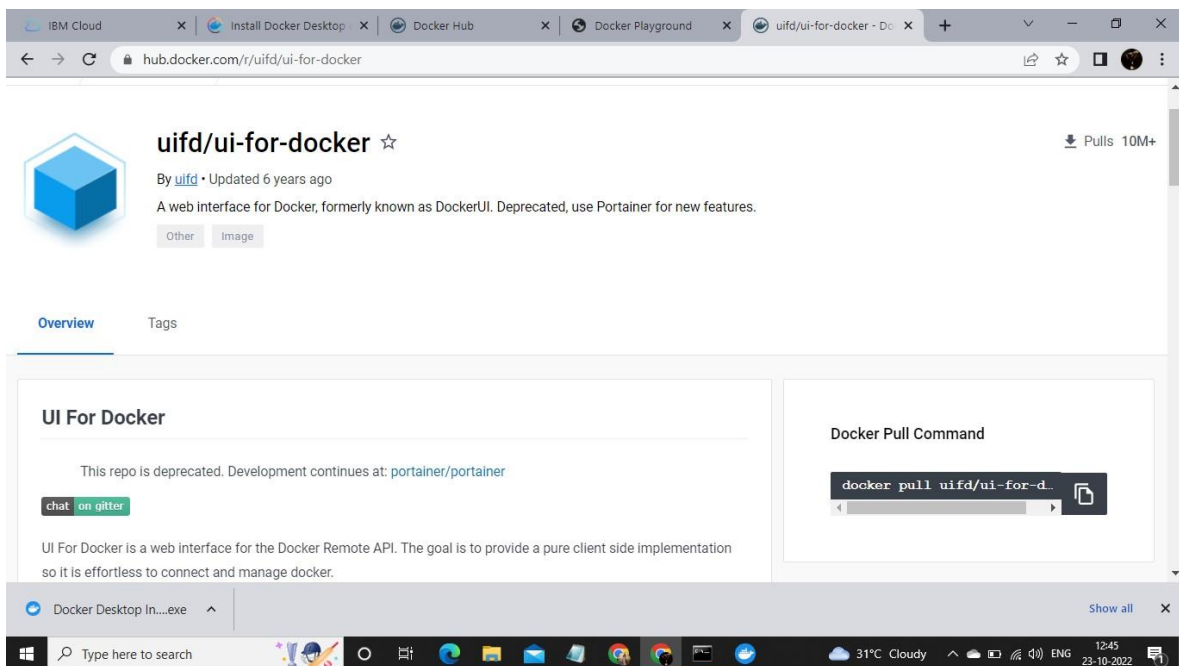


DOCKERANDKUBERNETES

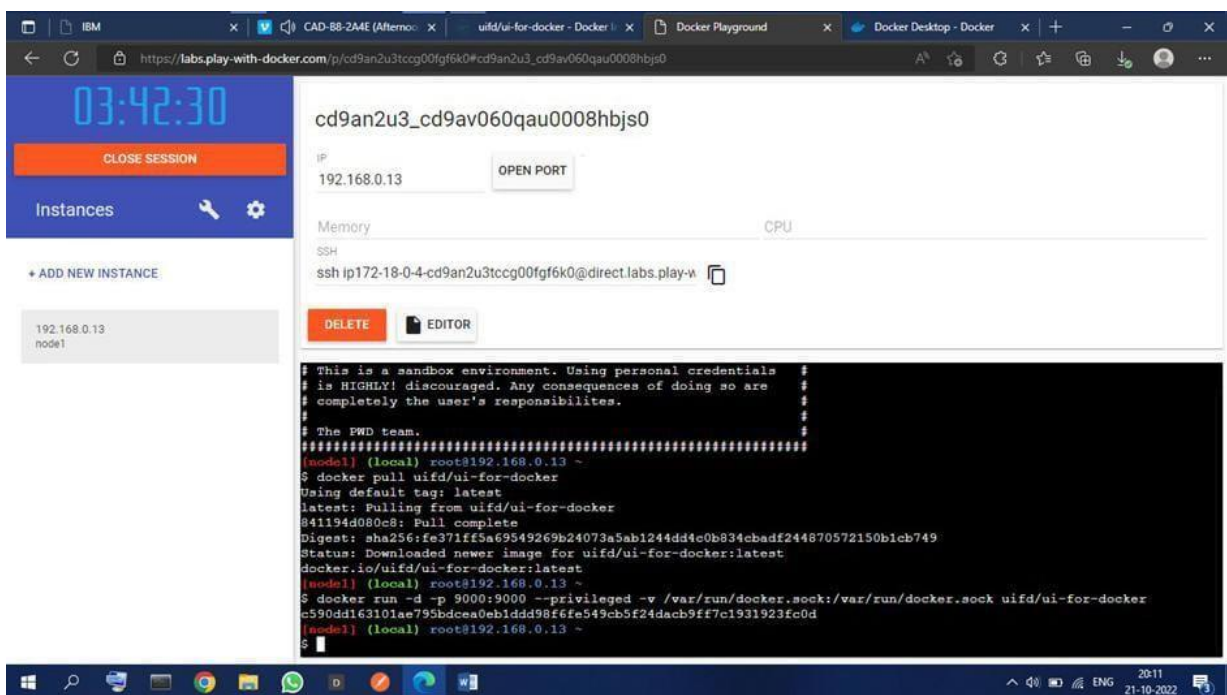
AssignmentDate	21October2022
StudentName	N. Nivetha
StudentRoll Number	6130192034
TeamID	PNT2022TMID30734
MaximumMarks	2Marks

