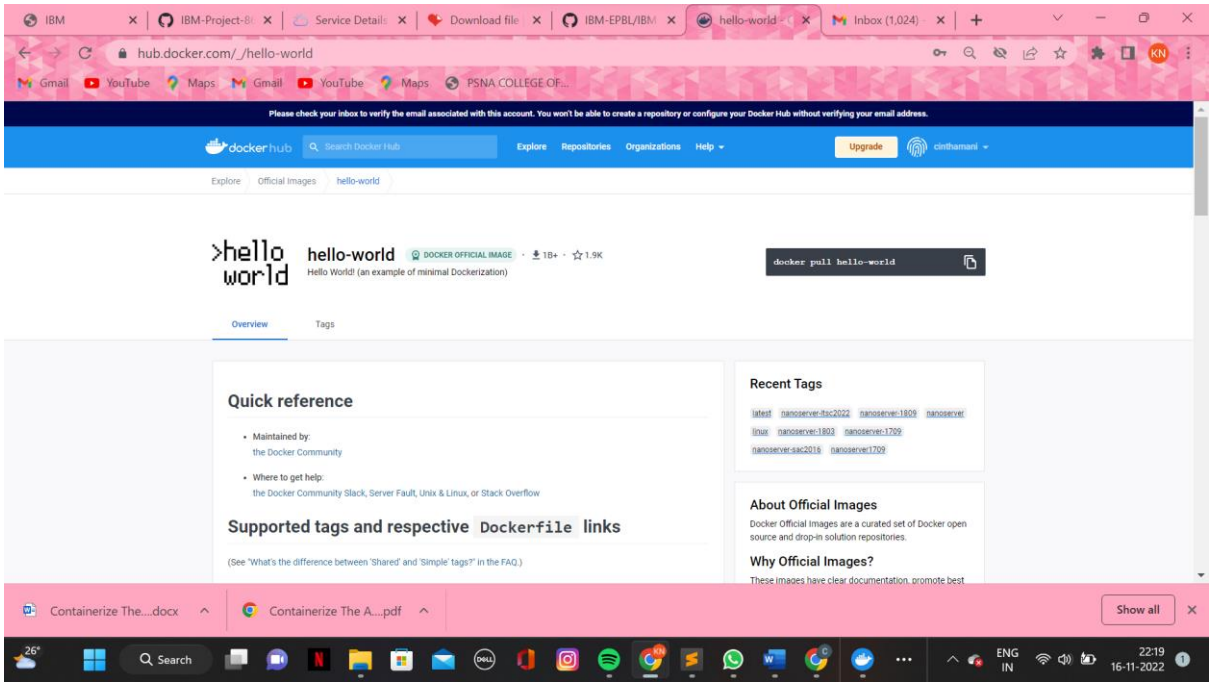
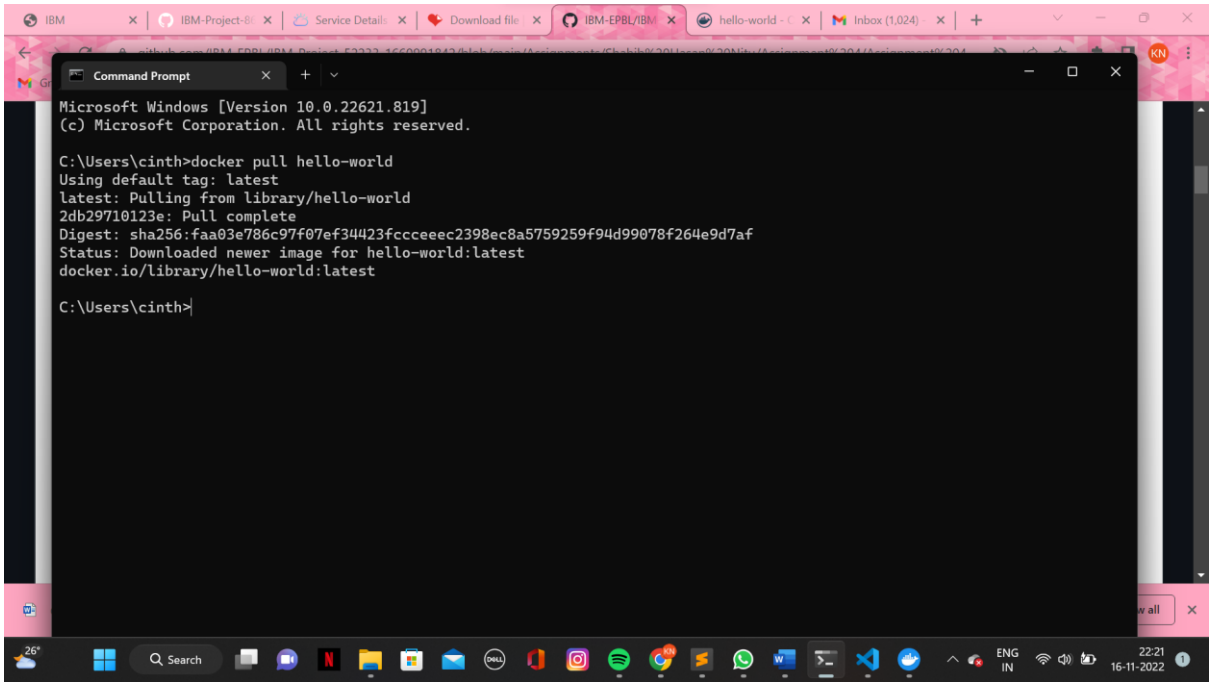
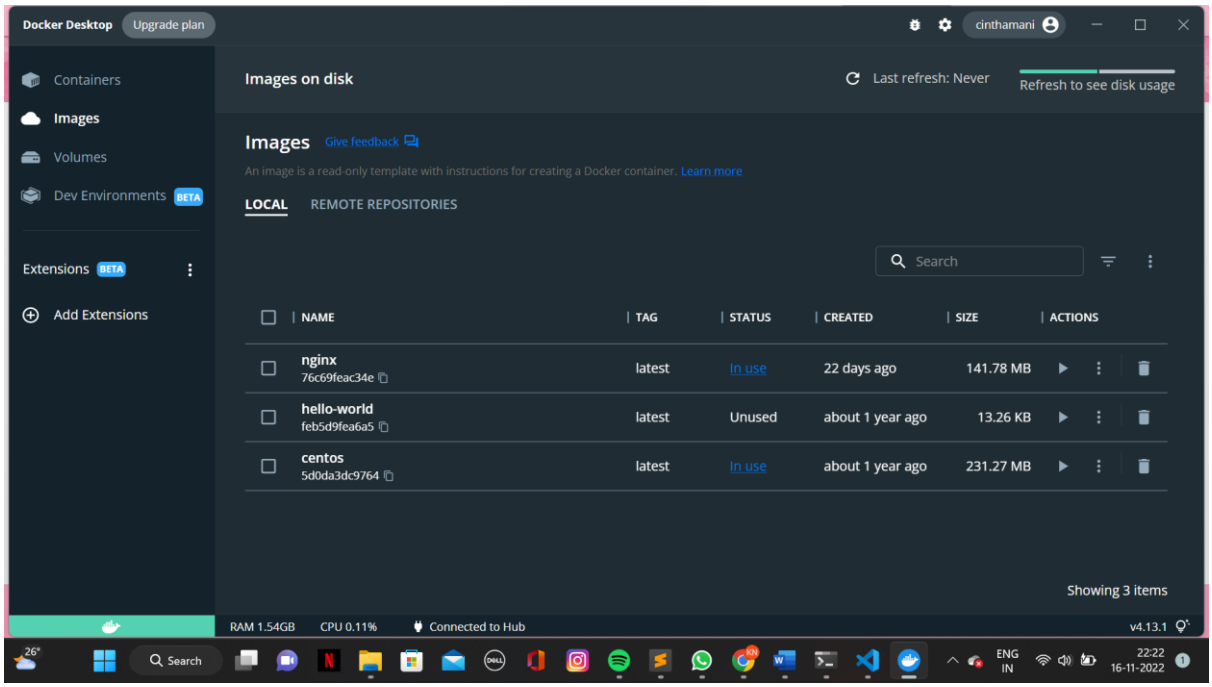
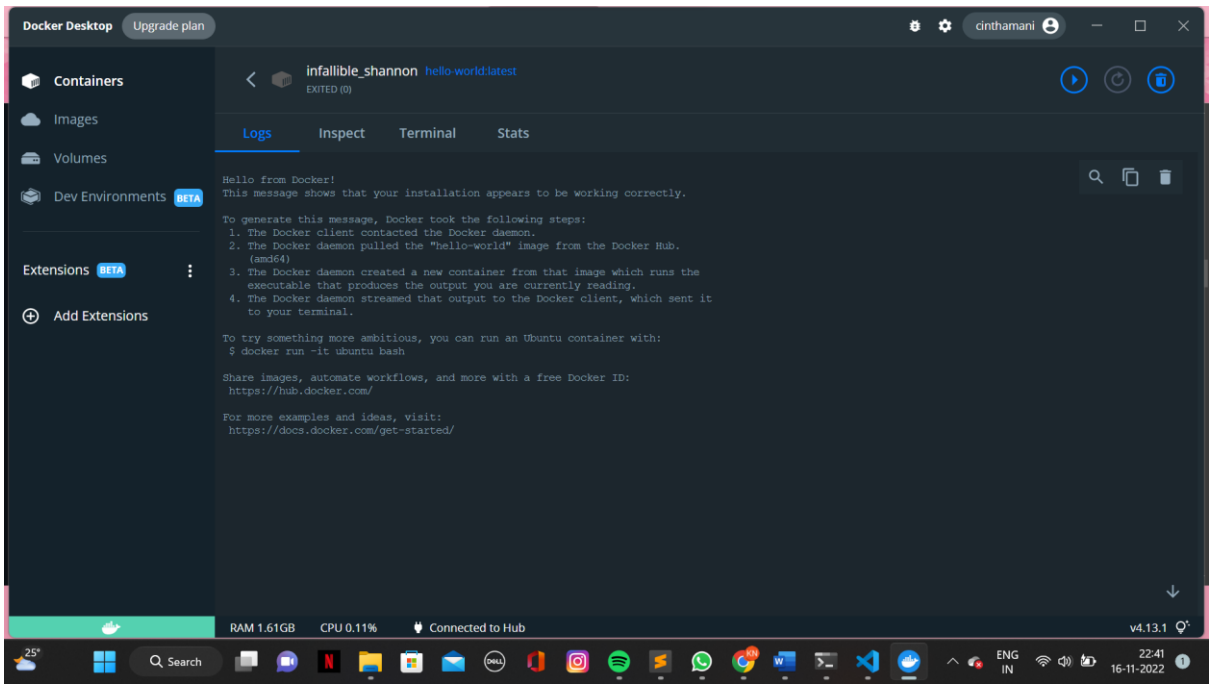
1) Pull an Image from docker hub and run it in docker playground





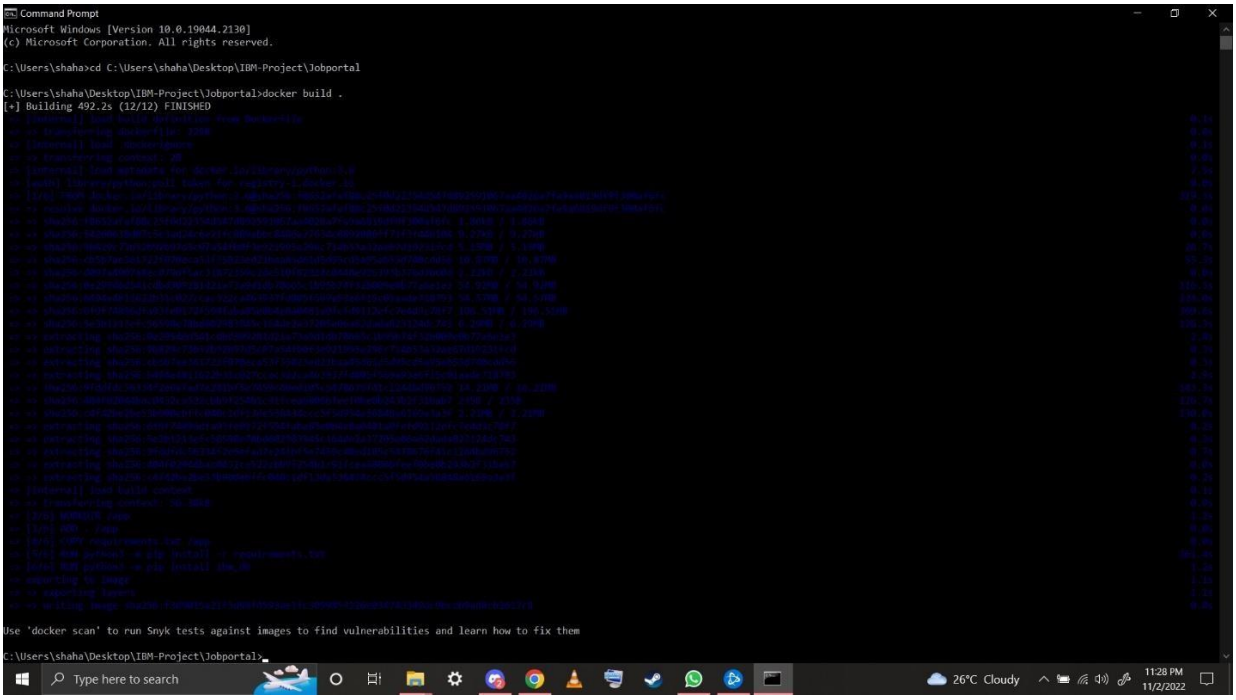

Docker Desktop
