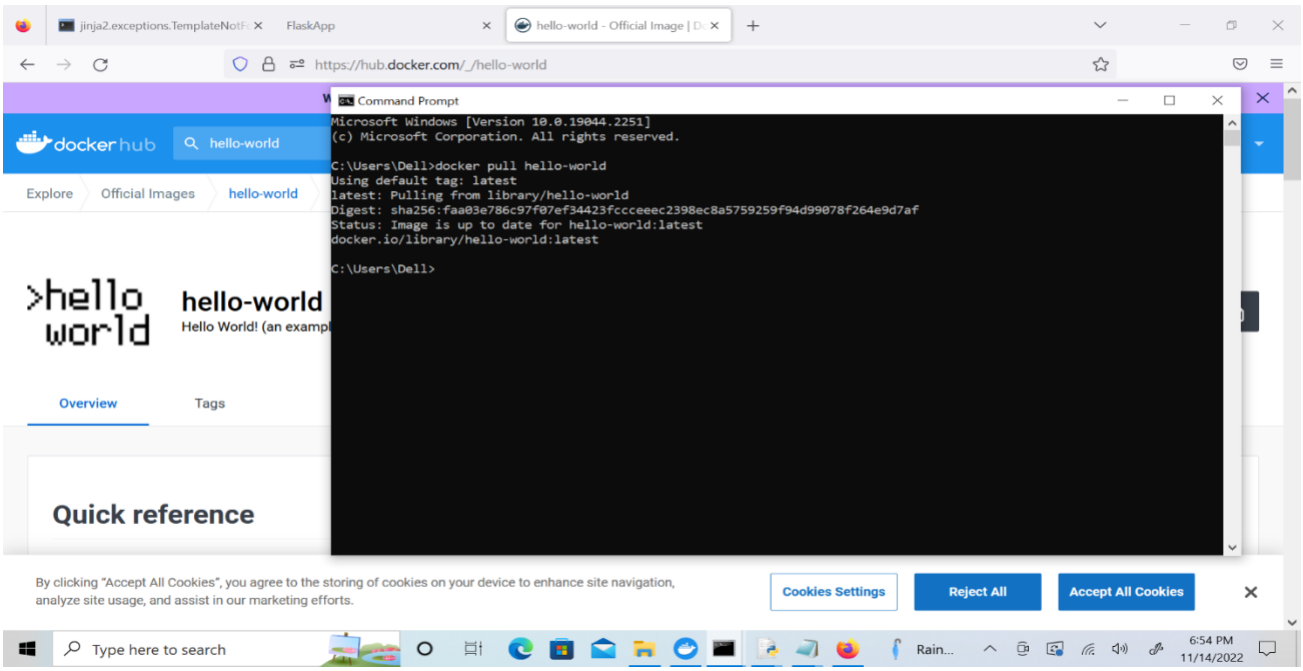
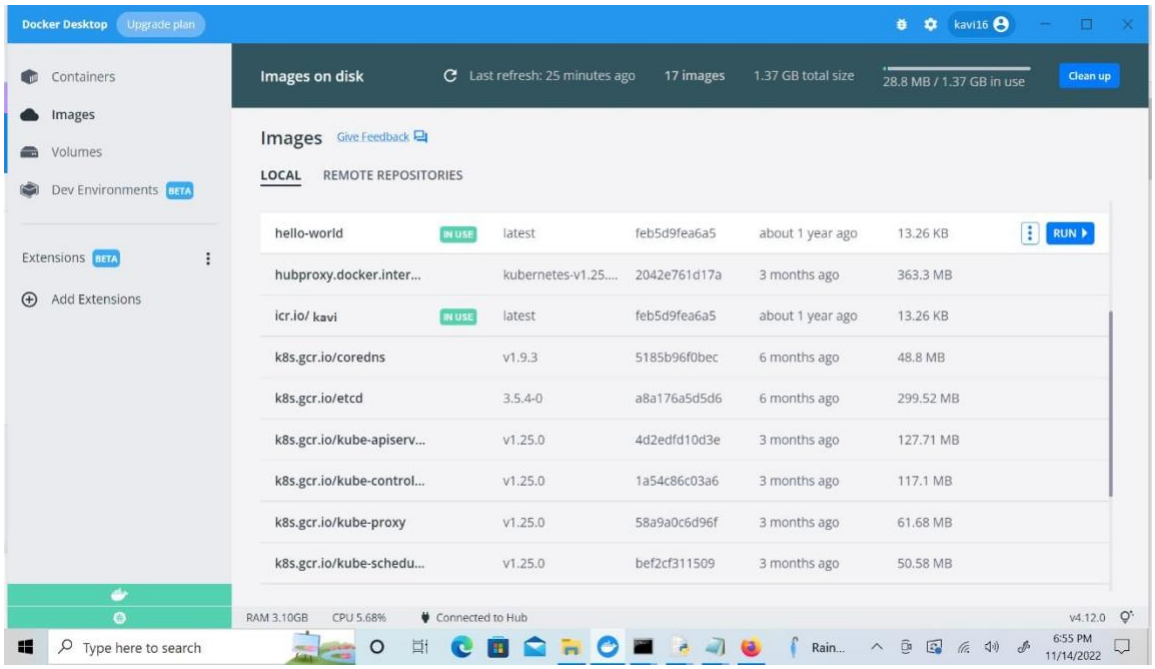
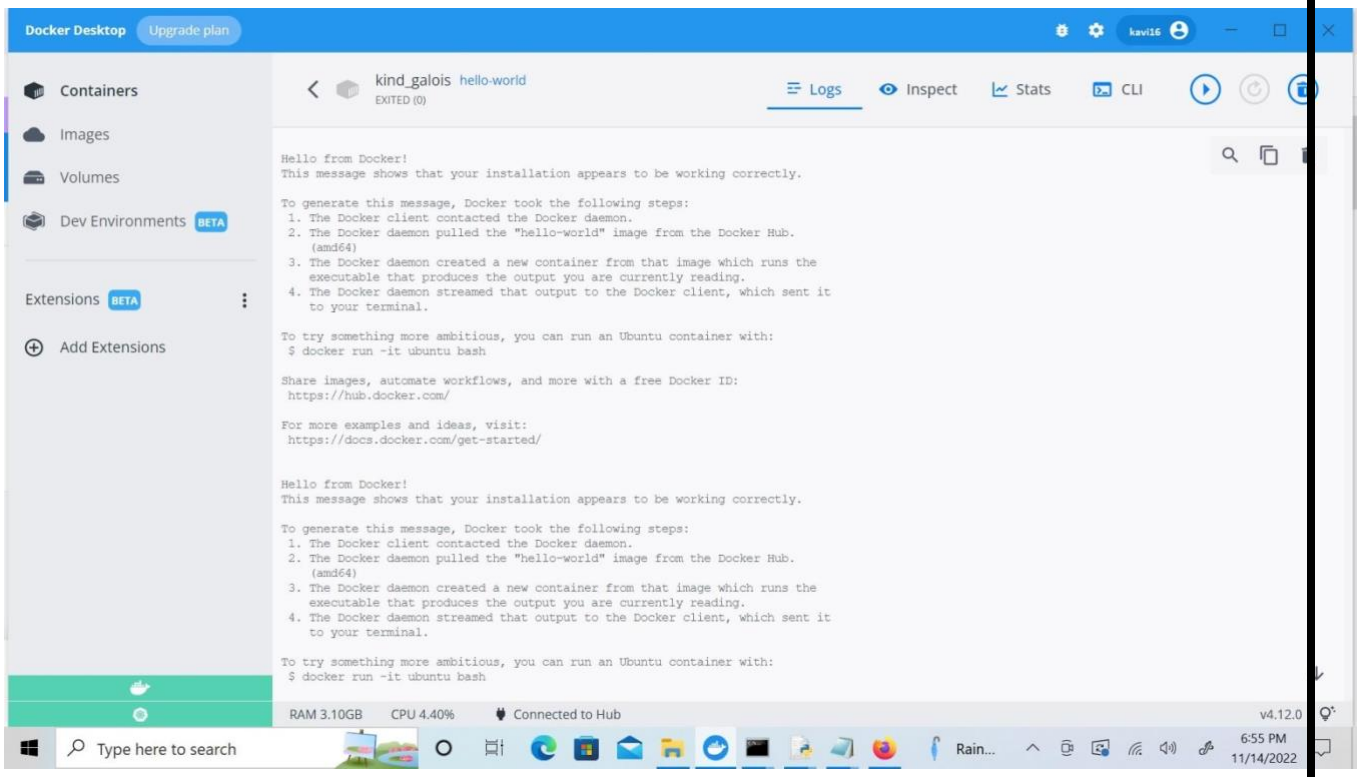
Assignment -4

Assignment Date	14 November 2022
Student Name	KAVI PRIYA P
Team ID	PNT2022TMID48189
Maximum Marks	2 Marks

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



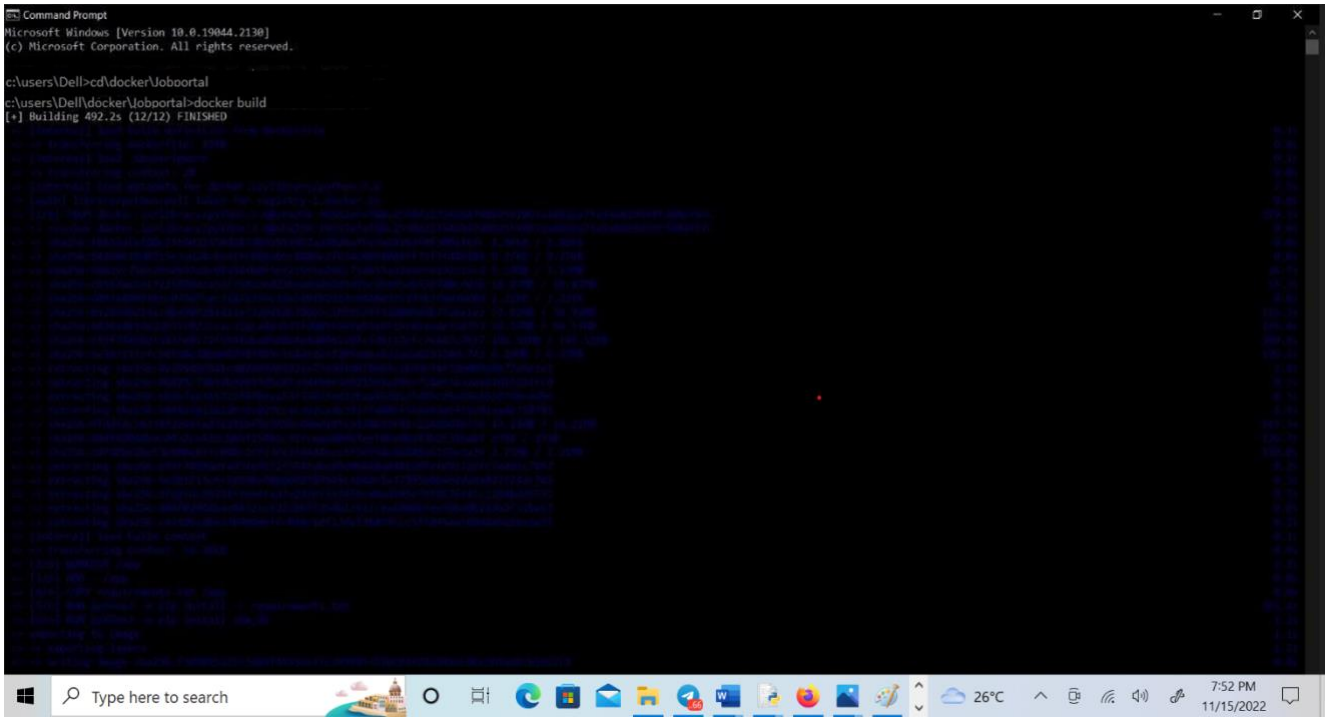

Docker Desktop
Upgrade plan
kavi16
Containers
Images
Volumes
Dev Environments BETA
Extensions BETA
Add Extensions
Images on disk
Last refresh: 25 minutes ago
17 images
1.37 GB total size
28.8 MB / 1.37 GB in use
Clean up
Images
Give Feedback
LOCAL
REMOTE REPOSITORIES
hello-world IN USE latest feb5d9fea6a5 about 1 year ago 13.26 KB RUN
hubproxy.docker.inter... kubernetes-v1.25.... 2042e761d17a 3 months ago 363.3 MB
icr.io/ kavi IN USE latest feb5d9fea6a5 about 1 year ago 13.26 KB
k8s.gcr.io/coredns v1.9.3 5185b96f0bec 6 months ago 48.8 MB
k8s.gcr.io/etcd 3.5.4-0 a8a176a5d5d6 6 months ago 299.52 MB
