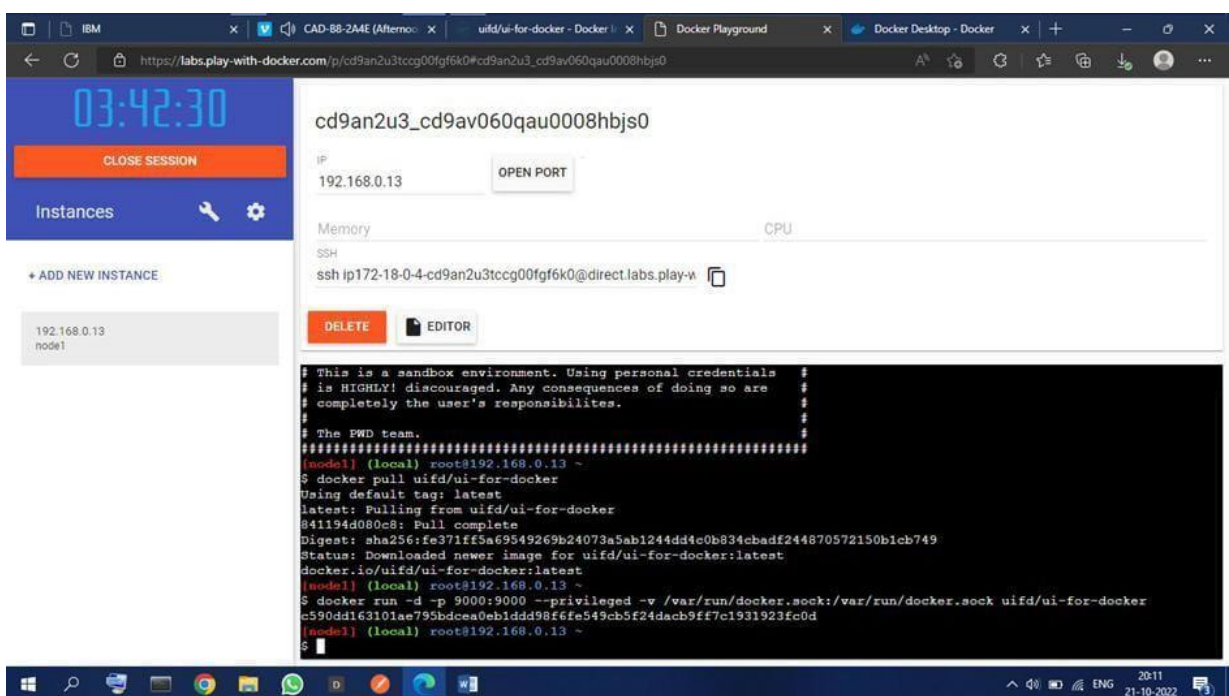
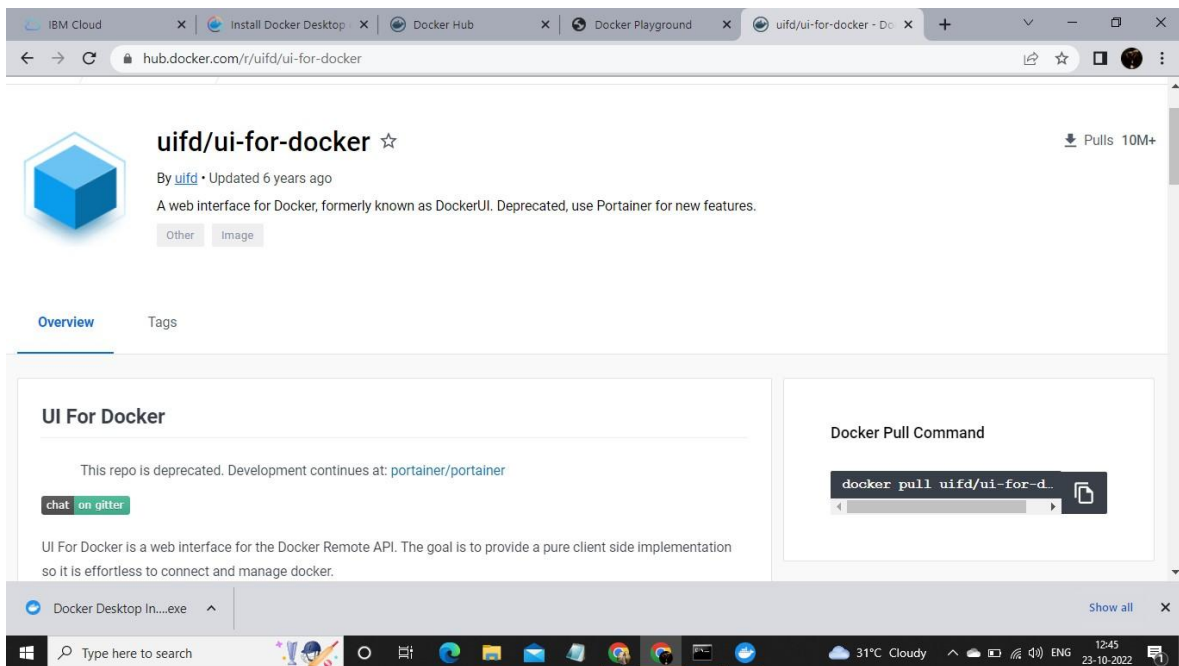


