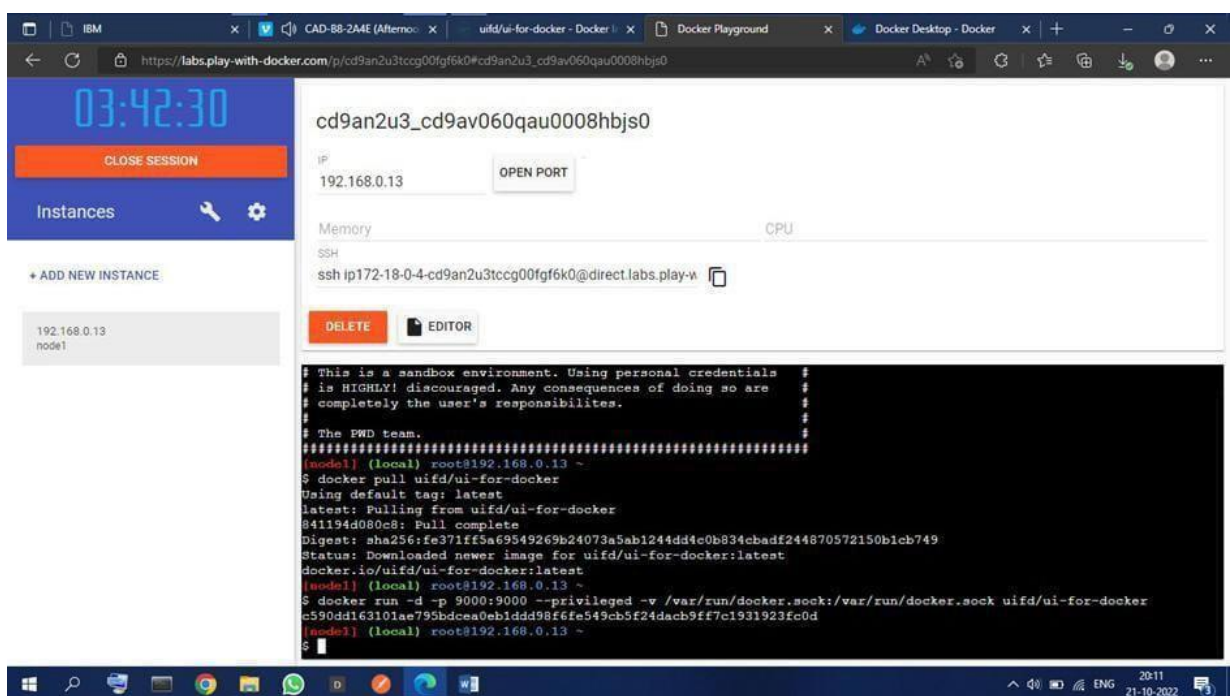
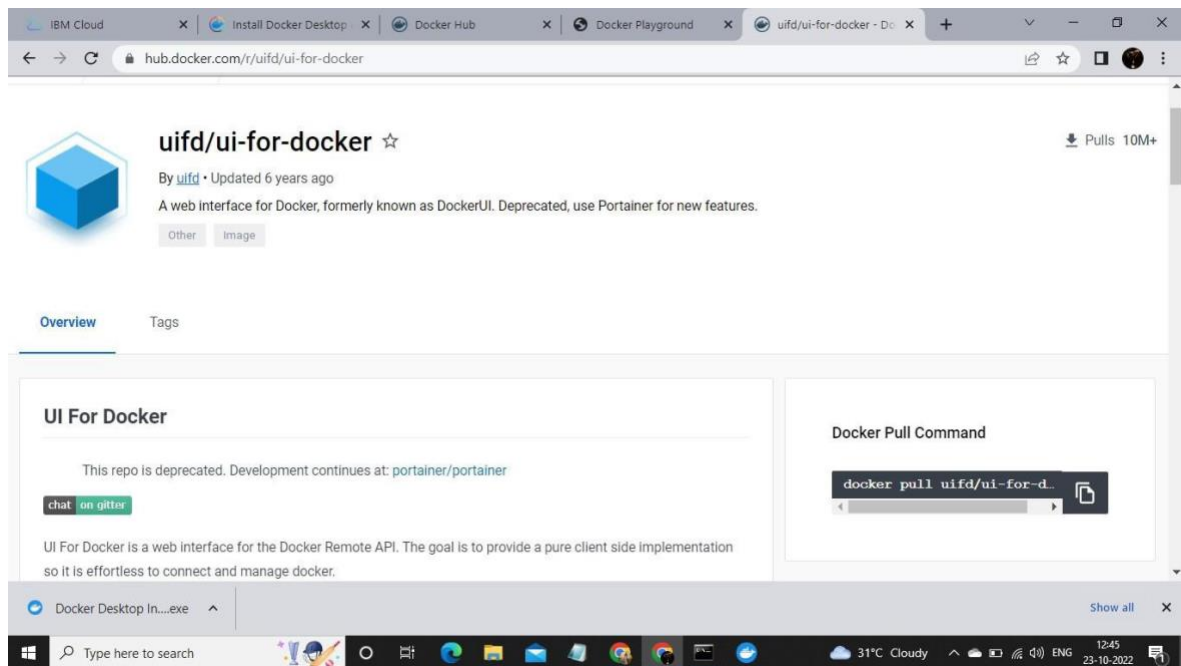