k8s.gcr.io/kube-apiserv... v1.25.0 4d2edfd10d3e 3 months ago 127.71 MB
k8s.gcr.io/kube-control... v1.25.0 1a54c86c03a6 3 months ago 117.1 MB
k8s.gcr.io/kube-proxy v1.25.0 58a9a0c6d96f 3 months ago 61.68 MB
k8s.gcr.io/kube-schedu... v1.25.0 bef2cf311509 3 months ago 50.58 MB
RAM 3.10GB
CPU 5.68%
Connected to Hub
v4.12.0
Type here to search
Rain...
6:55 PM
11/14/2022

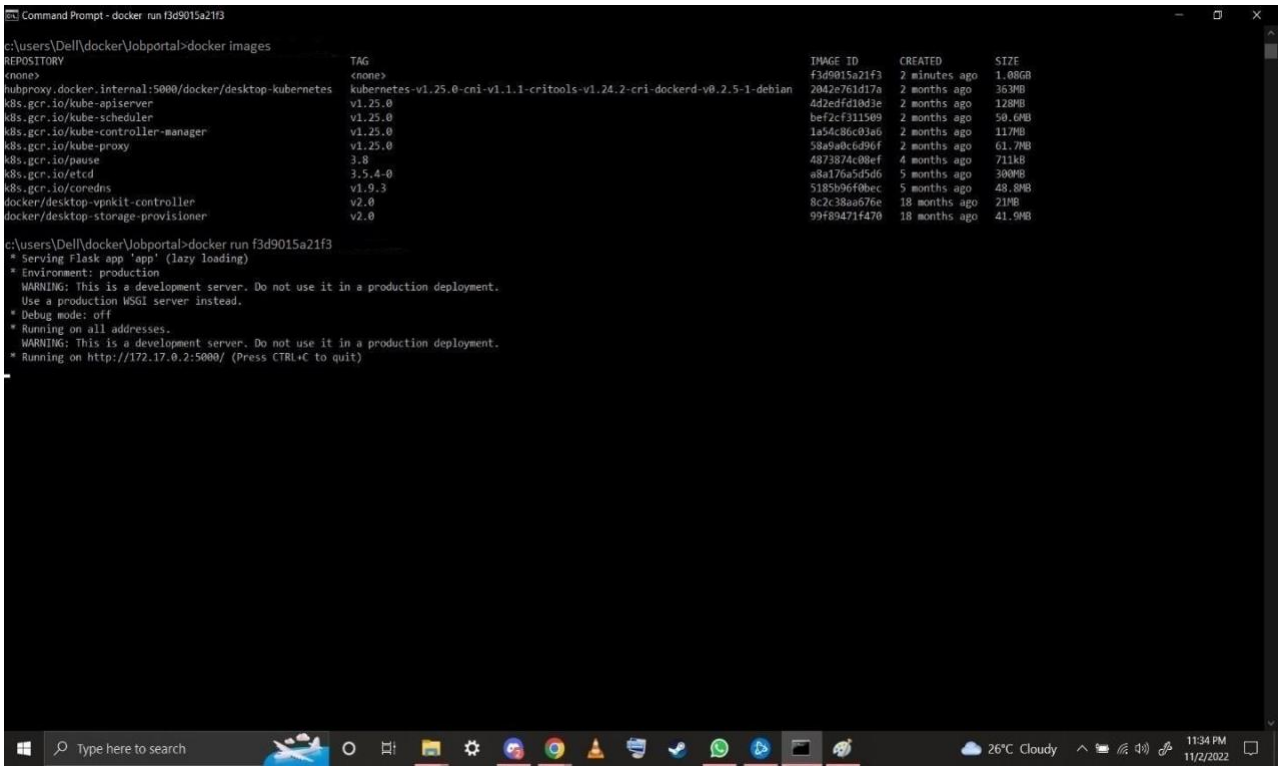

Docker Desktop
Upgrade plan
kavi16
Containers
Images
Volumes
Dev Environments BETA
Extensions BETA
Add Extensions
kind_galois hello-world
EXITED (0)
Logs
Inspect
Stats
CLI
Hello from Docker!
This message shows that your installation appears to be working correctly.
To generate this message, Docker took the following steps:
1. The Docker client contacted the Docker daemon.
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
(amd64)
3. The Docker daemon created a new container from that image which runs the
executable that produces the output you are currently reading.
4. The Docker daemon streamed that output to the Docker client, which sent it
to your terminal.
To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash
Share images, automate workflows, and more with a free Docker ID:
https://hub.docker.com/
For more examples and ideas, visit:
https://docs.docker.com/get-started/
Hello from Docker!
This message shows that your installation appears to be working correctly.
To generate this message, Docker took the following steps:
1. The Docker client contacted the Docker daemon.
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
(amd64)
3. The Docker daemon created a new container from that image which runs the
executable that produces the output you are currently reading.
4. The Docker daemon streamed that output to the Docker client, which sent it
to your terminal.
To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash
RAM 3.10GB
CPU 4.40%
Connected to Hub
v4.12.0
Type here to search
Rain...
6:55 PM
11/14/2022

