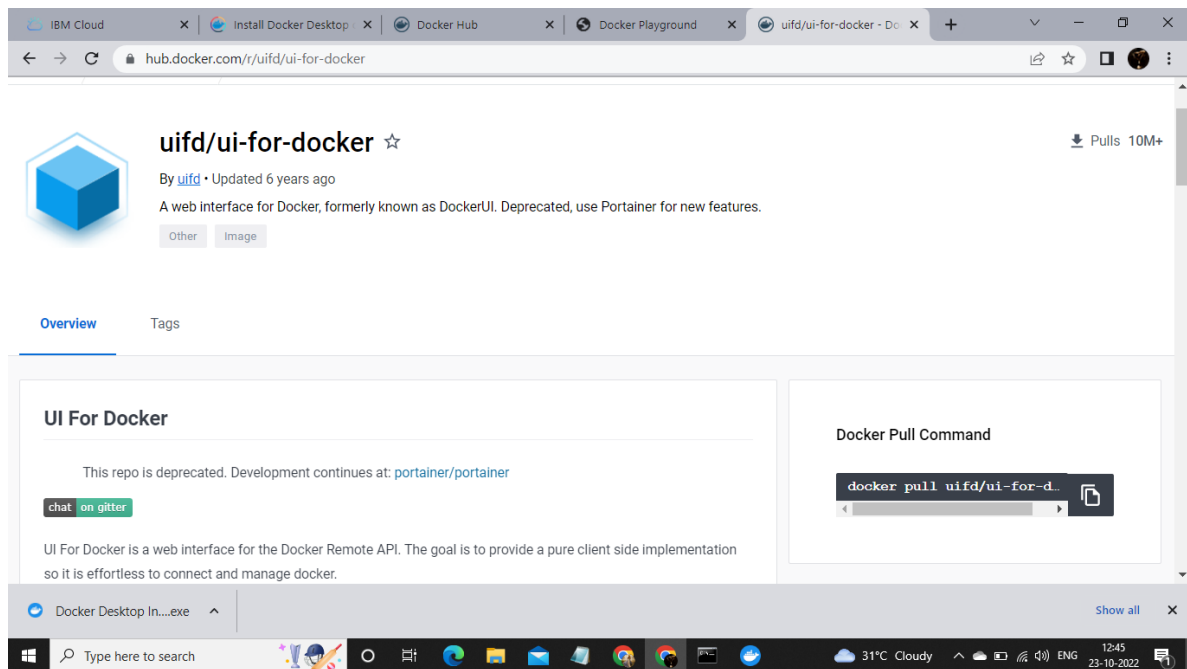


DOCKER AND KUBERNETES

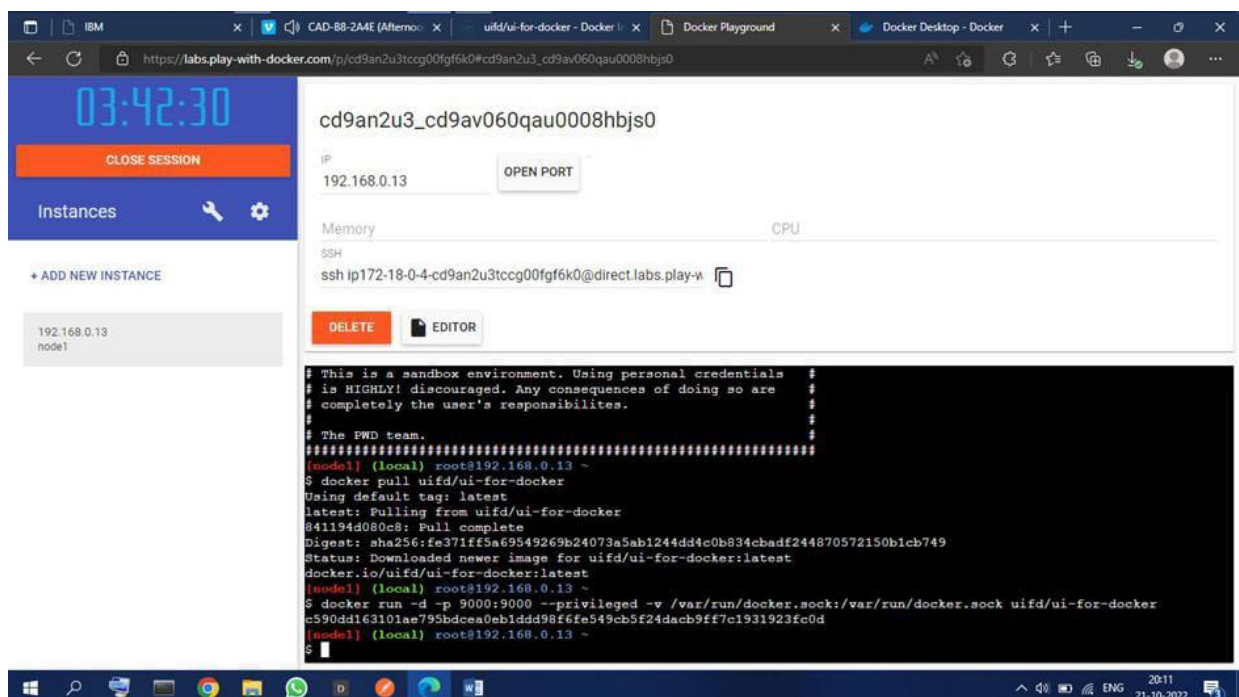
Assignment Date	21 October 2022
Student Name	AGILA P
Student Roll Number	613019104001
Team ID	PNT2022TMID30524
Maximum Marks	2 Marks

Question 1:

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



The screenshot shows a web browser window with multiple tabs. The active tab is 'uifd/ui-for-docker - Docker Hub'. The page displays the Docker Hub profile for 'uifd/ui-for-docker', which is marked as deprecated. 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 'Docker Pull Command' box shows the command: `docker pull uifd/ui-for-d`. The bottom of the browser shows a Windows taskbar with various icons and a system tray displaying '31°C Cloudy' and the date '23-10-2022'.



