

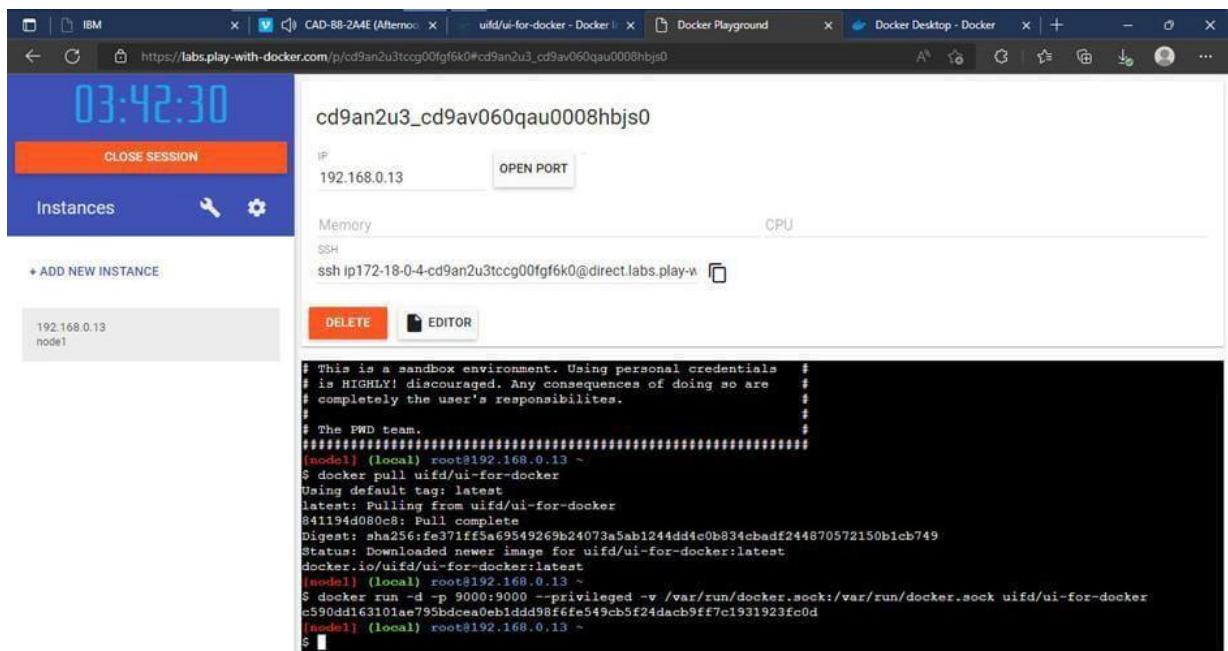
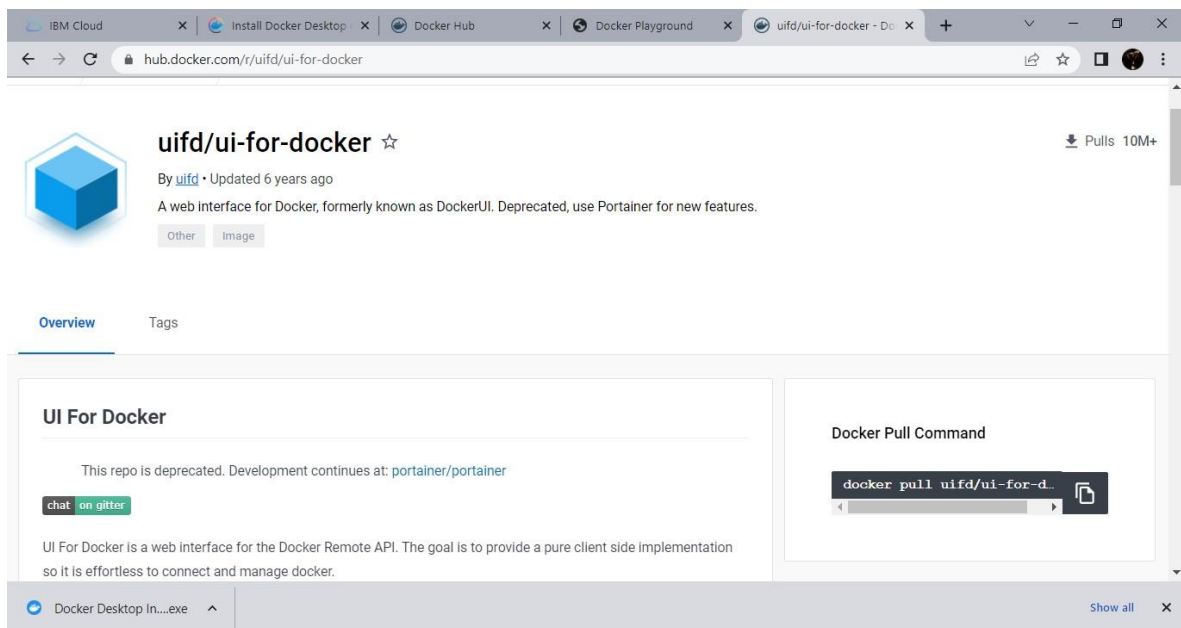
ASSIGNMENT - 4

DOCKER AND KUBERNETES

Assignment Date	26 October 2022
Student Name	M.MUTHURAJA
Student Roll Number	311819205019
Team ID	PNT2022TMID37467
Maximum Marks	2 Marks

Question 1:

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



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



Legend: Running (green), Stopped (red), Ghost (grey)


UI For Docker

Dashboard Containers Containers Network Images Networks Volumes Info Refresh

Running Containers

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Legend: Running (green), Stopped (red), Ghost (grey)