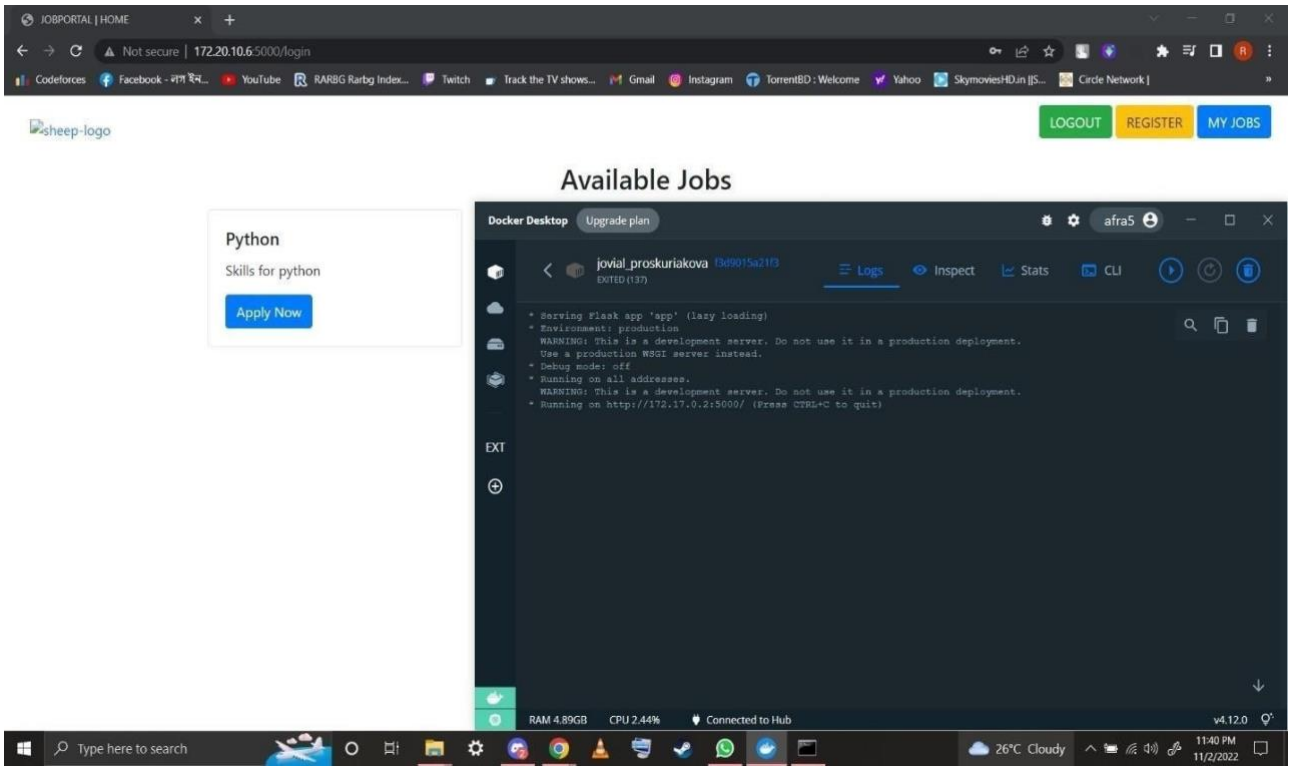
2. Create a docker file for the job portal application and deploy it in Docker desktop application.

Dockerfile:

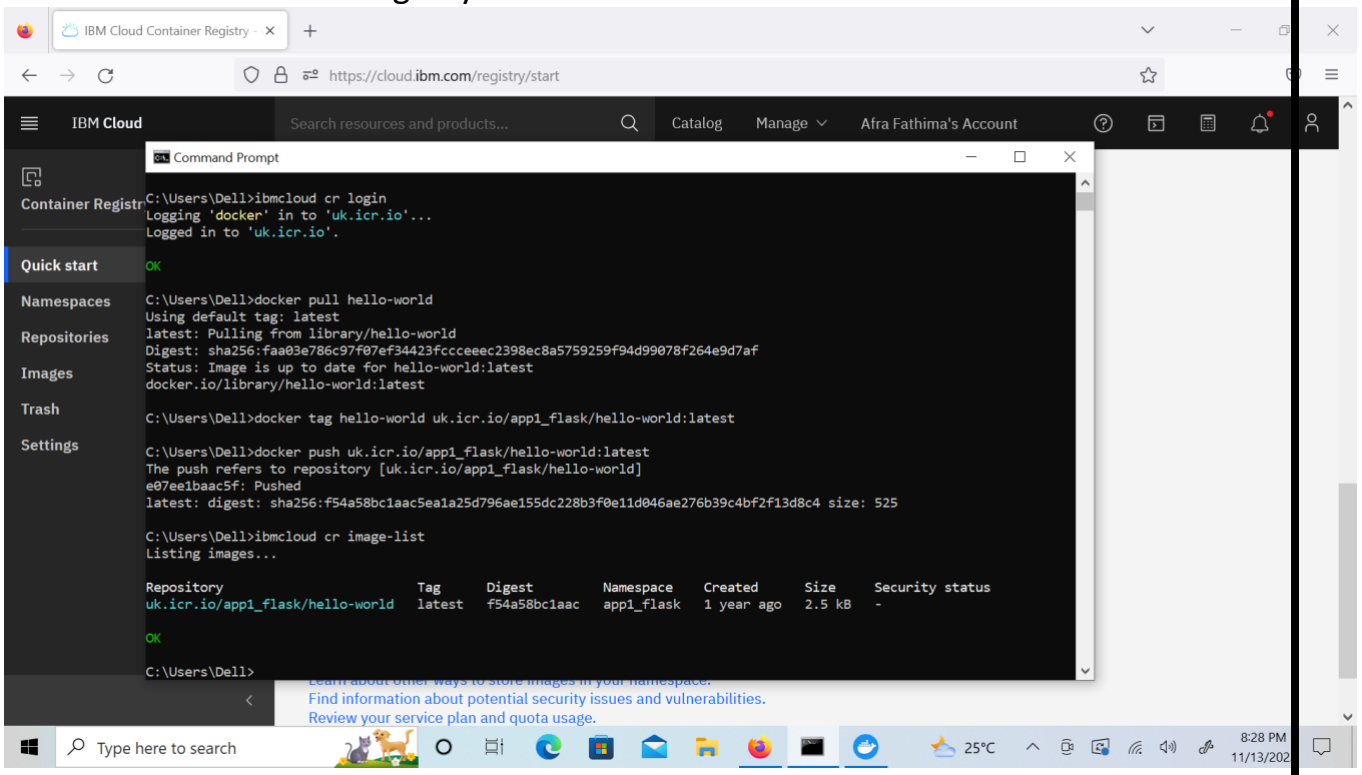
```
FROM

python:3.6

WORKDIR /app

ADD. /app

COPY requirements.txt /app

RUN python3 -m pip install -r

requirements.txtRUN python3 -m pip

install ibm_db

EXPOSE 5000

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



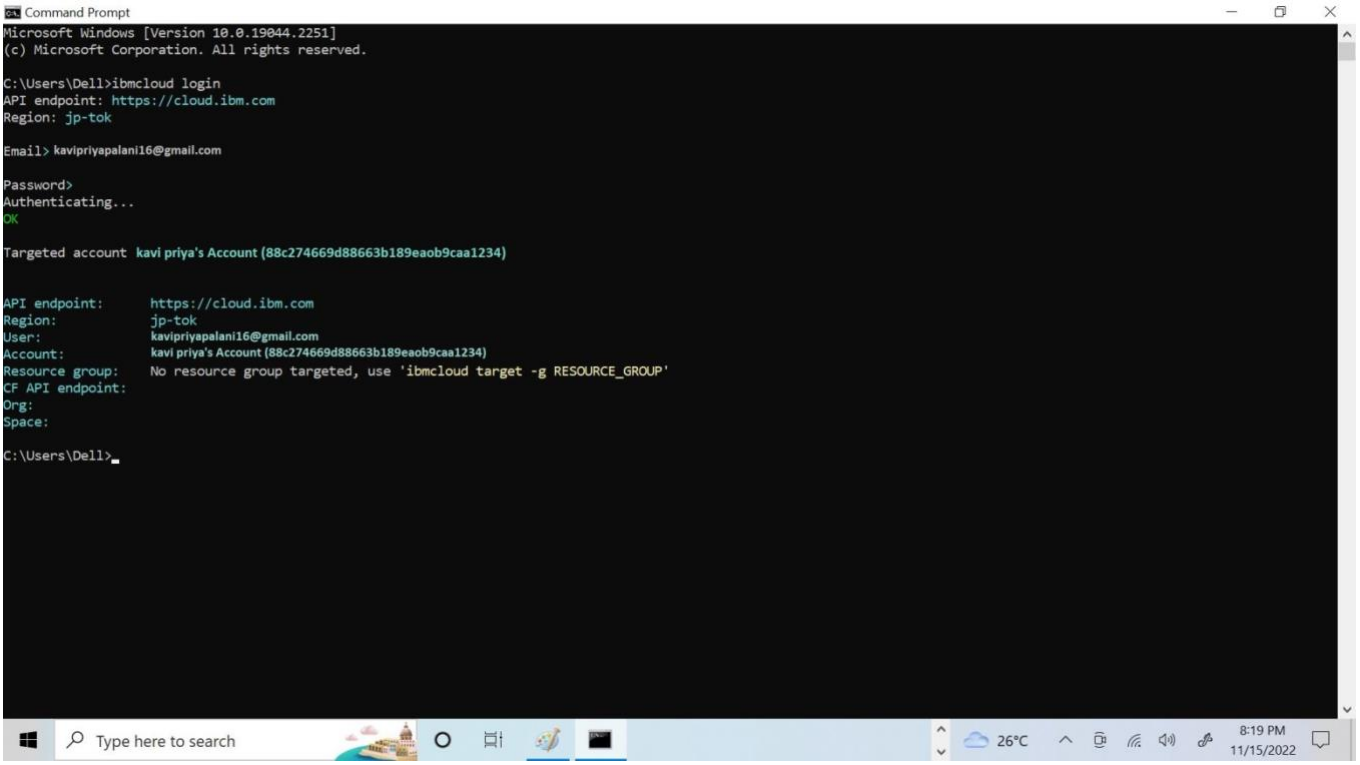

Command Prompt - docker run f3d9015a21f3
c:\users\Dell\docker\Jobportal>docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
<none> <none> f3d9015a21f3 2 minutes ago 1.08GB