The screenshot shows the Docker Playground interface in a web browser. The top bar includes a timer '03:42:30' and a 'CLOSE SESSION' button. Below this is an 'Instances' section with a '+ ADD NEW INSTANCE' button. A list of instances shows '192.168.0.13 node1'. The main area displays details for the selected instance: 'cd9an2u3_cd9av060qau0008hbjs0'. It shows the IP '192.168.0.13', an 'OPEN PORT' button, and an SSH command: `ssh ip172-18-0-4-cd9an2u3tccg00fg6k0@direct.labs.play-w`. There are 'DELETE' and 'EDITOR' buttons. A terminal window at the bottom 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
c590dd163101ae795bdcea0eb1ddd98f6fe549cb5f24dadb9ff7c1931923fc0d
(node1) (local) root@192.168.0.13 ~
```

The bottom of the browser shows a Windows taskbar with various icons and a system tray displaying '20:11' and '21-10-2022'.

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

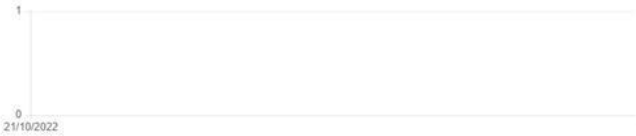
- beautiful_goldwasser Up About a minute

Status




Running Stopped Ghost

Containers created



Images created



Windows taskbar: 20:13 21-10-2022

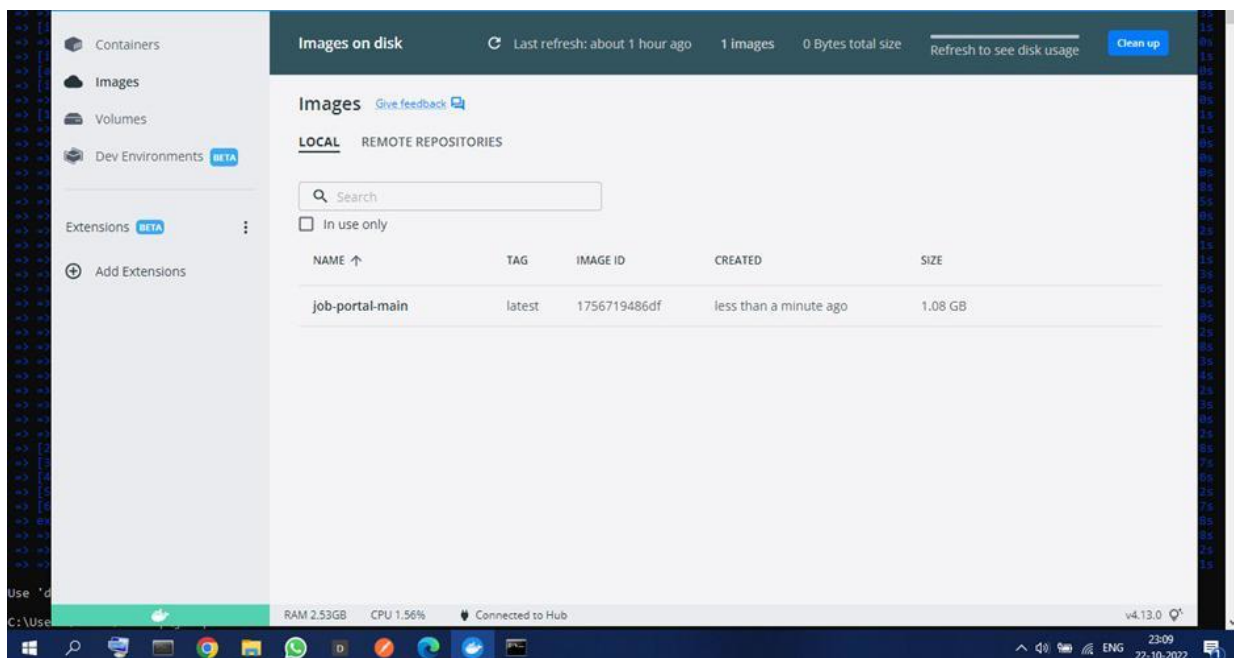
Question 2:

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
-> [Internal] load dockerfile: 328
-> [Internal] load .dockerignore
-> [Internal] load context: 28
-> [Internal] load metadata for docker.io/library/python:3.6
-> [auth] library/python:pull token for registry-1.docker.io
-> [Internal] load build context
-> [Internal] load context: 6878
-> [1/6] FROM docker.io/library/python:3.6@sha256:f8022afaf80222f8d22354d547d802591067aa4026a7fa06d19d9f300af6fc
-> [2/6] RUN apt-get update && apt-get install -y python3-pip python3-dev python3-setuptools python3-wheel python3-tk
-> [3/6] RUN python3 -m pip install -r requirements.txt
-> [4/6] COPY requirements.txt /app
-> [5/6] RUN python3 -m pip install -e requirements.txt
-> [6/6] RUN python3 -m pip install lba_db
-> exporting to image
-> exporting layers
-> writing image sha256:1756719486df002f0d5ae305c5221513f2f2d1b49a80242b21a28af0379f19
-> 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.

