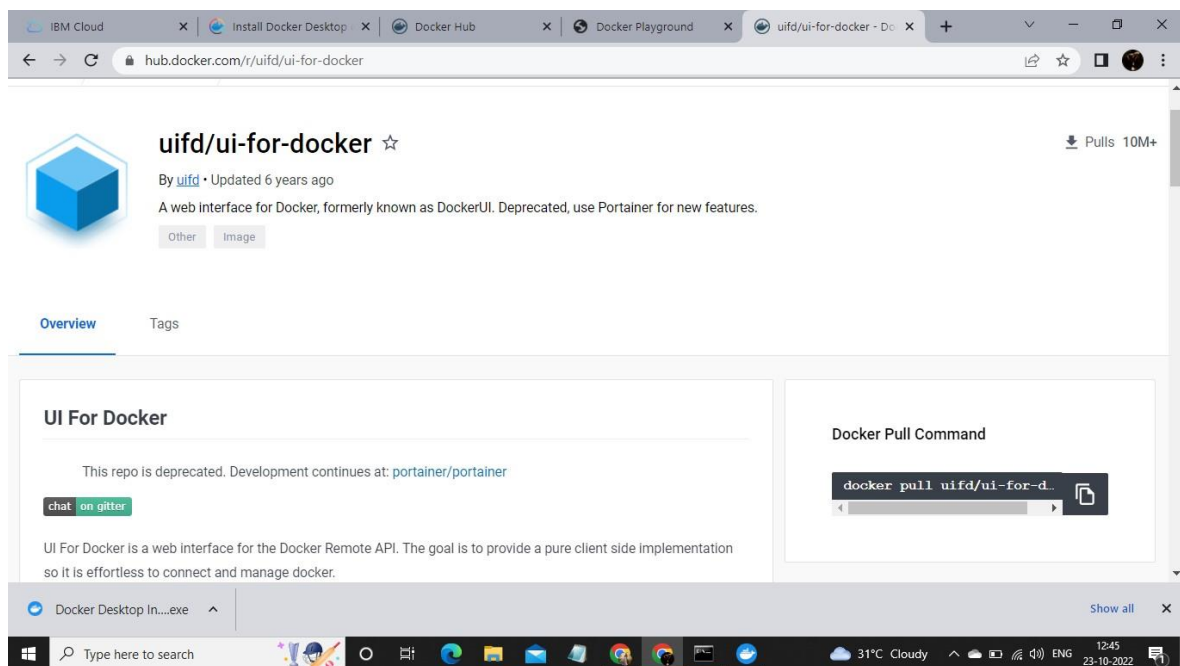


DOCKER AND KUBERNETES

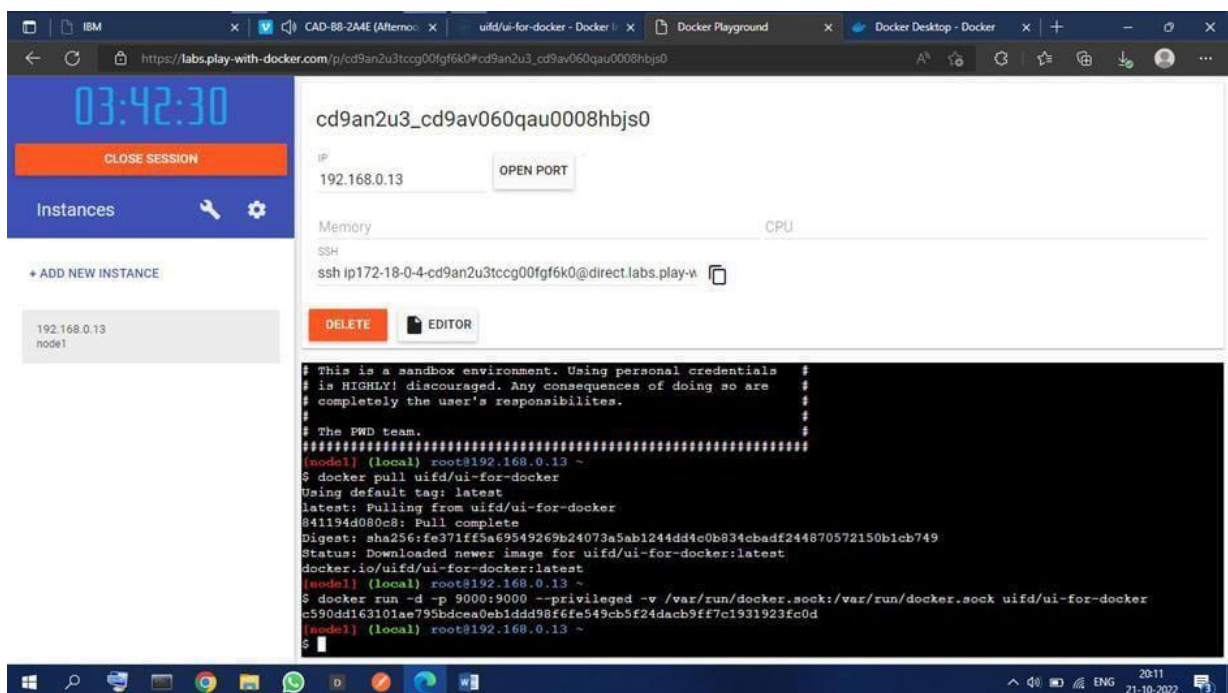
Assignment Date	21October2022
Student Name	S. Swetha
Student Roll Number	613019205050
Team ID	PNT2022TMID30734
Maximum Marks	2Marks