Upgrade plan
cinthamani
Containers
Images
Volumes
Dev Environments BETA
Extensions BETA
Add Extensions
Images on disk
Last refresh: Never
Refresh to see disk usage
Images
Give feedback
An image is a read-only template with instructions for creating a Docker container. Learn more
LOCAL
REMOTE REPOSITORIES
Search
NAME
TAG
STATUS
CREATED
SIZE
ACTIONS
nginx
76c69feac34e
latest
In use
22 days ago
141.78 MB
hello-world
feb5d9fea6a5
latest
Unused
about 1 year ago
13.26 KB
centos
5d0da3dc9764
latest
In use
about 1 year ago
231.27 MB
Showing 3 items
RAM 1.54GB
CPU 0.11%
Connected to Hub
v4.13.1
Search
ENG
IN
22:22
16-11-2022

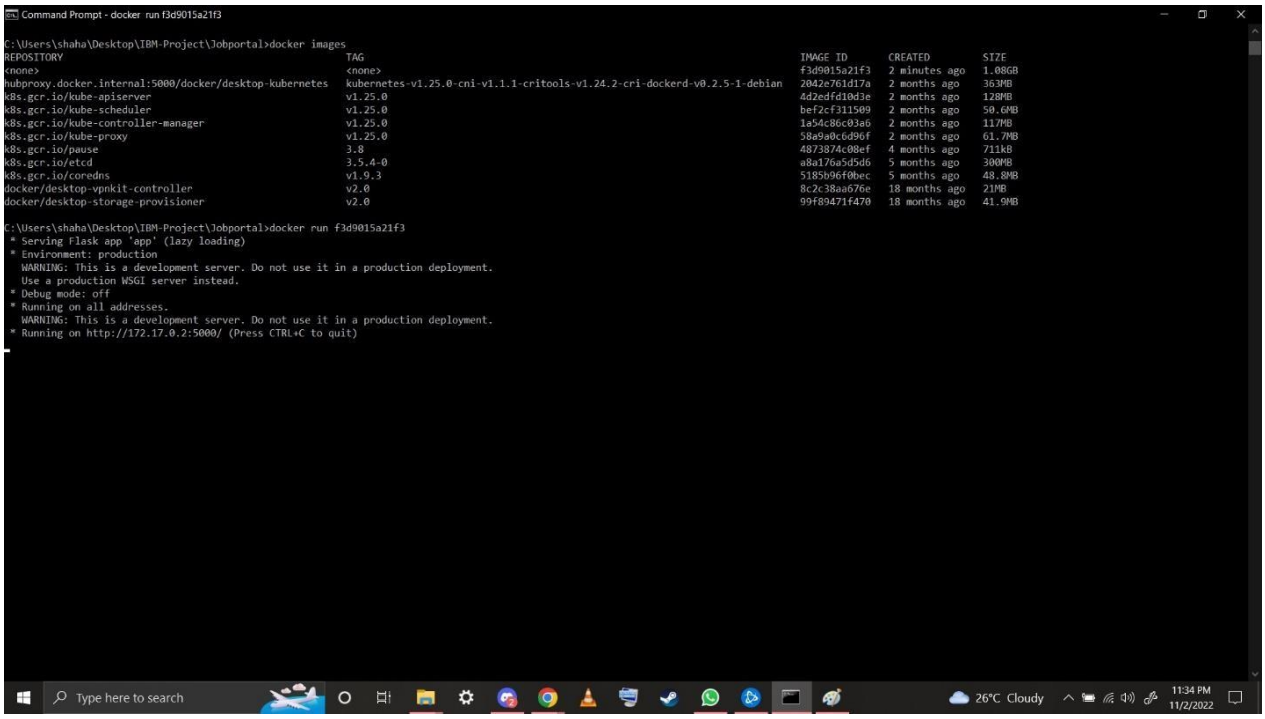

Docker Desktop
Upgrade plan
cinthamani
Containers
Images
Volumes
Dev Environments BETA
Extensions BETA
Add Extensions
infallible_shannon
hello-world:latest
EXITED (0)
Logs
Inspect
Terminal
Stats
Hello from Docker!