hubproxy.docker.internal:5000/docker/desktop-kubernetes kubernetes-v1.25.0-cni-v1.1.1-critools-v1.24.2-cri-dockerd-v0.2.5-1-debian 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 50.6MB
k8s.gcr.io/kube-controller-manager v1.25.0 1a54c86c03a6 2 months ago 117MB
k8s.gcr.io/kube-proxy v1.25.0 58a9a0c6d96f 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\Dell\docker\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)
Type here to search
26°C Cloudy
11:34 PM
11/2/2022

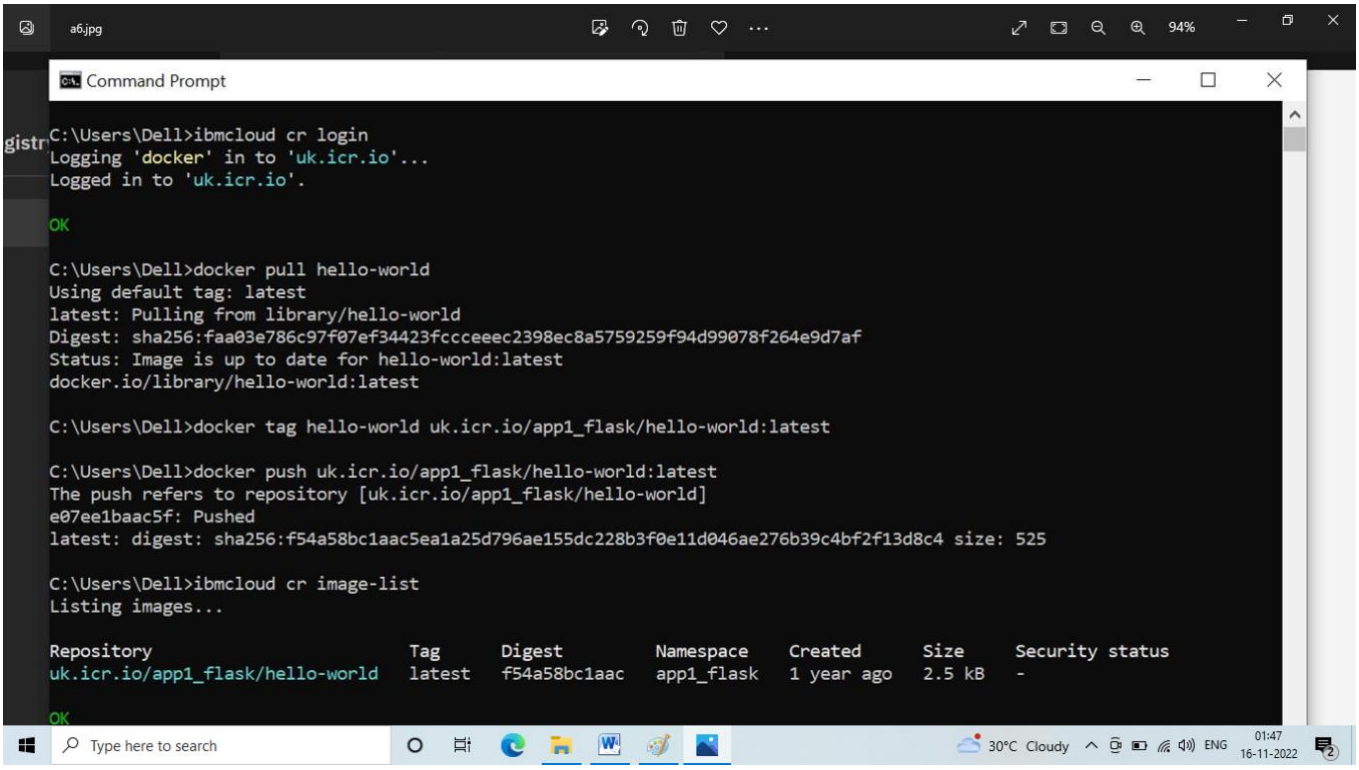

JOBPORTAL | HOME
Not secure | 172.20.10.6:5000/login
Codeforces
Facebook - লগ ইন...
YouTube
RARBG Rarbg Index...
Twitch
Track the TV shows...