# DOCKER AND KUBERNETES

Assignment Date	21 October 2022
Student Name	YAMUNA.R
Student Roll Number	613019106078
Team ID	PNT2022TMID30665
Maximum Marks	2 Marks

## Question 1:

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



UI For Docker

Dashboard Containers Containers Network Images Networks Volumes Info Refresh

# UI For Docker


The UI for Docker container engine

Learn more.

Running Containers

- beautiful\_goldwasser Up About a minute

Status



Windows taskbar: 20:13 21-10-2022


UI For Docker

Dashboard Containers Containers Network Images Networks Volumes Info Refresh

Running Containers

- beautiful\_goldwasser Up About a minute

Status



Running Stopped Ghost

Containers created

1

0

21/10/2022

Images created

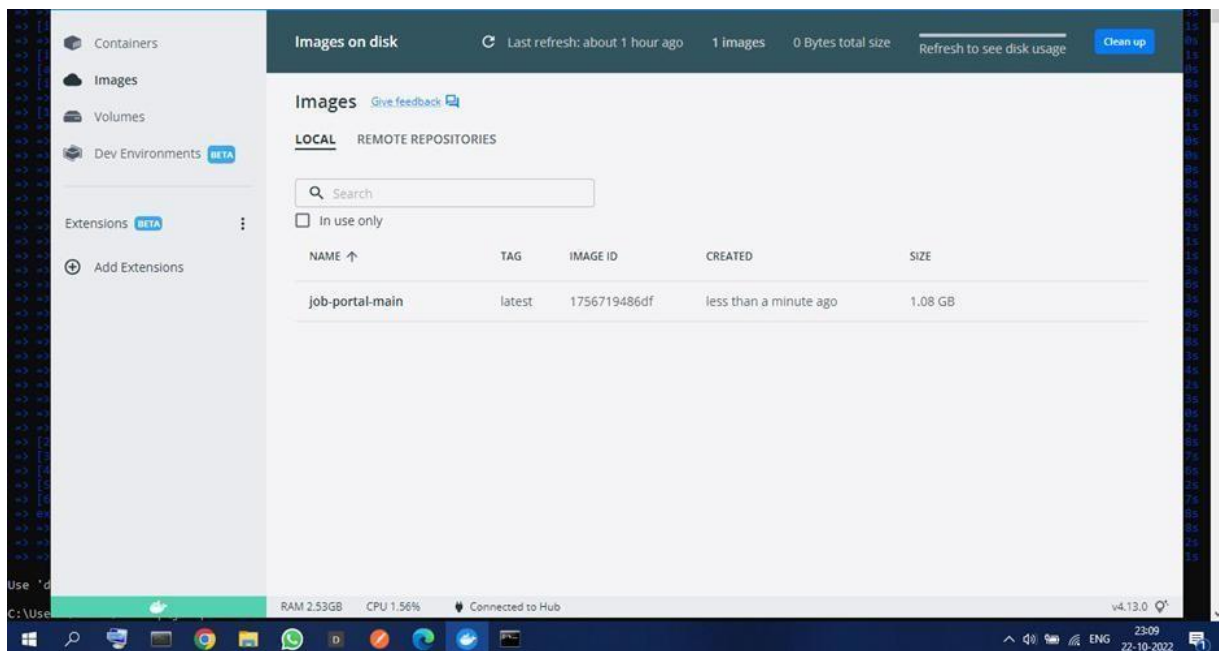
1

Windows taskbar: 20:13 21-10-2022

## Question 2:

Create a docker file for the job portal application and deploy it in Docker Desktop Application

```
C:\Windows\System32\cmd.exe
-> [internal] load build definition from Dockerfile
-> -- transferring dockerfile: 32B
-> [internal] load .dockerignore
-> -- transferring context: 2B
-> [internal] load metadata for docker.io/library/python:3.6
[auth] library/python:pull token for registry-1.docker.io
-> [internal] load build context
-- transferring context: 687B
-> [1/6] FROM docker.io/library/python:3.6@sha256:f8652afaf8bc25fbd22354d547d892591067aa4026a7fa9a6019df9f300af6fc
-- resolve docker.io/library/python:3.6@sha256:f8652afaf8bc25fbd22354d547d892591067aa4026a7fa9a6019df9f300af6fc
-- sha256:f8652afaf8bc25fbd22354d547d892591067aa4026a7fa9a6019df9f300af6fc 1.86kB / 1.86kB
-- sha256:d097a4007a8ec078df5ac31072359c2de510f82214c0448e826393b376d3b00d 2.22kB / 2.22kB
-- sha256:5426033007c5eaa4c4e21f180a0bc048e077634c000208a771f3f44b104 9.27kB / 9.27kB
-- sha256:0e295462c44cd0709201d21a750d1d072e85c1b50b54f730000e0077ade1e3 54.22kB / 54.22kB
-- sha256:90829c73652b02b97d5c07a54f0f3a921995a296c714b51a37ae67019231fd 5.15kB / 5.15kB
-- sha256:c5b7a361722f07eca53f5823ed71bae5d61d5d95cd5a95ab5d740cdd56 10.87kB / 10.87kB
-- sha256:6040e4811622031c027ccac322ca463937fd005f569a93e0f15c01aade718793 54.57kB / 54.57kB