This message shows that your installation appears to be working correctly.
To generate 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/
RAM 1.61GB
CPU 0.11%
Connected to Hub
v4.13.1
Search
ENG
IN
22:41
16-11-2022

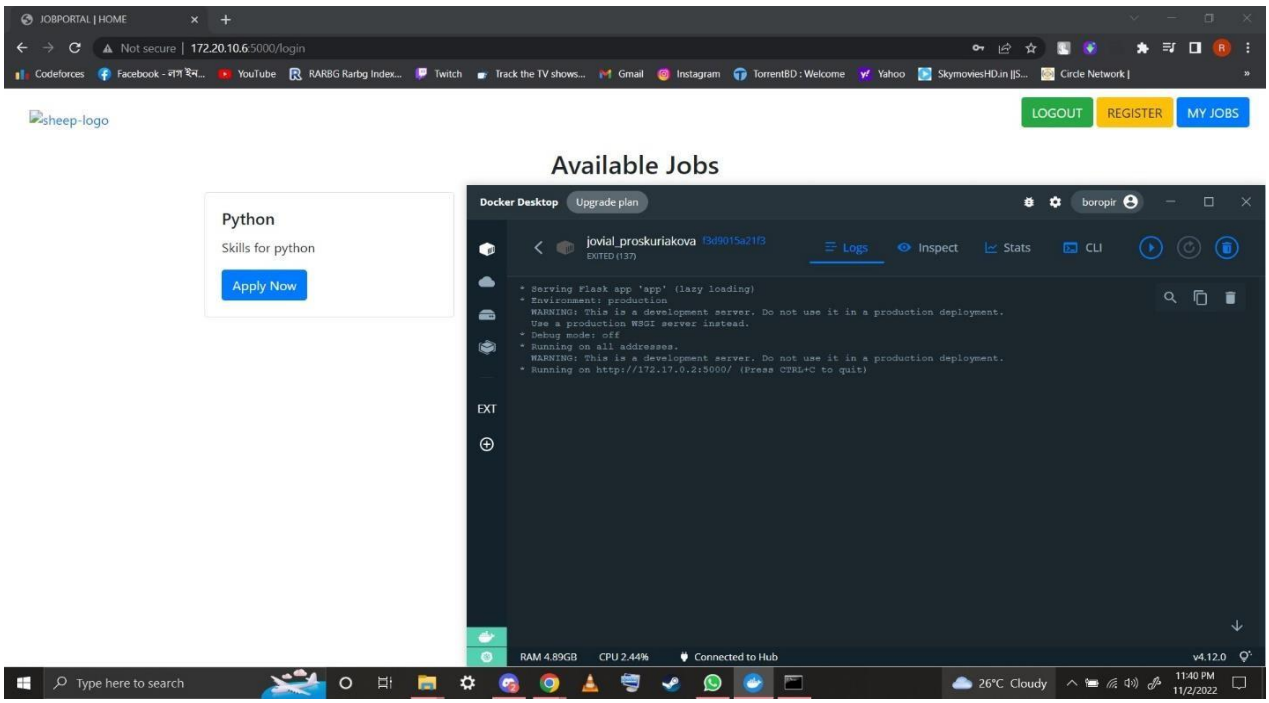
2)Create a docker file for the jobportal application and deploy it in Docker desktop application.