Gmail
Instagram
TorrentBD : Welcome
Yahoo
SkymoviesHD.in |||S...
Circle Network |
sheep-logo
LOGOUT
REGISTER
MY JOBS
Available Jobs
Python
Skills for python
Apply Now
Docker Desktop
Upgrade plan
afra5
jovial_proskuriakova
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
Type here to search
26°C Cloudy
11:40 PM
11/2/2022

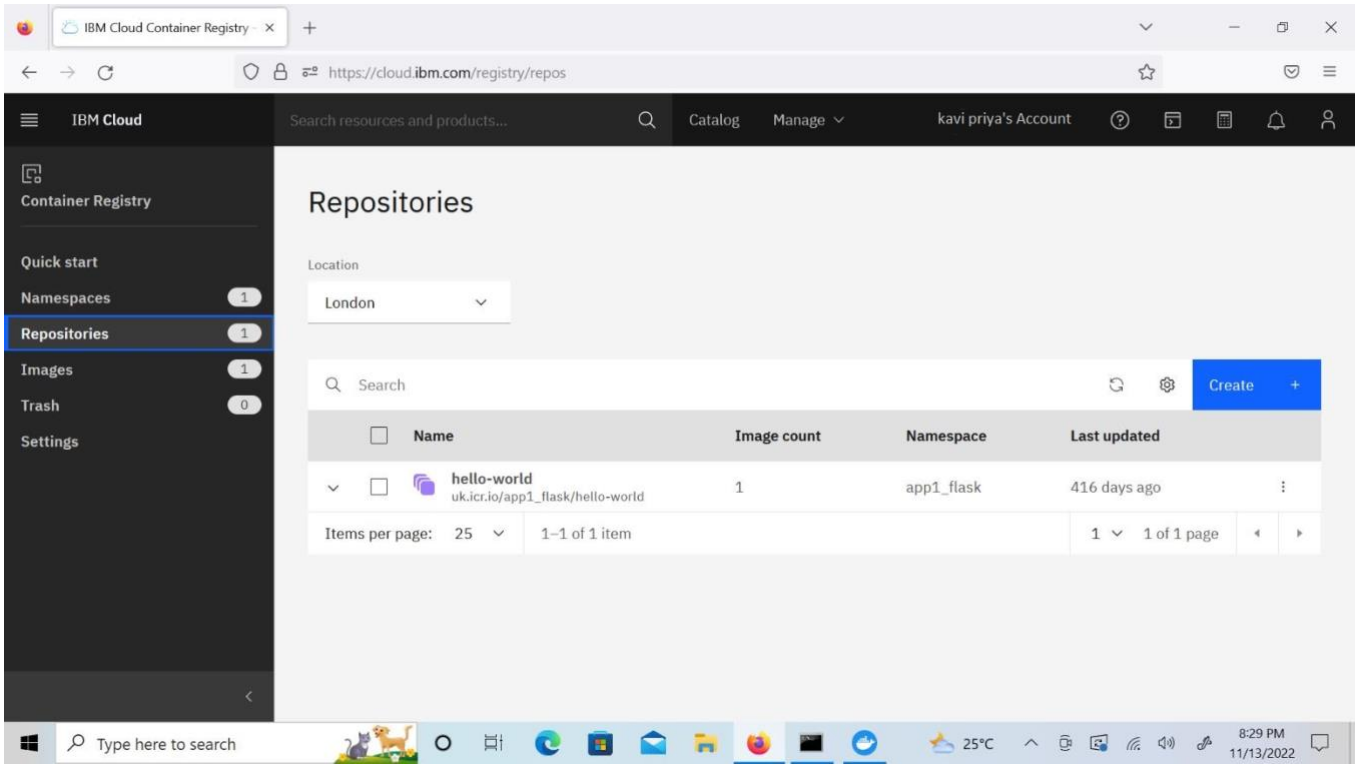
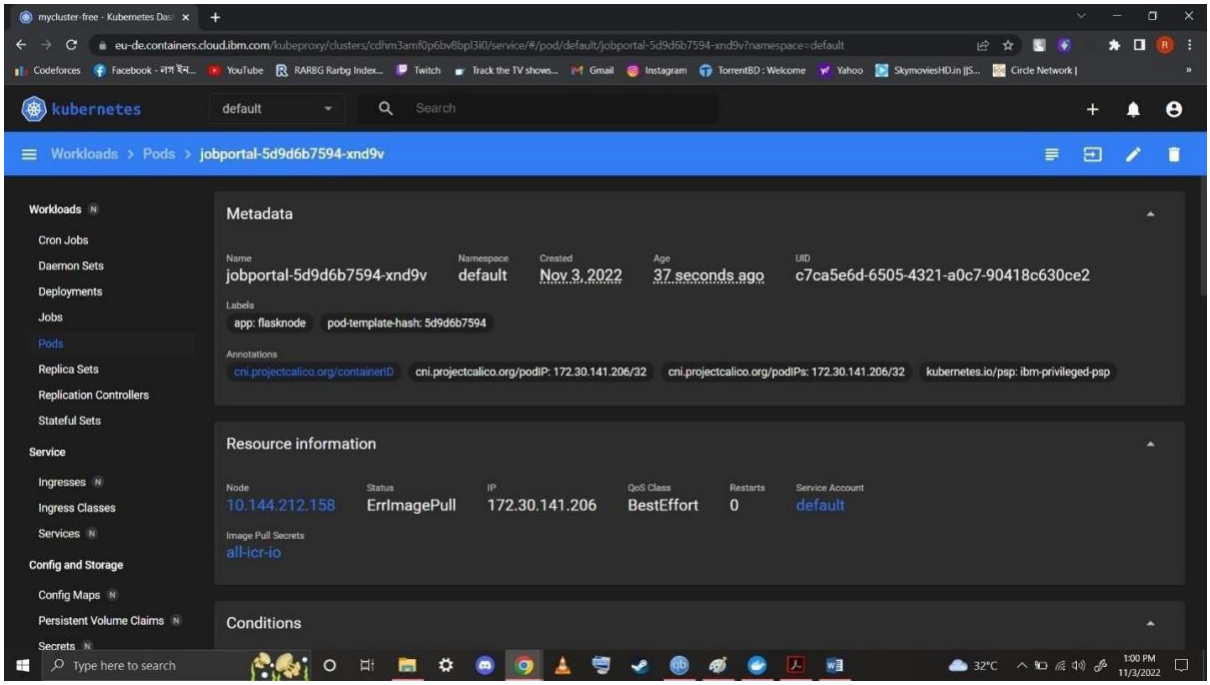
3. Create a IBM container registry and



deploy hello world app.




a6.jpg
94%
Command Prompt
C:\Users\Dell>ibmcloud cr login
Logging 'docker' in to 'uk.icr.io'...
Logged in to 'uk.icr.io'.
OK
C:\Users\Dell>docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