Question1:

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 URL bar shows 'hub.docker.com/r/uifd/ui-for-docker'. 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.' and a 'Pulls 10M+' badge. Below the description, there are tabs for 'Overview' and 'Tags'. The 'Overview' tab is selected, showing a 'UI For Docker' section with a note that development continues at 'portainer/portainer'. A 'chat on gitter' button is also present. On the right, a 'Docker Pull Command' box shows the command: 'docker pull uifd/ui-for-d...'. The Windows taskbar at the bottom shows the time as 12:45 on 23-10-2022.



The screenshot shows the Docker Playground interface in a web browser. The URL bar shows 'https://labs.play-with-docker.com/p/cd9an2u3tccg00fgf6k0#cd9an2u3_cd9av060qau0008hbjso'. The interface displays a terminal window with the following content:

```
# This is a sandbox environment. Using personal credentials is HIGHLY discouraged. Any consequences of doing so are completely the user's responsibilities.
# The FWD 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 ~
$
```

The interface also shows a 'CLOSE SESSION' button, an 'Instances' section with a '+ ADD NEW INSTANCE' button, and a list of instances with the IP address 192.168.0.13 and the name 'node1'. The Windows taskbar at the bottom shows the time as 20:11 on 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

UI For Docker

Dashboard Containers Containers Network Images Networks Volumes Info Refresh

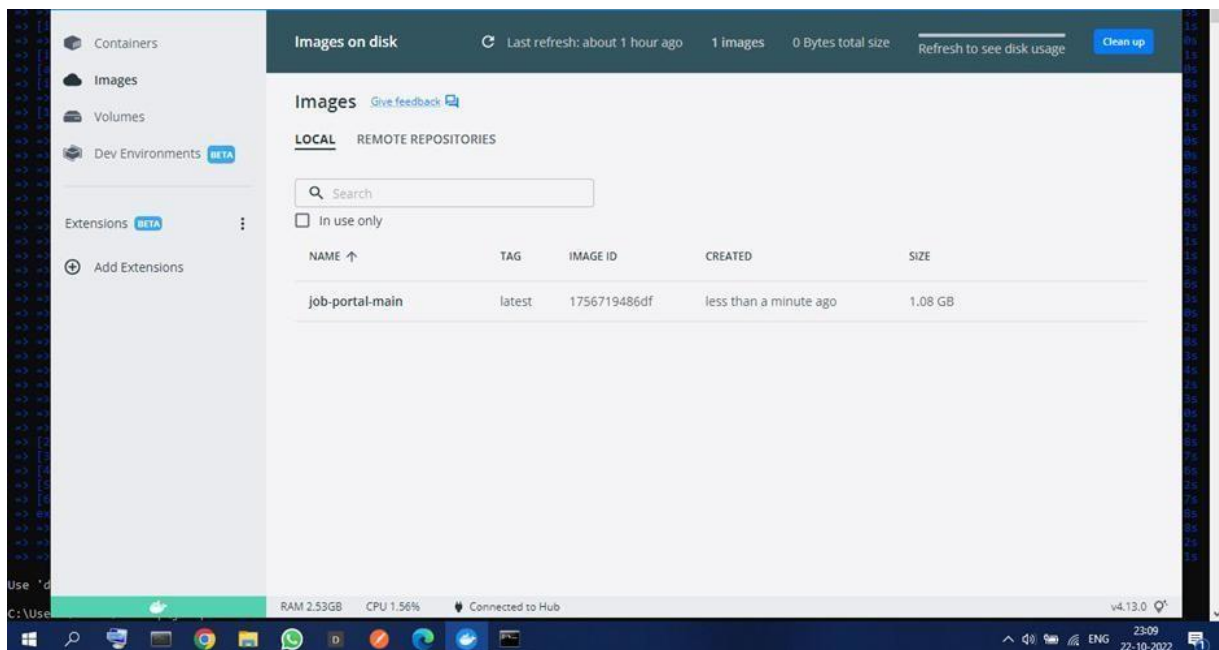
Running Containers

- beautiful_goldwasser Up About a minute

Status

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 context: 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:f8652afe18c25f6d22354d547d002501067aa4026a7f9a0e819d9f9300afe1c
>> resolve docker.io/library/python:3.6@sha256:f8652afe18c25f6d22354d547d002501067aa4026a7f9a0e819d9f9300afe1c
>> sha256:f8652afe18c25f6d22354d547d002501067aa4026a7f9a0e819d9f9300afe1c 1.86kB / 1.86kB
>> sha256:0807a907a8ec079df5ac31072359c2de0510f8224c0448a9d26393b376d3b60d 2.22kB / 2.22kB
>> sha256:54206e3d0d75e3ad24c6e21ffc809abb0480a27634c0092086ef73f3f44b10d 9.27kB / 9.27kB
>> sha256:be29546d541cd9d309201d21a73a9d1db78605c1b95b74f32b000eb77a6e13 54.92MB / 54.92MB