Dockerfile:

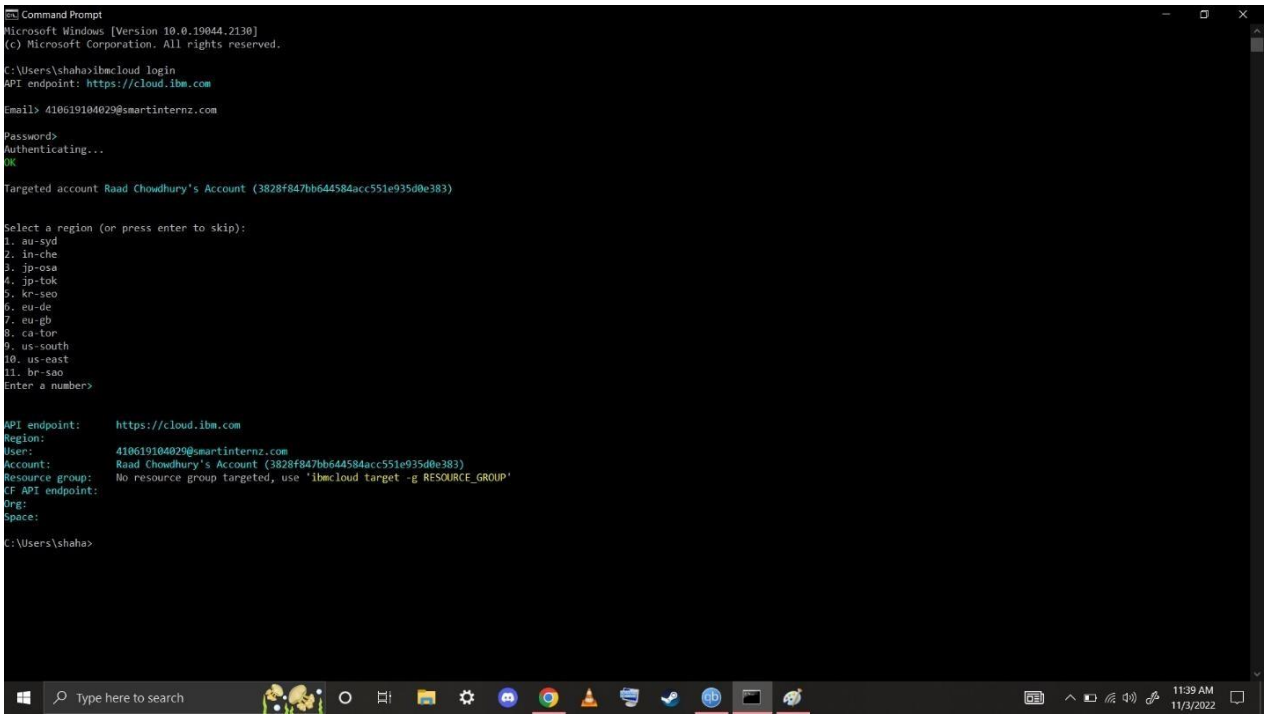
```
FROM python:3.6

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","app.py"]
```

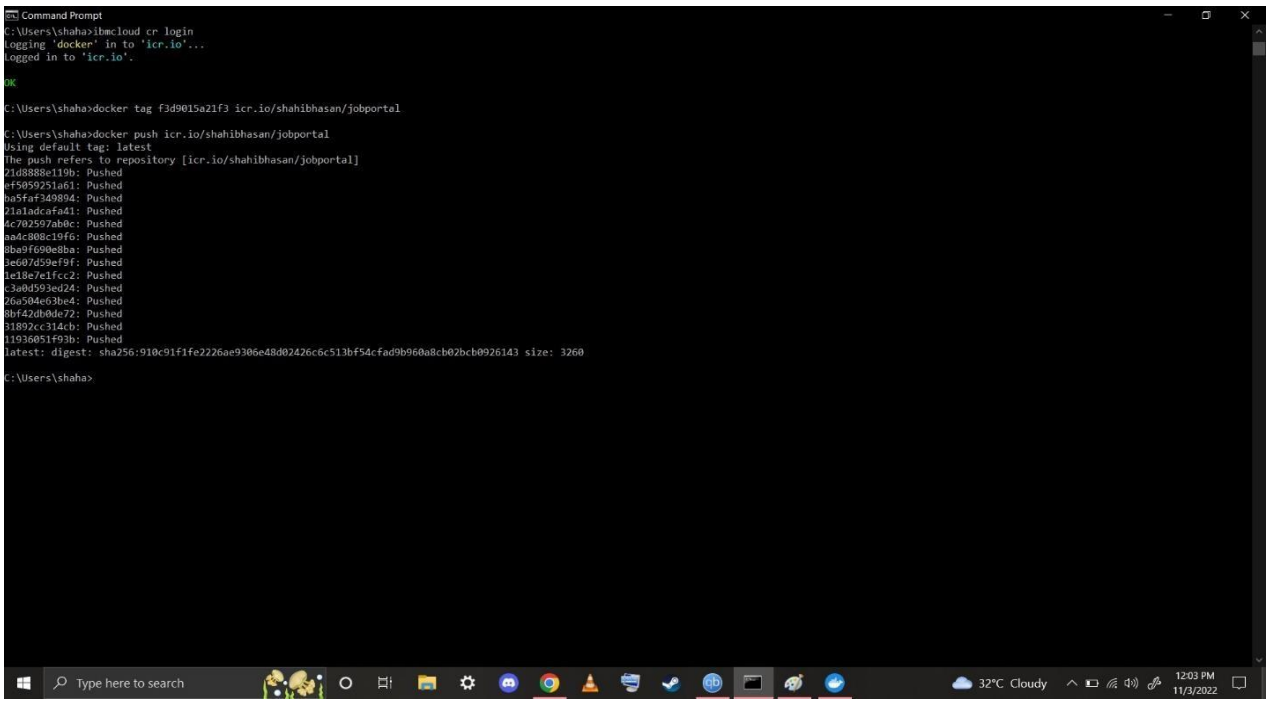


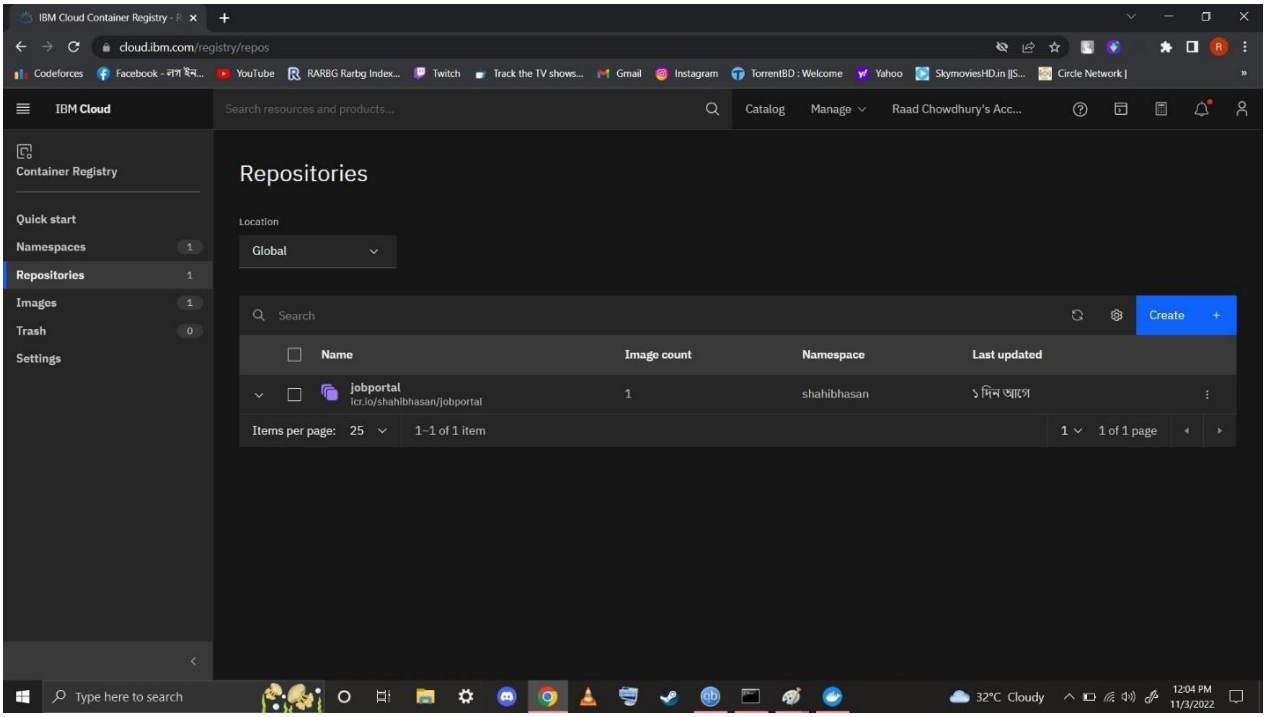
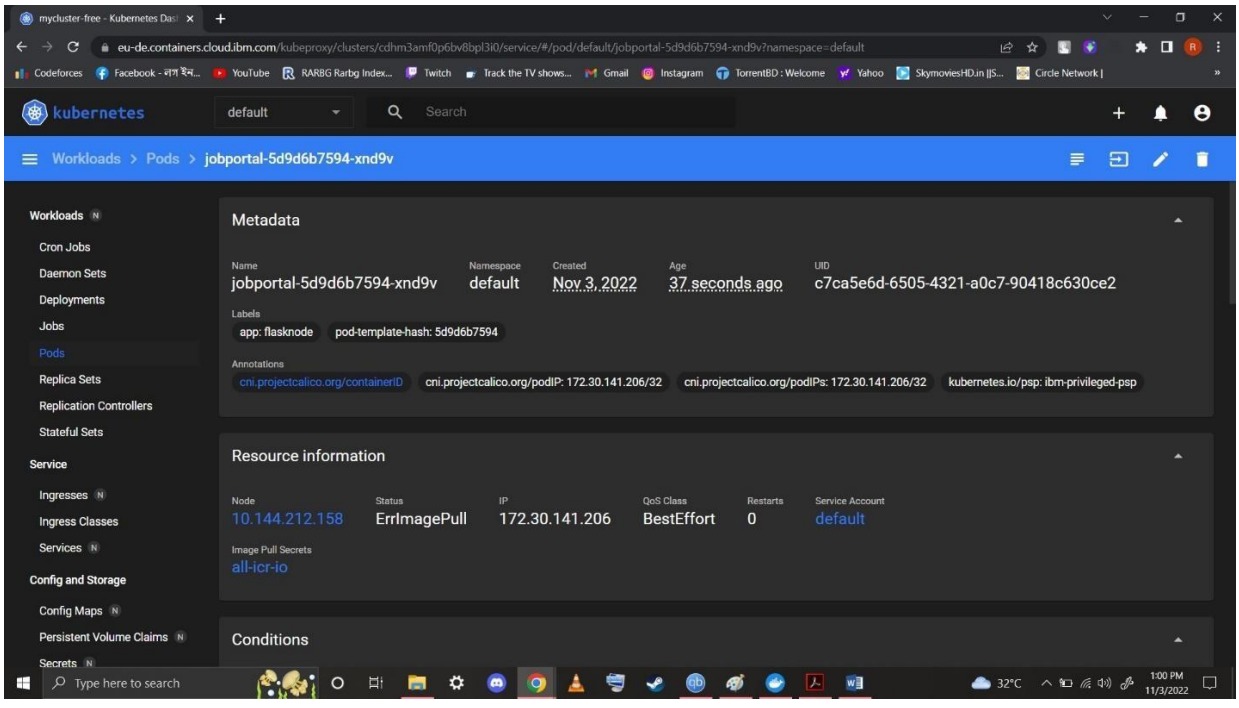

Command Prompt - docker run f3d9015a21f3
C:\Users\shaha\Desktop\IBM-Project\Jobportal>docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
<none> <none> f3d9015a21f3 2 minutes ago 1.08GB
hubproxy.docker.internal:5000/docker/desktop-kubernetes kubernetes-v1.25.0-cni-v1.1.1-critools-v1.24.2-cri-dockerd-v0.2.5-1-debian 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\shaha\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)
Type here to search
26°C Cloudy
11:34 PM
11/2/2022


JOBPORTAL | HOME
Not secure | 172.20.10.6:5000/login
sheep-logo
LOGOUT
REGISTER
MY JOBS
Available Jobs
Python
Skills for python
Apply Now
Docker Desktop
Upgrade plan
boropir
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
Type here to search
26°C Cloudy
11:40 PM
11/2/2022

3)Create a IBM container registry and deploy jobportal app.







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