Containers created

1

0

21/10/2022

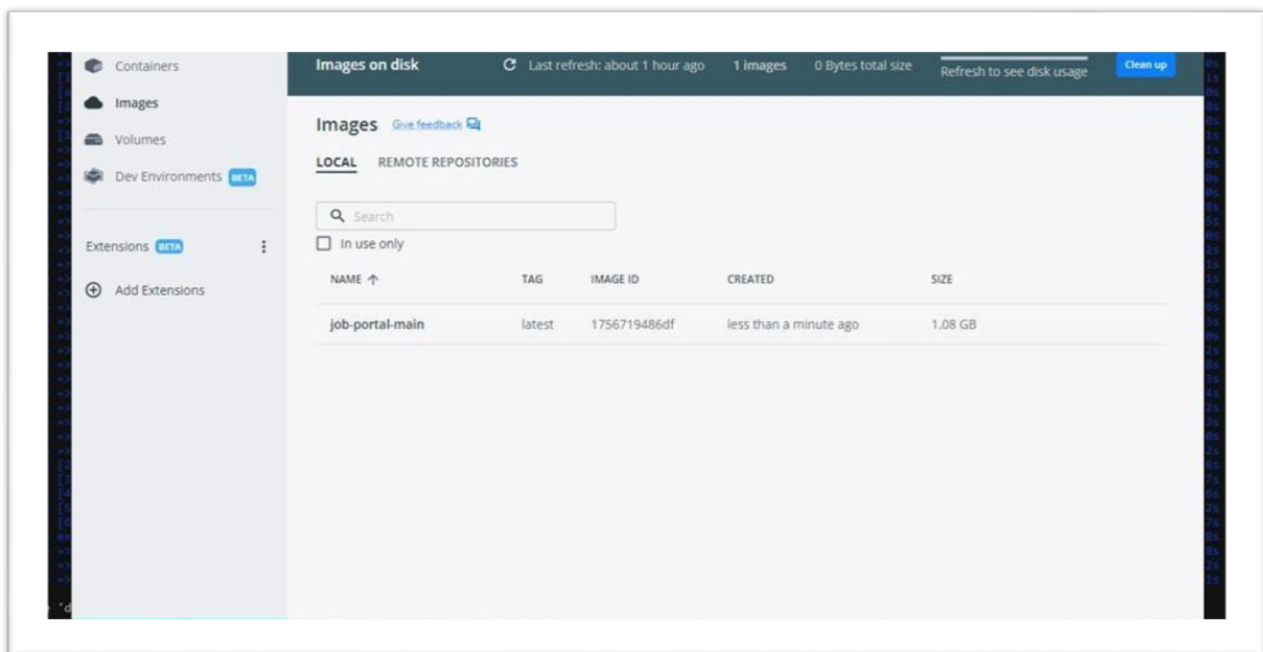
Images created

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:f852afef88c25f6d22354d547d892591067aa4026a7f6a6019df9f300afefc
-> resolve docker.io/library/python:3.8@sha256:f852afef88c25f6d22354d547d892591067aa4026a7f6a6019df9f300afefc
-> sha256:f852afef88c25f6d22354d547d892591067aa4026a7f6a6019df9f300afefc 1.86kB / 1.86kB
-> sha256:8007a4007a0e079df5ac31872359c3de510f82214c0448e926393b376d3b60d 2.22kB / 2.22kB
-> sha256:54240638007c5e3ad24c6e21fc889abbc8488a27634c809208eff71f3f44b104 9.27kB / 9.27kB
-> sha256:0e29546d541c8bd369201d21a73add1d07865c1b95b74f32b009eb77a6e1e3 54.92MB / 54.92MB
-> sha256:90820c73b52b02b97d5c07a54fb0f3e921995a296c714b53a32ae07019231fcd 5.15MB / 5.15MB
-> sha256:c5b7ae361722f078eca53f35823ed21baad5061d5d95cd5a95ab53d740cdd96 10.87MB / 10.87MB
-> sha256:609e881622031c027cc322ca08097f4009f569a930ef15c01aad0710791 24.57MB / 54.57MB
-> sha256:9f977480d4f03f61727594f4ba85e08a6a841a0ef409112efc7e4d5c78f7 196.51MB / 196.51MB
-> sha256:5e301233efc56598e78bd602983945c164de2a37295e08a63dad823124d743 6.29MB / 6.29MB
-> extracting sha256:0e29546d541c8bd369201d21a73add1d07865c1b95b74f32b009eb77a6e1e3
-> sha256:9fd9f4c5633472e6fad7e241bf5e7459c40ed105c5478b76f41c1244bd96752 14.21MB / 14.21MB
-> extracting sha256:9b820c73b52b02b97d5c07a54fb0f3e921995a296c714b53a32ae07019231fcd 2.38
-> extracting sha256:c5b7ae361722f078eca53f35823ed21baad5061d5d95cd5a95ab53d740cdd96 4.86
-> sha256:404f02044bac0432ca522cb097254b1c91fcea600bfeef0be0b243b2f31bab7 235B / 235B
-> sha256:c4f42be2be53b900ebffcc040c1d0f13de538434ccc5f5d954a50848ac109a3a3f 2.21MB / 2.21MB
-> extracting sha256:609e881622031c027cc322ca08097f4009f569a930ef15c01aad0710791 27.34
-> extracting sha256:c5b7ae361722f078eca53f35823ed21baad5061d5d95cd5a95ab53d740cdd96 131.45
-> extracting sha256:5e301233efc56598e78bd602983945c164de2a37295e08a63dad823124d743 6.29
-> extracting sha256:9fd9f4c5633472e6fad7e241bf5e7459c40ed105c5478b76f41c1244bd96752 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:

Createan IBMcontainer registry and deploy helloworldapp orJob 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 orjob portal image and also expose the same app to run in node port.