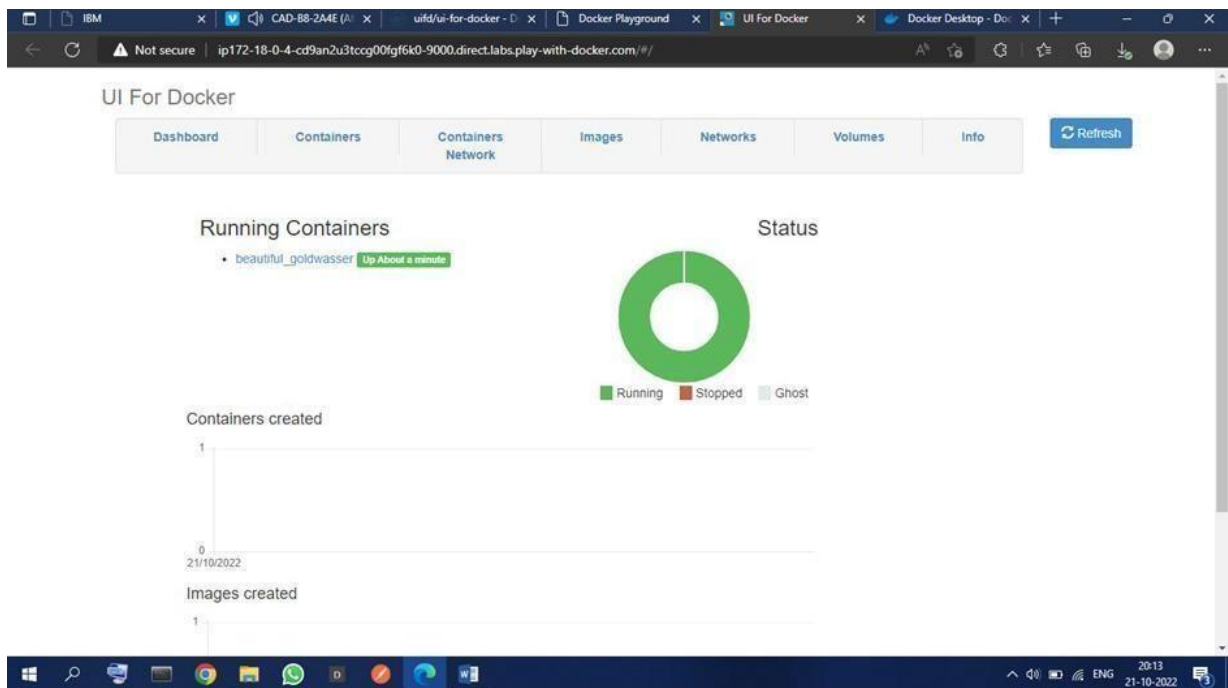
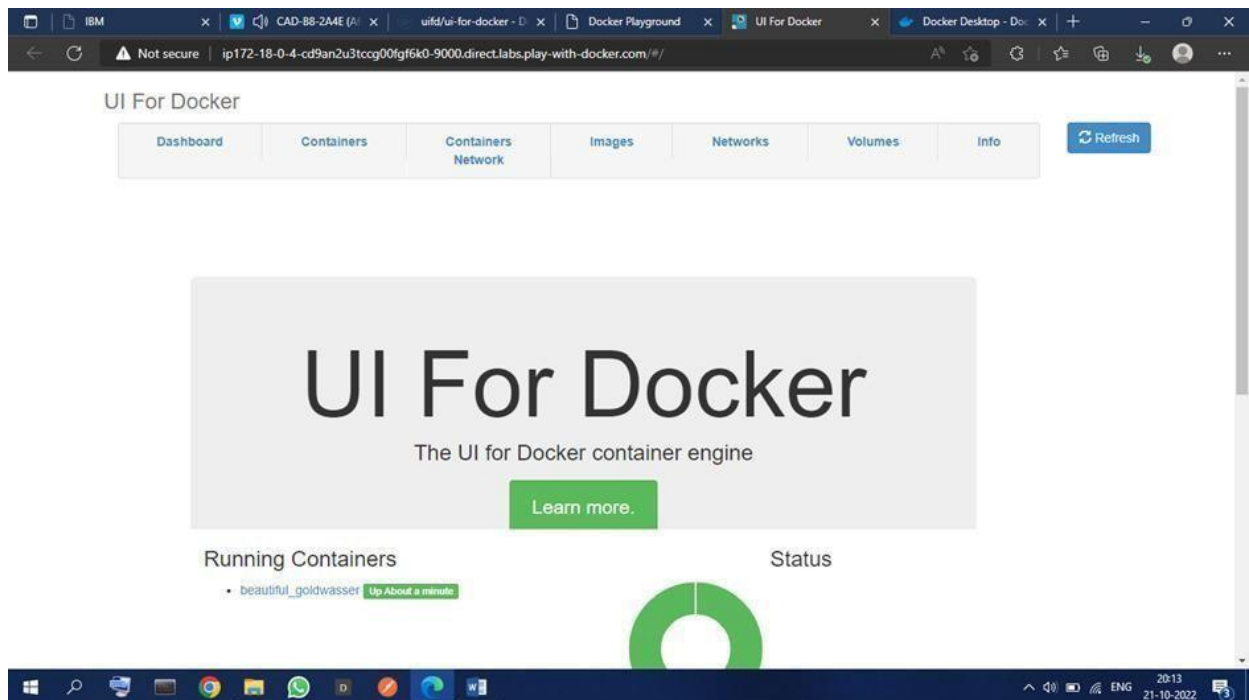
DOCKER AND KUBERNETES

