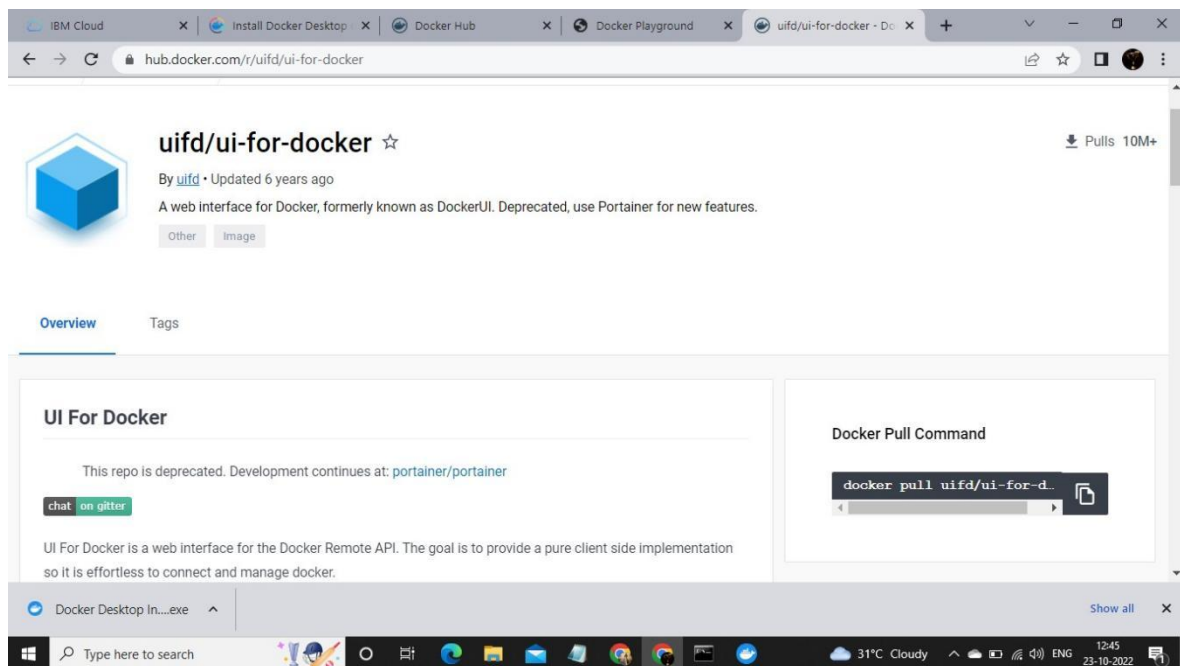


DOCKER AND KUBERNETES

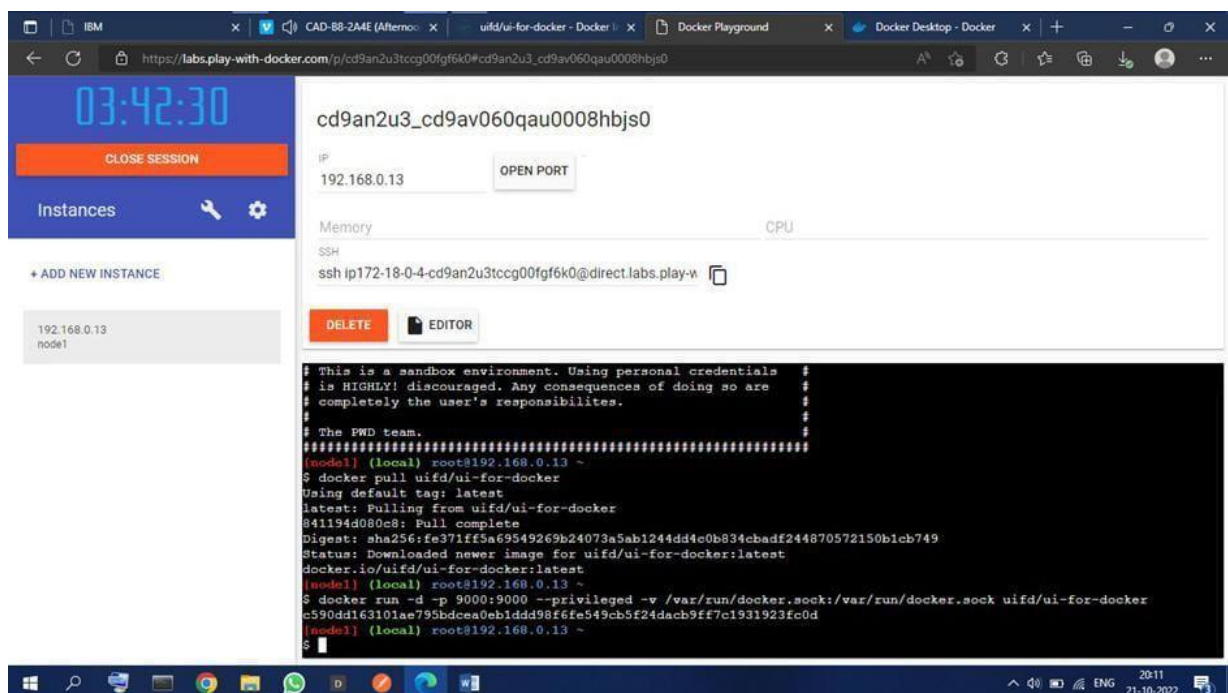
Assignment Date	21 October 2022
Student Name	SUSHMITHA G
Student Roll Number	613019104085
Team ID	PNT2022TMID30600
Maximum Marks	2 Marks