Digest: sha256:faa03e786c97f07ef34423fccceeec2398ec8a5759259f94d99078f264e9d7af
Status: Image is up to date for hello-world:latest
docker.io/library/hello-world:latest
C:\Users\Dell>docker tag hello-world uk.icr.io/app1_flask/hello-world:latest
C:\Users\Dell>docker push uk.icr.io/app1_flask/hello-world:latest
The push refers to repository [uk.icr.io/app1_flask/hello-world]
e07ee1baac5f: Pushed
latest: digest: sha256:f54a58bc1aac5ea1a25d796ae155dc228b3f0e11d046ae276b39c4bf2f13d8c4 size: 525
C:\Users\Dell>ibmcloud cr image-list
Listing images...
Repository Tag Digest Namespace Created Size Security status
uk.icr.io/app1_flask/hello-world latest f54a58bc1aac app1_flask 1 year ago 2.5 kB -
OK
Type here to search
30°C Cloudy
ENG
01:47
16-11-2022


IBM Cloud Container Registry
https://cloud.ibm.com/registry/repos
IBM Cloud
Search resources and products...
Catalog
Manage
kavi priya's Account
Container Registry
Quick start
Namespaces 1
Repositories 1
Images 1
Trash 0
Settings
Repositories
Location
London
Search
Create
Name
Image count
Namespace
Last updated
hello-world
uk.icr.io/app1_flask/hello-world
1
app1_flask
416 days ago
Items per page: 25
1–1 of 1 item
1 of 1 page
Type here to search
25°C
8:29 PM
11/13/2022

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