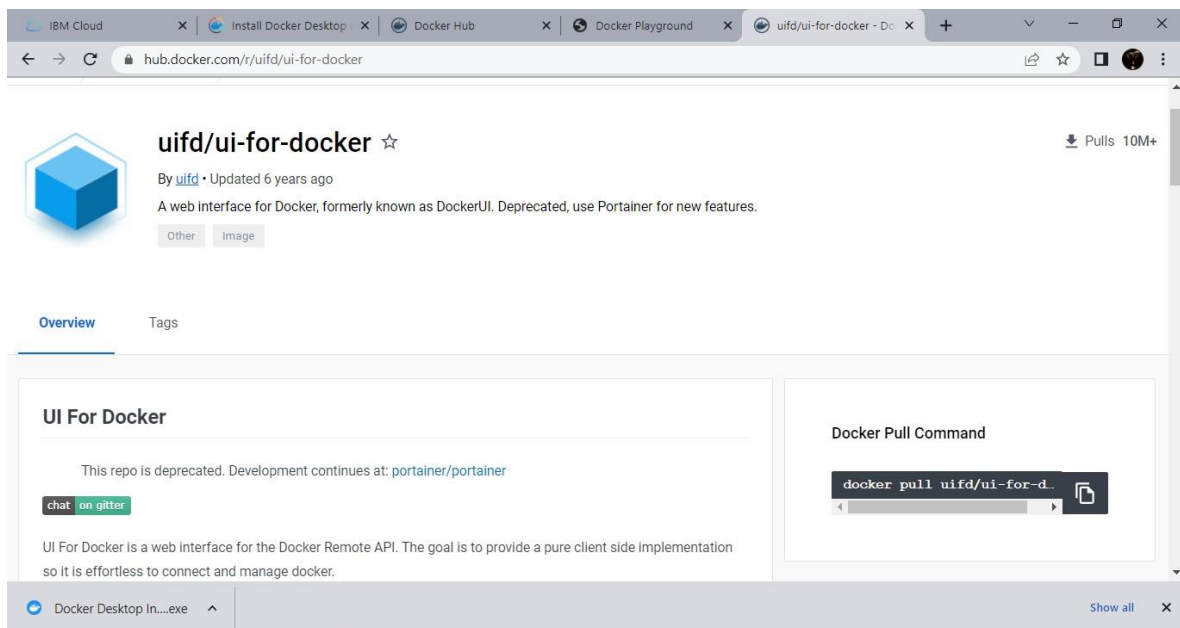


DOCKER AND KUBERNETES

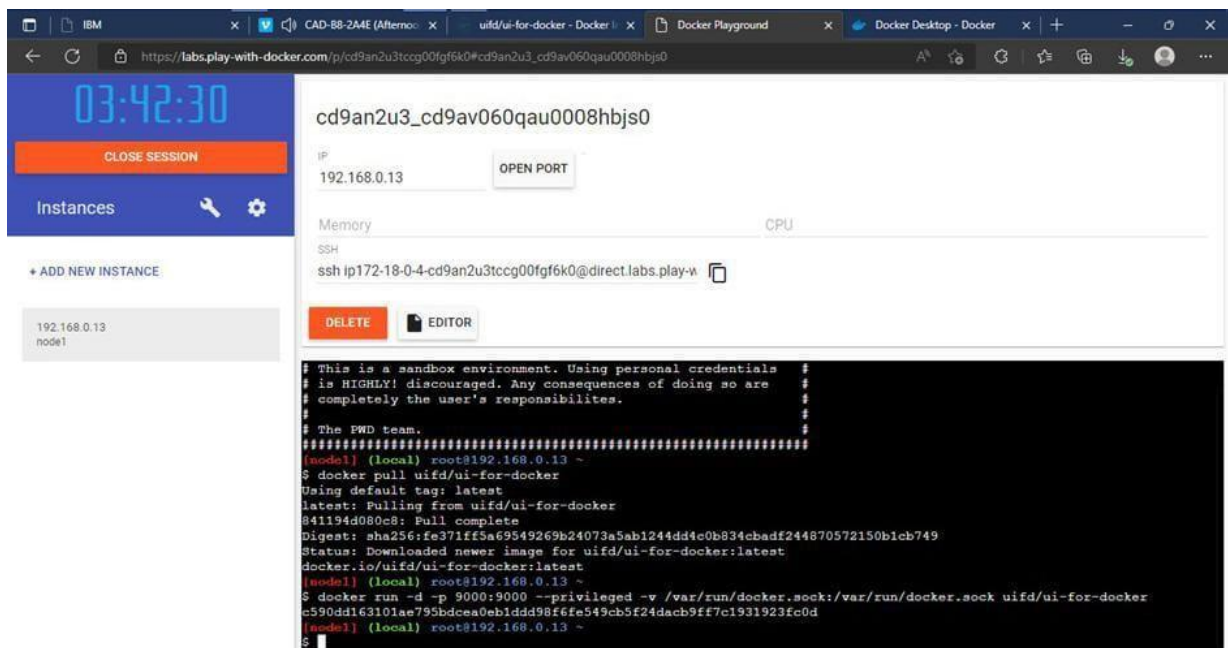
Assignment Date	26 October 2022
Student Name	K.Kowsika
Student Roll Number	613019106031
Team ID	PNT2022TMID30621
Maximum Marks	2 Marks

