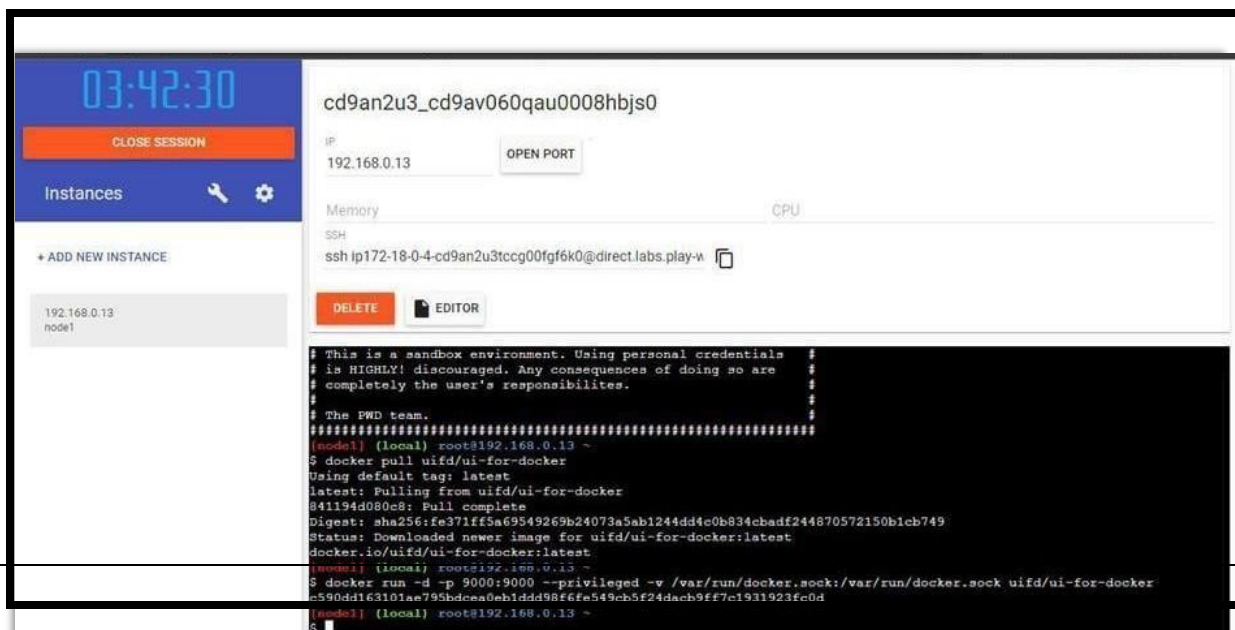
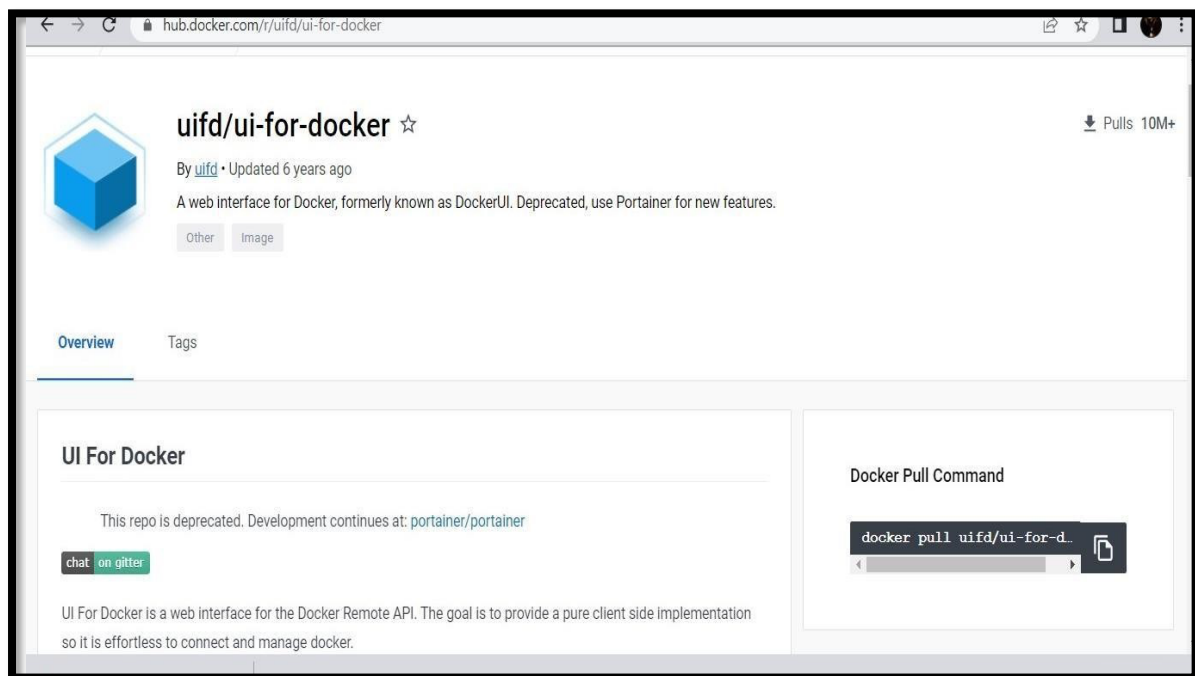


