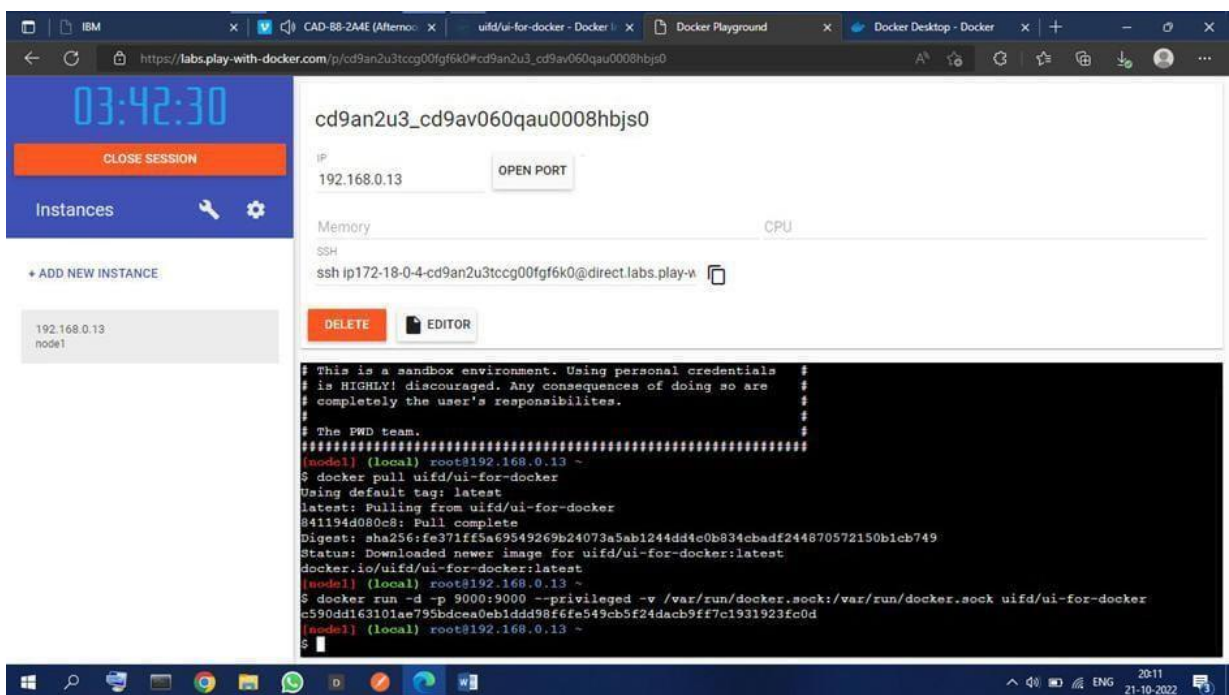
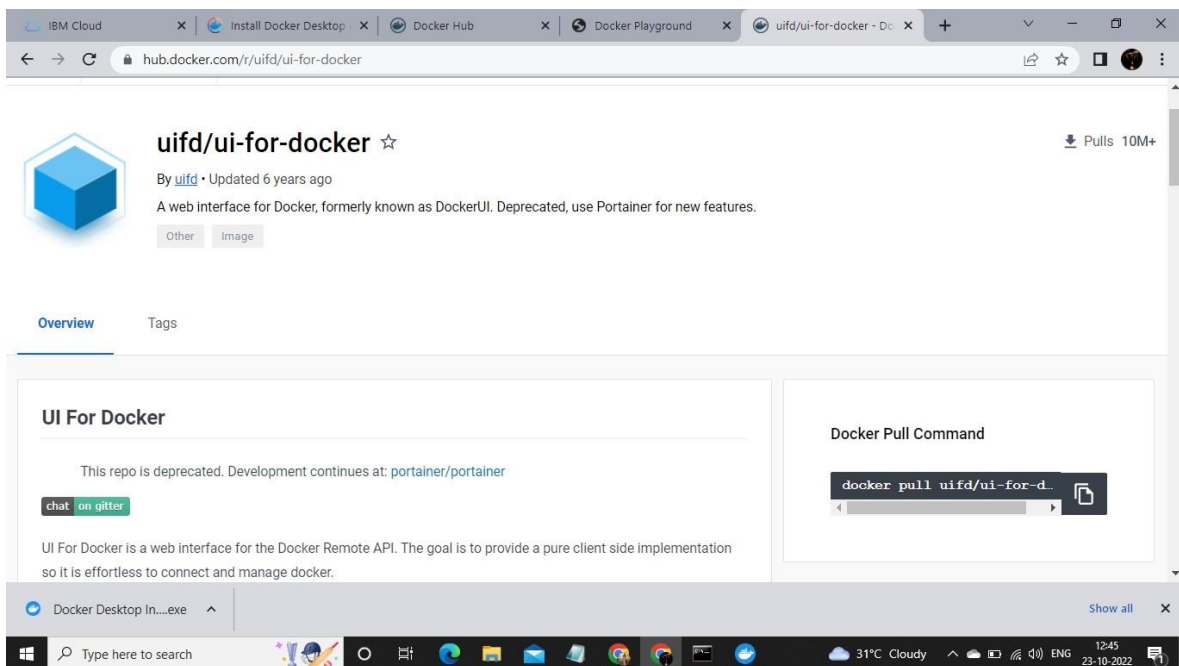