Question 1:

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



The screenshot shows the Docker Hub page for the repository `uifd/ui-for-docker`. The page includes the repository name, a star icon, and a note that the repository is deprecated and development continues at `portainer/portainer`. It also displays the Docker Pull Command: `docker pull uifd/ui-for-d`.



The screenshot shows the Docker Playground interface. On the left, there is a sidebar with a clock showing 03:42:30, a 'CLOSE SESSION' button, and a list of instances. The main area displays the instance details for `cd9an2u3_cd9av060qau0008hbjso`, including its IP address (192.168.0.13) and a terminal window. The terminal shows the following commands and output:

```
# This is a sandbox environment. Using personal credentials is HIGHLY discouraged. Any consequences of doing so are completely the user's responsibilities.
# The PWD team.
(node1) (local) root@192.168.0.13 ~
$ docker pull uifd/ui-for-docker
Using default tag: latest
latest: Pulling from uifd/ui-for-docker
841194d080c8: Pull complete
Digest: sha256:fe371ff5a69549269b24073a5ab1244dd4c0b834cbadf244870572150b1cb749
Status: Downloaded newer image for uifd/ui-for-docker:latest
docker.io/uifd/ui-for-docker:latest
(node1) (local) root@192.168.0.13 ~
$ docker run -d -p 9000:9000 --privileged -v /var/run/docker.sock:/var/run/docker.sock uifd/ui-for-docker
c590dd163101ae795bdcea0eb1ddd98f6fe549cb5f24dacb9ff7c1931923fc0d
(node1) (local) root@192.168.0.13 ~
$
```