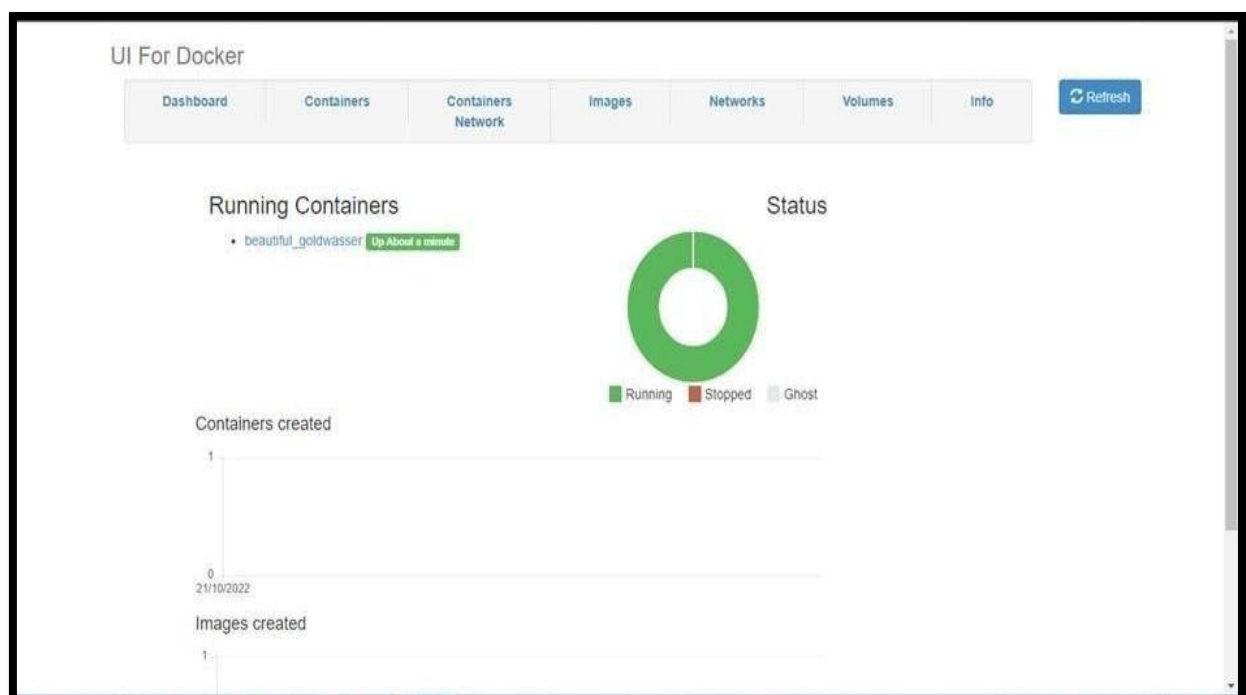
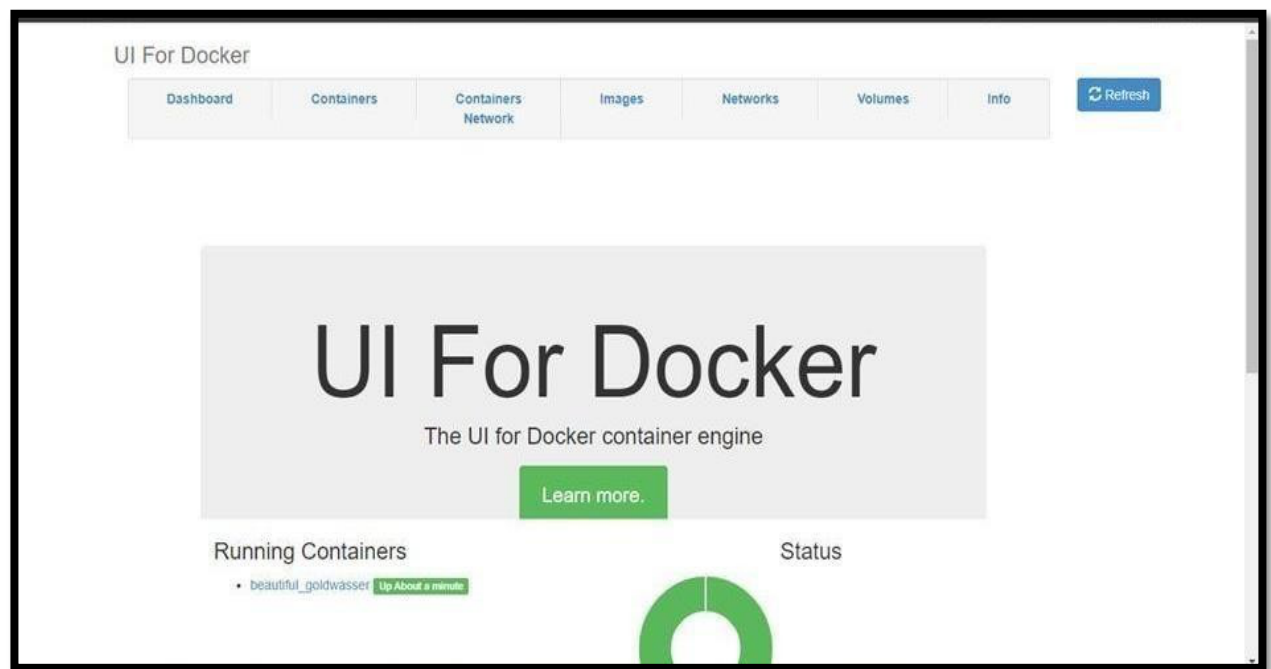
DOCKER AND KUBERNETES