Question 1:

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



The screenshot shows a web browser window with the URL `hub.docker.com/r/uifd/ui-for-docker`. The page displays the repository `uifd/ui-for-docker` by `uifd`, updated 6 years ago. It includes a description: "A web interface for Docker, formerly known as DockerUI. Deprecated, use Portainer for new features." There are tabs for "Overview" and "Tags". A "UI For Docker" section states: "This repo is deprecated. Development continues at: [portainer/portainer](#)". A "chat on gitter" button is present. A "UI For Docker" section also states: "UI For Docker is a web interface for the Docker Remote API. The goal is to provide a pure client side implementation so it is effortless to connect and manage docker." A "Docker Pull Command" section shows the command: `docker pull uifd/ui-for-d`.



The screenshot shows the Docker Playground interface. On the left, there's a sidebar with a clock showing 03:42:30, a "CLOSE SESSION" button, and an "Instances" section with a list of instances. The main area shows the details of an instance named `cd9an2u3_cd9av060qau0008hbjs0` with IP `192.168.0.13`. It includes buttons for "OPEN PORT", "DELETE", and "EDITOR". Below this, there's a terminal window showing 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
c590dd163101ae795bdcea0eb1ddd98f6fe549cb5f24dcb9ff7c1931923fc0d
(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



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

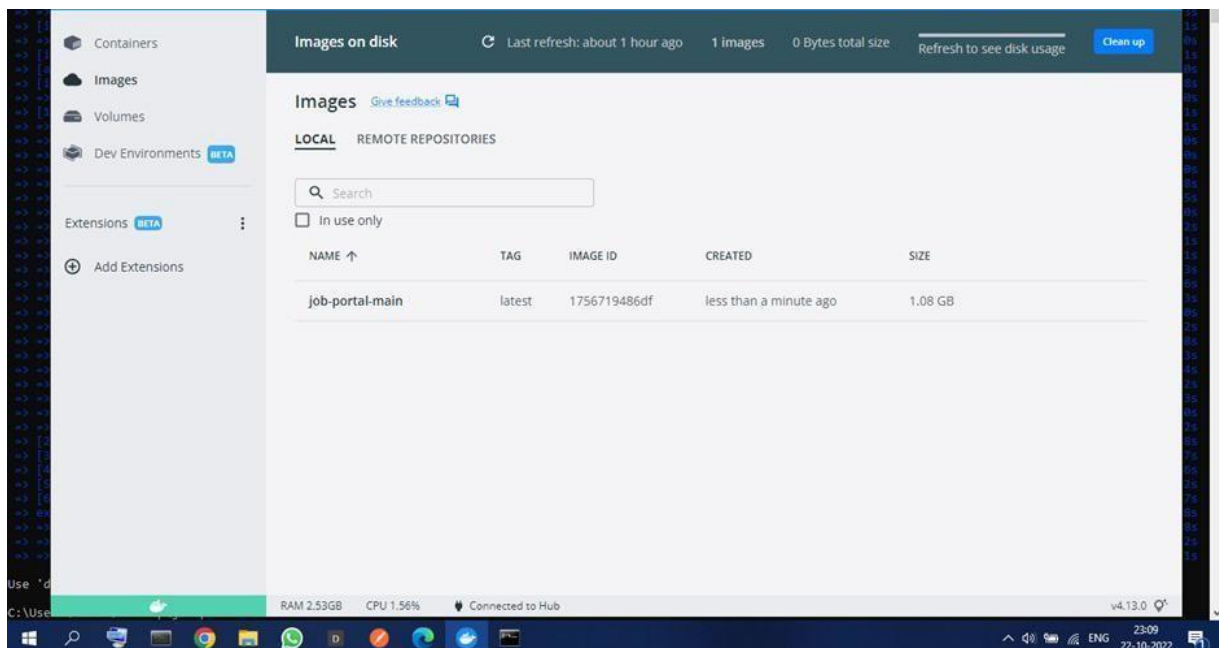
Windows taskbar: 20:13 21-10-2022

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: 697B
[1/6] FROM docker.io/library/python:3.6@sha256:f8653afebf8c25f6d22354d547d002501067aa4026a7f9a0e819cf9f300afe9fc
resolving docker.io/library/python:3.6@sha256:f8653afebf8c25f6d22354d547d002501067aa4026a7f9a0e819cf9f300afe9fc
sha256:f8653afebf8c25f6d22354d547d002501067aa4026a7f9a0e819cf9f300afe9fc 1.86kB / 1.86kB