Assignment Date	13-11-2022
Student Name	Karthick Raja R
Student Roll Number	91761915022
Team ID	PNT2022TMID06098
Maximum Marks	2 Marks

Question 1:

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

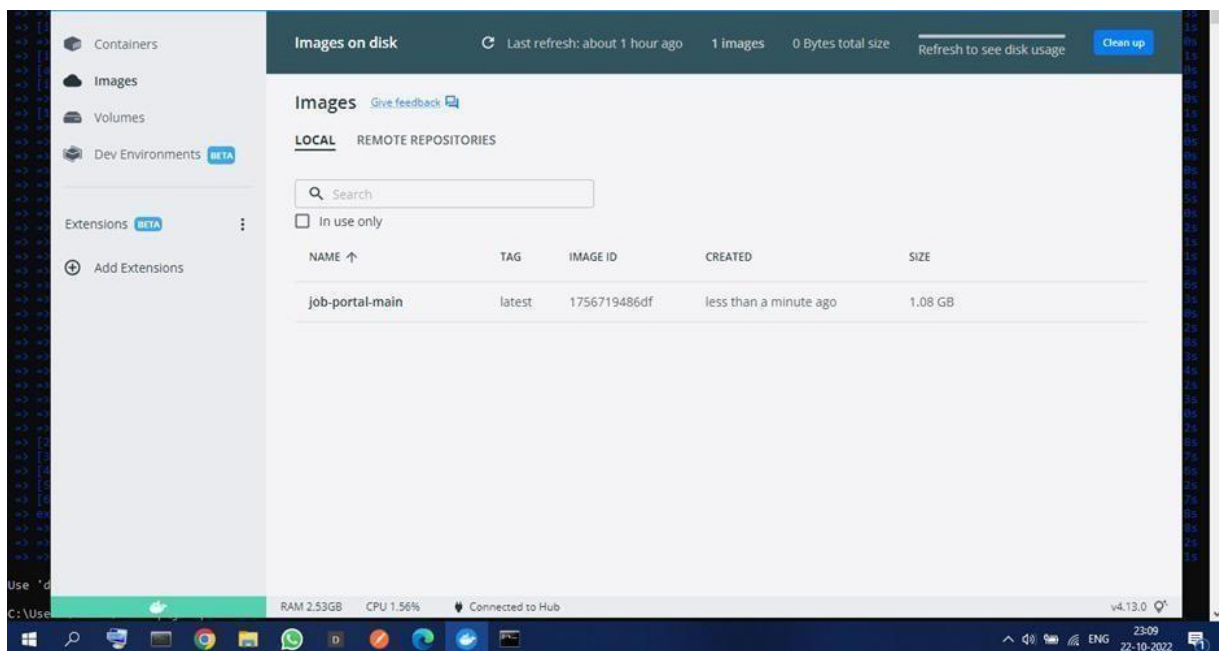




Question 2:

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 .dockerignore
-> [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: 687B
[1/6] FROM docker.io/library/python:3.6@sha256:f8652afaf88c25f8d22354d547d892591867aa4026a7fa9a6819df9f300af6fc
-> resolve docker.io/library/python:3.6@sha256:f8652afaf88c25f8d22354d547d892591867aa4026a7fa9a6819df9f300af6fc
-> sha256:f8652afaf88c25f8d22354d547d892591867aa4026a7fa9a6819df9f300af6fc 1.08GB / 1.08GB
-> sha256:8097a900728ee079d5c31972359c3d6510f82234c8448e02103b376d5b8d0d 2.22KB / 2.22KB
-> sha256:54298635087c5c3ad04c6e21f889abbc6886a27634c8092886ff71f3f44b104 9.27KB / 9.27KB
-> sha256:8e39546d54cedb369201d1a73a9d1db7665c1b95b74f12b0909eb77ade3 54.92MB / 54.92MB
-> sha256:9b829c73652b2b97d5c07a54fb8f3e921995a296c714b51a32ae7019231fcd 5.15MB / 5.15MB
-> sha256:c85b7ae361722f078eca53f35823ed21baa8d61d5d95cd5a95ab53d748cdd56 10.87MB / 10.87MB
-> sha256:6494e811622b31c027ccac322ca463937fd805f569a93e6f15c01aade718793 54.57MB / 54.57MB
-> sha256:6f9f74896dfa93fe8172f594fab85e04e8a0481a0efed9112efc7e4d3c78f7 196.51MB / 196.51MB
-> sha256:5c3b1213efc56598e78bd6029b3945c164de2a3729506a62ada823124dc743 6.29MB / 6.29MB