-- sha256:0f974800df0a3f0b172f504fab85e0b4a0401a0ef0d9112efc7e4d3c78f7 196.51kB / 196.51kB
-- sha256:5e3b1213efc56598e78bd602963945c164de2a37205e06a62dad823124dc743 6.29kB / 6.29kB
-- extracting sha256:0e295462c44cd0709201d21a750d1d072e85c1b50b54f730000e0077ade1e3
-- sha256:9fd0f0c5033af20efad7e241bf5e7459c40ed105c5478676f41c1244bd96752 14.21kB / 14.21kB
-- extracting sha256:0e295462c44cd0709201d21a750d1d072e85c1b50b54f730000e0077ade1e3
-- extracting sha256:c057a0301722f07eca53f5823ed71bae5d61d5d95cd5a95ab5d740cdd56
-- sha256:404f02044bac0422ca522cbb0f25401c91fcea6080bf0e0e0243b2f31bab7 235B / 235B
-- sha256:c442be3e3b000bffc04dc1df13de53843ccc5f5d954a56848a0109a3a3f 2.21kB / 2.21kB
-- extracting sha256:6404e4811622031c027ccac322ca463937fd005f569a93e0f15c01aade718793
-- extracting sha256:0f974800df0a3f0b172f504fab85e0b4a0401a0ef0d9112efc7e4d3c78f7
-- sha256:5e3b1213efc56598e78bd602963945c164de2a37205e06a62dad823124dc743
-- extracting sha256:9fd0f0c5033af20efad7e241bf5e7459c40ed105c5478676f41c1244bd96752
-- extracting sha256:404f02044bac0422ca522cbb0f25401c91fcea6080bf0e0e0243b2f31bab7
-- extracting sha256:c442be3e3b000bffc04dc1df13de53843ccc5f5d954a56848a0109a3a3f
[2/6] WORKDIR /app
--> [3/6] ADD . /app
--> [4/6] COPY requirements.txt /app
--> [5/6] RUN python3 -m pip install -r requirements.txt
--> [6/6] RUN python3 -m pip install lm_db
--> exporting to image
--> exporting layers
--> writing image sha256:1756719486df003fad1dae305c5221513f2ff2d1b49a80242b22a20ef0379f19
--> naming to docker.io/library/job-portal-main
Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
C:\Users\VK-PC\Desktop\job-portal-main>
```



### Question 3:

Create an IBM container registry and deploy helloworld app or Job portal app.

```
PS C:\Users\HP> docker tag hello-world icr.io/0034ns/helloworld
PS C:\Users\HP> docker push icr.io/0034ns/helloworld
Using default tag: latest
The push refers to repository [icr.io/0034ns/helloworld]
e07ee1baac5f: Pushed
latest: digest: sha256:f54a58bc1aac5ea1a25d796ae155dc228b3f0e11d046ae276b39c4bf2f13d8c4 size: 525
```

### Question 4:

Create a Kubernetes cluster in IBM cloud and deploy helloworld image or job portal image and also expose the same app to run in node port.