sha256:0807da907a8ec079df5ac31072359c2de05108221ca048a9e26393b376d3b60d 2.22kB / 2.22kB
sha256:5428063d0d75e3ad24c6e21ffc809abbca88a27634c0092086ef73f3f44b10d 9.27kB / 9.27kB
sha256:be29546d541cd0d30920d121a73a9d1db78665c1b95b74f32b00e0b77a6e13 54.92MB / 54.92MB
sha256:90829c73052b0b97d5c07a54f60f3e921995a296c714b53a32ae67019231fcd 5.15MB / 5.15MB
sha256:b5b7ae36172707bec45f35823ee21baa5061dd65c45e9a552d748cd56 10.97MB / 10.97MB
sha256:90829c73052b0b97d5c07a54f60f3e921995a296c714b53a32ae67019231fcd 54.57MB / 54.57MB
sha256:07974806df03f8b172f594fab85e0b4080481a0fef0112efc7e4d3c78f7 196.51MB / 196.51MB
sha256:5e3b1213efc56598e78bd0e2983945c164dc2a37290e06a62dada82124d743 6.29MB / 6.29MB
extracting sha256:be29546d541cd0d30920d121a73a9d1db78665c1b95b74f32b00e0b77a6e13
sha256:9fd0f9dc563472e6fad7e241bf5e7450c40ed105c5478676f41c1244bd96752 14.21MB / 14.21MB
extracting sha256:9b82b2c73052b0b97d5c07a54f60f3e921995a296c714b53a32ae67019231fcd
extracting sha256:cdb57ae36172707bec45f35823ee21baa5061dd65c45e9a552d748cd56
sha256:404f02044bac432ca522cbb9f25401c91fcea080bfeef0eb0b243b23f31bab7 235B / 235B
sha256:c4f42be3b5b900ebf9c040c1df13de538434cccf5d954a568406169a3a3f
extracting sha256:6a94e04811622b1c1027cca322caae393f7d885f59a936f15c01ade718793
extracting sha256:07974806df03f8b172f594fab85e0b4080481a0fef0112efc7e4d3c78f7
extracting sha256:5e3b1213efc56598e78bd0e2983945c164dc2a37290e06a62dada82124d743
extracting sha256:9fd0f9dc563472e6fad7e241bf5e7450c40ed105c5478676f41c1244bd96752
extracting sha256:404f02044bac432ca522cbb9f25401c91fcea080bfeef0eb0b243b23f31bab7
extracting sha256:c4f42be3b5b900ebf9c040c1df13de538434cccf5d954a568406169a3a3f
[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 llm_dh
exporting to image
-> exporting layers
-> writing image sha256:1756719406df002fa5d3e3053221513f2f2d1b4a0d242b22a28af0379f19
-> 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.