Question1:

PullanImagefromdockerhubandrunitindockerplayground.



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.' 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 the repo is deprecated and development continues at 'portainer/portainer'. There is also a 'chat on gitter' button. To the right, a 'Docker Pull Command' box shows the command: `docker pull uifd/ui-for-d...`. The bottom of the browser window shows a Windows taskbar with various icons and a system tray displaying '31°C Cloudy' and '12:45 23-10-2022'.



The screenshot shows a Docker Playground interface. On the left, there is a sidebar with a digital clock showing '03:42:30', a 'CLOSE SESSION' button, and a list of instances. One instance is listed with IP '192.168.0.13' and name 'node1'. The main area displays the details for the selected instance, including its IP address '192.168.0.13', memory usage, CPU usage, and an SSH command: `ssh ip172-18-0-4-cd9an2u3tccg00fgf6k0@direct.labs.play-w`. Below this, there are 'DELETE' and 'EDITOR' buttons. The bottom section shows a terminal window with a series of commands and their outputs. The commands include pulling the 'uifd/ui-for-docker' image and running it with specific flags. The terminal output shows the image being pulled from Docker Hub and the container starting successfully.

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

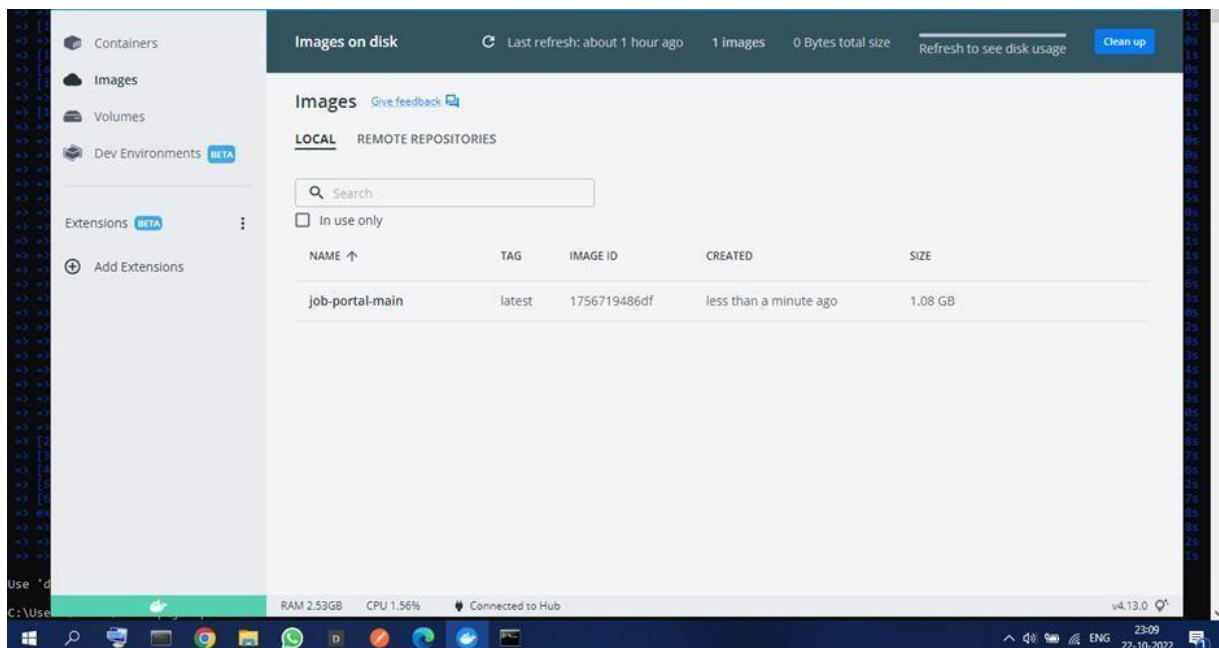
Question2:

Create a dockerfile 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
-> sha256:8097a087a0ec079df5ac31b72359c3de510f82214c0448e926393b376d3b60d 2.22kB / 2.22kB
-> sha256:542606380d7c5e3ad24c6e21f3809abbc8488a27634c809208eff71f3f44b104 9.27kB / 9.27kB
-> sha256:0e28546d541c8d369201d21a73add1d07865c1b95b74f32b009e0b77a6e1e3 54.92MB / 54.92MB
-> sha256:90820c73b52b02b97d5c07a54fb0f3e921995a296c714b53a32ae07019231fcd 5.15MB / 5.15MB
-> sha256:c5b7ae361722f07beca53f35823ed21baad506165d95cd5a95ab530740cdd56 10.87MB / 10.87MB
-> sha256:689e4811622011c027cac322a40937f4080f569a03e0f15c01aed071b793 34.57MB / 34.57MB
-> sha256:9f97489ddf03f6e172f594f4ba85e04e6a841a0fef09112efc7e4d3c78f7 156.51MB / 156.51MB
-> sha256:5e301213efc56598e78bd602983945c164de2a37285e06a63dad823124dc743 6.29MB / 6.29MB
-> extracting sha256:0e28546d541c8d369201d21a73add1d07865c1b95b74f32b009e0b77a6e1e3
-> sha256:9fd8f4c5633472e6fad7e241bf5e7450c40ed105c5478b76f41c1244bd96752 14.21MB / 14.21MB
-> extracting sha256:9b820c73b52b02b97d5c07a54fb0f3e921995a296c714b53a32ae07019231fcd 2.35 / 2.35
-> extracting sha256:c5b7ae361722f07beca53f35823ed21baad506165d95cd5a95ab530740cdd56 4.05 / 4.05
-> sha256:404f02044bac0432ca522cb9f254b1c91fcea6080bfeef0be0b243b2f31bab7 2358 / 2358
-> sha256:c4f42be2be53b900bffc040c1d0f13de53843ccc5f5d954a10848ac109a3a3f 2.21MB / 2.21MB
-> extracting sha256:689e4811622011c027cac322a40937f4080f569a03e0f15c01aed071b793 27.34 / 27.34
-> extracting sha256:9f97489ddf03f6e172f594f4ba85e04e6a841a0fef09112efc7e4d3c78f7 131.45 / 131.45
-> extracting sha256:5e301213efc56598e78bd602983945c164de2a37285e06a63dad823124dc743 9.28 / 9.28
-> extracting sha256:9fd8f4c5633472e6fad7e241bf5e7450c40ed105c5478b76f41c1244bd96752 11.38 / 11.38
-> extracting sha256:404f02044bac0432ca522cb9f254b1c91fcea6080bfeef0be0b243b2f31bab7 0.05 / 0.05
-> extracting sha256:c4f42be2be53b900bffc040c1d0f13de53843ccc5f5d954a10848ac109a3a3f 2.28 / 2.28
[2/6] WORKDIR /app
-> [2/6] WORKDIR /app
[3/6] ADD . /app
-> [3/6] ADD . /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 sha256:1756719486df002fad5dae305c5221513f2ff2d1b49a8d242b22a28af9379f19
-> 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>
```



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 node port.