DOCKER AND KUBERNETES

Assignment Date	21 October 2022
Student Name	SATHYA O
Student Roll Number	613019205701
Team ID	PNT2022TMID30715
Maximum Marks	2 Marks

Question 1:

Pull an Image from docker hub and run it in 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

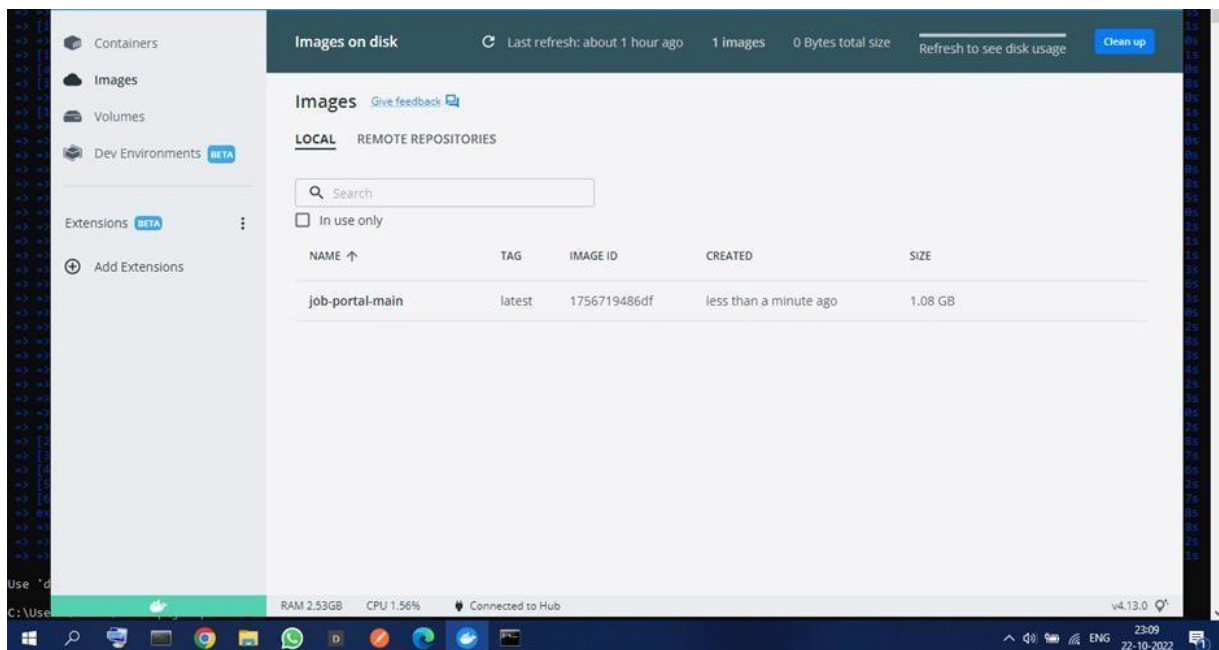
Question 2:

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:3.8
[auth] library/python:pull token for registry-1.docker.io
[Internal] load build context
-> transferring context: 68B
[1/6] FROM docker.io/library/python:3.8@sha256:f863afef88c25f6d22354d547d892591067aa4026a7f6a6019df9f300afefc
-> resolve docker.io/library/python:3.8@sha256:f863afef88c25f6d22354d547d892591067aa4026a7f6a6019df9f300afefc
-> sha256:f863afef88c25f6d22354d547d892591067aa4026a7f6a6019df9f300afefc 1.86kB / 1.86kB
-> sha256:8097a087aee079d75ac31b72359c3de510f82214c0448a926393b376d3b60d 2.22kB / 2.22kB
-> sha256:54260638007c5e3ad24c6e21f3809abbc8488a27634c809208eff71f344b104 9.27kB / 9.27kB
-> sha256:0e25546d543c8d369201d21a73add1d07865c1b95b74f32b009e0b77a6e1e3 54.92MB / 54.92MB
-> sha256:90820c73b52b02b97d5c07a54fb0f3e921995a296c714b53a32ae07019231fcd 5.15MB / 5.15MB
-> sha256:c5b7ae361722f07beca53f35823ed21baad506165d95cd5a95ab53d740cdd56 10.87MB / 10.87MB
-> sha256:649e481162201c027cac322ca40937f4080f569a93eef15c01aed0710793 34.57MB / 34.57MB
-> sha256:0f977489d4f03f6172f594f4ba85e084eab481a0fef01110fc7e445c78f7 156.51MB / 156.51MB
-> sha256:5e301213efc56598e78bd602983945c164de2a3728e08a62dad823124dc743 6.29MB / 6.29MB
-> extracting sha256:0e25546d543c8d369201d21a73add1d07865c1b95b74f32b009e0b77a6e1e3
-> sha256:9fd8f4c5633472e6fad7e241bf5e7459c40ed105c5478b76f41c1244bd96752 14.21MB / 14.21MB
-> extracting sha256:9b820c73b52b02b97d5c07a54fb0f3e921995a296c714b53a32ae07019231fcd 2.35 / 2.35
-> extracting sha256:c5b7ae361722f07beca53f35823ed21baad506165d95cd5a95ab53d740cdd56 4.05 / 4.05
-> sha256:404f02044bac0432ca522cb9f254b1c91fcea6080bfeef0be0b243b2f31bab7 235B / 235B
-> sha256:c4f42be2be53b900bffc040c1d0f13de53843ccc5f5d954a10848ac109a3a3f 2.21MB / 2.21MB
-> extracting sha256:649e481162201c027cac322ca40937f4080f569a93eef15c01aed0710793 27.34 / 27.34
-> extracting sha256:0f977489d4f03f6172f594f4ba85e084eab481a0fef01110fc7e445c78f7 131.45 / 131.45
-> extracting sha256:5e301213efc56598e78bd602983945c164de2a3728e08a62dad823124dc743 9.28 / 9.28
-> extracting sha256:9fd8f4c5633472e6fad7e241bf5e7459c40ed105c5478b76f41c1244bd96752 11.35 / 11.35
-> extracting sha256:404f02044bac0432ca522cb9f254b1c91fcea6080bfeef0be0b243b2f31bab7 0.05 / 0.05
-> extracting sha256:c4f42be2be53b900bffc040c1d0f13de53843ccc5f5d954a10848ac109a3a3f 2.28 / 2.28
[2/6] WORKDIR /app
-> [2/6] WORKDIR /app
[3/6] RUN . /app
-> [3/6] RUN . /app
[4/6] COPY requirements.txt /app
-> [4/6] COPY requirements.txt /app
[5/6] RUN python3 -m pip install -r requirements.txt
-> [5/6] RUN python3 -m pip install -r requirements.txt
[6/6] RUN python3 -m pip install lmw_db
-> [6/6] RUN python3 -m pip install lmw_db
-> exporting to image
-> exporting layers
-> exporting image sha256:1756719486df003fad5dae305c5221513f2ff2d1b49a0d242b22a28af0379f19
-> 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.