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



Running Stopped Ghost


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

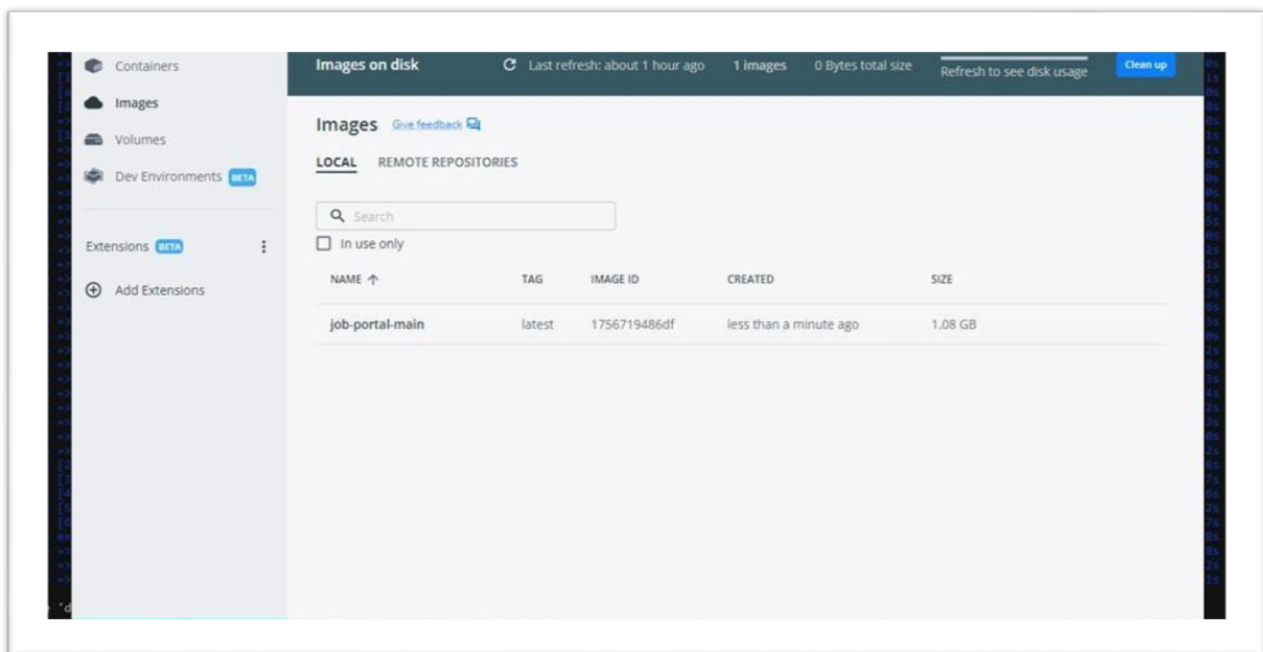
Images created

1

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:f852afef88c25f6d22354d547d892591067aa4026a7f6a60190f9f300afefc
-> resolve docker.io/library/python:3.8@sha256:f852afef88c25f6d22354d547d892591067aa4026a7f6a60190f9f300afefc
-> sha256:f852afef88c25f6d22354d547d892591067aa4026a7f6a60190f9f300afefc 1.86kB / 1.86kB
-> sha256:8007a007a0e079d75ac31872359c3de510f82214c0448e926393b376d3b60d 2.22kB / 2.22kB
-> sha256:54240638007c5e3ad24c6e21fc889abbc8488a27634c809208eff71f3f44b104 9.27kB / 9.27kB
-> sha256:0e29546d541c8bd369201d21a73add1d07865c1b95b74f32b009eb77a6e1e3 54.92MB / 54.92MB
-> sha256:90820c73b52b02b97d5c07a54fb0f3e921995a296c714b53a32ae07019231fcd 5.15MB / 5.15MB
-> sha256:c5b7ae361722f078eca53f35823ed21baad5061d5d95cd5a93ab53d740cdd96 10.87MB / 10.87MB
-> sha256:609e881622031c027cc322ca08097f4009f569a930ef15c01aad0710791 24.57MB / 54.57MB
-> sha256:9f977489d4f03f61727594f4ba85e08a6a841a0ef409112efc7e4d5c78f7 196.51MB / 196.51MB
-> sha256:5e301233efc56598e78bd602983945c164de2a37295e08a63dad823124d743 6.29MB / 6.29MB
-> extracting sha256:0e29546d541c8bd369201d21a73add1d07865c1b95b74f32b009eb77a6e1e3
-> sha256:9fdd9dc56334f2e6fad7e241bf5e7459c40ed185c5478b76f41c1244bd96752 14.21MB / 14.21MB
-> extracting sha256:9b820c73b52b02b97d5c07a54fb0f3e921995a296c714b53a32ae07019231fcd 2.38
-> extracting sha256:c5b7ae361722f078eca53f35823ed21baad5061d5d95cd5a93ab53d740cdd96 4.86
-> sha256:404f02044bac0432ca522cb097254b1c91fcea600bfeef0be0b243b2f31bab7 235B / 235B
-> sha256:c4f42be2be53b900ebffcc040c1d0f13de538434ccc5f5d954a50848ac109a3a3f 2.21MB / 2.21MB
-> extracting sha256:609e881622031c027cc322ca08097f4009f569a930ef15c01aad0710791 27.34
-> extracting sha256:c5b7ae361722f078eca53f35823ed21baad5061d5d95cd5a93ab53d740cdd96 131.45
-> extracting sha256:5e301233efc56598e78bd602983945c164de2a37295e08a63dad823124d743 6.29
-> extracting sha256:9fdd9dc56334f2e6fad7e241bf5e7459c40ed185c5478b76f41c1244bd96752 11.35
-> extracting sha256:404f02044bac0432ca522cb097254b1c91fcea600bfeef0be0b243b2f31bab7 0.06
-> extracting sha256:c4f42be2be53b900ebffcc040c1d0f13de538434ccc5f5d954a50848ac109a3a3f 2.24
[2/6] WORKDIR /app
-> [2/6] WORKDIR /app
[3/6] RUN . /app
-> [3/6] COPY requirements.txt /app
[4/6] RUN python3 -m pip install -r requirements.txt
-> [4/6] RUN python3 -m pip install -r requirements.txt
[5/6] RUN python3 -m pip install lm_db
-> [5/6] RUN python3 -m pip install lm_db
-> exporting image
-> exporting layers
-> exporting image sha256:1756719486df002fad5dae305c5221513f2ff2d1b49a08d242b22a28af379f19
-> 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:

```
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
```

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

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.