-> extracting sha256:6e2994dd41c4bd99281d21735e01db7806c1093e24f72b0909eb77ade3 27.34 / 27.34
-> sha256:9f48f4c5e3347a6efad7a241b5c7450c40ad186c5478676f41c1244b086752 14.21MB / 14.21MB
-> extracting sha256:9b829c73652b2b97d5c07a54fb8f3e921995a296c714b51a32ae7019231fcd 2.35 / 2.35
-> sha256:c85b7ae361722f078eca53f35823ed21baa8d61d5d95cd5a95ab53d748cdd56 4.85 / 4.85
-> sha256:404f02044bac0432ca522cb9f254b1c91fca60806fee0b0e243b2f31bab7 2358 / 2358
-> sha256:c4f42be2be53b080ebffc04bc1df13de53843acc5f5d954a56848a0109a3af 2.21MB / 2.21MB
-> extracting sha256:6494e811622b31c027ccac322ca463937fd805f569a93e6f15c01aade718793 27.34 / 27.34
-> extracting sha256:6f9f74896dfa93fe8172f594fab85e04e8a0481a0efed9112efc7e4d3c78f7 131.45 / 131.45
-> extracting sha256:5c3b1213efc56598e78bd6029b3945c164de2a3729506a62ada823124dc743 0.23 / 0.23
-> extracting sha256:9f48f4c5e3347a6efad7a241b5c7450c40ad186c5478676f41c1244b086752 12.33 / 12.33
-> extracting sha256:404f02044bac0432ca522cb9f254b1c91fca60806fee0b0e243b2f31bab7 0.89 / 0.89
-> extracting sha256:c4f42be2be53b080ebffc04bc1df13de53843acc5f5d954a56848a0109a3af 3.22 / 3.22
-> [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 lm_db
-> exporting to image
-> writing image sha256:1756719486dfad5da305c5221513f2ff2d1b49a80242b22a28af0379f19
-> 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.