Assignment Date	4 November 2022
Student Name	DEEPA DHARSHINI V
Team ID	PNT2022TMID01622
Maximum Marks	2 Marks

Question 1:

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



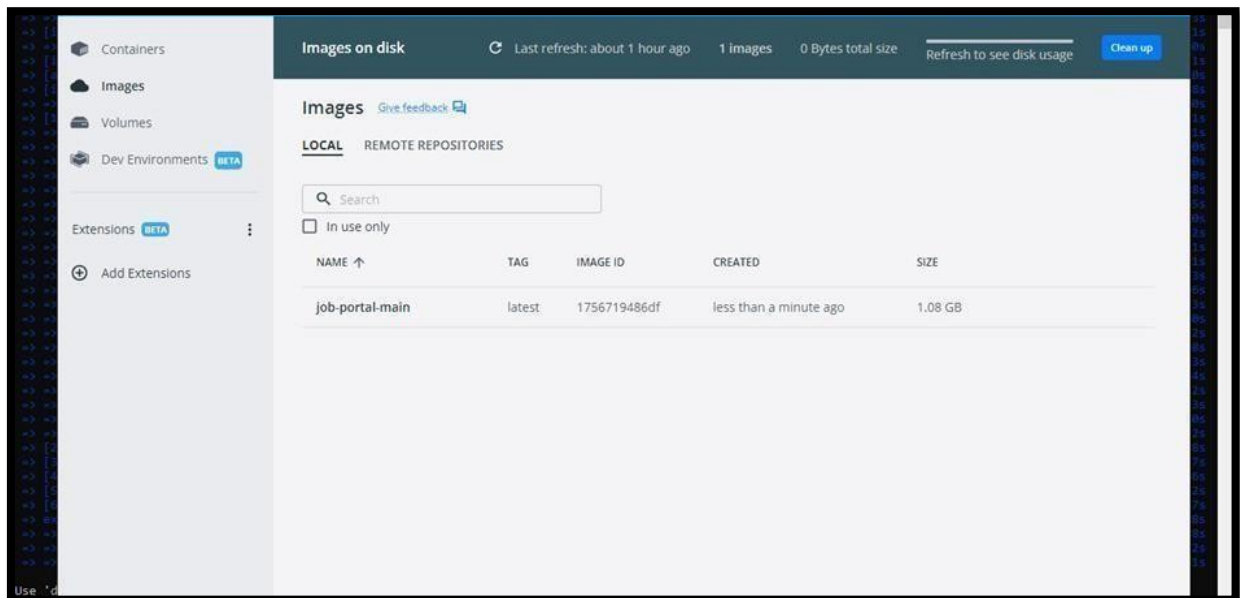


Question 2:

Create a docker file for the job portal application and deploy it in Docker Desktop Application

```
[Internal] load build definition from Dockerfile 1.0s
-> transferring dockerfile: 32B 0.3s
[Internal] load .dockerignore 1.3s
-> transferring context: 2B 0.0s
[Internal] load metadata for docker.io/library/python:3.6 9.3s
[auth] library/python:pull token for registry-1.docker.io 0.0s
[Internal] load build context 1.8s
-> transferring context: 687B 0.0s
[1/6] FROM docker.io/library/python:3.6@sha256:f8652afa788c25f6d22354d547d892591067aa4026a7fa9a6819df9f300af6fc 639.1s
-> resolve docker.io/library/python:3.6@sha256:f8652afa788c25f6d22354d547d892591067aa4026a7fa9a6819df9f300af6fc 1.1s
-> sha256:f8652afa788c25f6d22354d547d892591067aa4026a7fa9a6819df9f300af6fc 1.86kB / 1.86kB 0.0s
-> sha256:d807a907adec870df5ac31872359c26a510f82234c844e8b3030376d3b6dd 2.22kB / 2.22kB 0.0s
-> sha256:542080380875e3ad24c6e21fc889abbc8486a27634c8092886ff71f3f44b104 9.27kB / 9.27kB 0.0s
-> sha256:0e3954d454c0bd389281d21a73a9d1db78665c1b95b74f318009e0b77ade1e3 54.92MB / 54.92MB 120.8s
-> sha256:9b829c7352b92b7d5c07a54fb0f3e921995a296c714b53a32ae07d19231fcd 5.15MB / 5.15MB 28.5s
-> sha256:c05b7ae361722f870eca53f35823ed2baa85d61d5d95cd5a95ab53d740cdd56 10.87MB / 10.87MB 86.0s
-> sha256:6494e4811622b31c027ccac322ca463937fd805f569a93e0f15c01ade718793 54.57MB / 54.57MB 253.2s
-> sha256:0f0f74896dfa93fe0172f594fab85e04e8a8481a0fef09112efc7e4d3c78f7 196.51MB / 196.51MB 446.1s
-> sha256:5e301213efc56508e78bd002903945c164de2a37205e06a02dad8231240c743 6.29MB / 6.29MB 108.1s
-> extracting sha256:0e3954d454c0bd389281d21a73a9d1db78665c1b95b74f318009e0b77ade1e3 27.3s
-> sha256:9f0dfdc56234f2a6efad7ca21bf5c7450c48bd105c5478076f41c1244b96752 14.21MB / 14.21MB 187.6s
-> extracting sha256:9b829c7352b92b7d5c07a54fb0f3e921995a296c714b53a32ae07d19231fcd 2.3s
-> sha256:c05b7ae361722f870eca53f35823ed2baa85d61d5d95cd5a95ab53d740cdd56 4.0s
-> sha256:404f02044bac8432ca522cb9f254b1c91fcea0806fee0be0b243b2f31bab7 235B / 235B 194.2s
-> sha256:c4f42be2be53b900ebffc040c1df13de538434cc5f5d954a5684ba169a3af 2.21MB / 2.21MB 293.0s
-> extracting sha256:6494e4811622b31c027ccac322ca463937fd805f569a93e0f15c01ade718793 27.3s
-> extracting sha256:0f0f74896dfa93fe0172f594fab85e04e8a8481a0fef09112efc7e4d3c78f7 111.4s
-> extracting sha256:5e301213efc56508e78bd002903945c164de2a37205e06a02dad8231240c743 0.2s
-> extracting sha256:9f0dfdc56234f2a6efad7ca21bf5c7450c48bd105c5478076f41c1244b96752 11.3s
-> extracting sha256:404f02044bac8432ca522cb9f254b1c91fcea0806fee0be0b243b2f31bab7 0.8s
-> extracting sha256:c4f42be2be53b900ebffc040c1df13de538434cc5f5d954a5684ba169a3af 2.2s
-> [2/6] WORKDIR /app 2.8s
-> [3/6] ADD ./app 2.7s
-> [4/6] COPY requirements.txt /app 2.6s
-> [5/6] RUN python3 -m pip install -r requirements.txt 372.2s
-> [6/6] RUN python3 -m pip install lm_db 0.7s
-> exporting to image 7.8s
-> exporting layers 6.8s
-> writing image sha256:1756719486df002fad5dae305c5221513f2ff2d1b40a8d242b22a28af0379f19 8.2s
-> naming to docker.io/library/job-portal-main 0.1s

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
```



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.