>> sha256:9082c73052b01097d5c07a54f60f3e921995a290c714b53a32ae67019231fcd 5.15MB / 5.15MB
>> sha256:05b7a671727407bec453f35823ee21ba05061dd95c0f5a652d748cd56 10.07MB / 10.07MB
>> sha256:05b7a671727407bec453f35823ee21ba05061dd95c0f5a652d748cd56 10.07MB / 10.07MB
>> sha256:0f974280d6f03f8172f594fab85e0b0481a0fe9112efc7e4d3c78f7 196.51MB / 196.51MB
>> sha256:5e3b1213efc56598e78bd0e2983945c164de2a37290e06a62dada82124d743 6.20MB / 6.20MB
>> extracting sha256:0e29546d541cd9d309201d21a73a9d1db78605c1b95b74f32b000eb77a6e13
>> sha256:0fd9d6c5633f2e6fad7e241bf5e7450c40ed105c5478b76f41c1244bd96752 14.21MB / 14.21MB
>> extracting sha256:9b82b2c73052b01097d5c07a54f60f3e921995a290c714b53a32ae67019231fcd
>> extracting sha256:cd5b7ae3b61722f67beca53f35823ee21ba05061dd95c0f5a652d748cd56
>> sha256:404782044bac432ca522cbb9f25401c91fcea080bfeef0eb0b243b23f31ba07 235B / 235B
>> sha256:f42be0640c0f040c1df13de53843cccf5d9545a68406169a3a3f
>> extracting sha256:6a94e4811622b1c1027cca322ca6393f7db85f509a910e6f15c01ade718793
>> extracting sha256:0f974280d6f03f8172f594fab85e0b0481a0fe9112efc7e4d3c78f7
>> extracting sha256:5e3b1213efc56598e78bd0e2983945c164de2a37290e06a62dada82124d743
>> extracting sha256:9fd9d6c5633f2e6fad7e241bf5e7450c40ed105c5478b76f41c1244bd96752
>> extracting sha256:404782044bac432ca522cbb9f25401c91fcea080bfeef0eb0b243b23f31ba07
>> extracting sha256:c4f42be32be3b900ebf7c040c1df13de53843cccf5d9545a68406169a3a3f
[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 sha256:175671940d6f002fa5d3e53221513f2f2d1b4a0d242b22a28af0379f19
>> naming to docker.io/library/job-portal-main
1.80s
0.30s
1.11s
0.00s
9.11s
0.00s
1.81s
0.00s
639.11s
1.11s
0.00s
0.00s
2.22kB
0.00s
0.00s
0.27kB / 0.27kB
120.85s
38.55s
86.00s
54.92MB / 54.92MB
386.15s
146.15s
131.45s
27.32s
187.66s
2.35s
4.00s
194.25s
27.32s
131.45s
0.25s
11.32s
0.00s
2.28s
2.88s
2.60s
372.25s
9.75s
6.85s
0.25s
0.15s
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>
```



Question3:

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
```

Question4:

Create a Kubernetes cluster in IBM cloud and deploy helloworld image or job portal image and also expose the same app to run in no deport.

