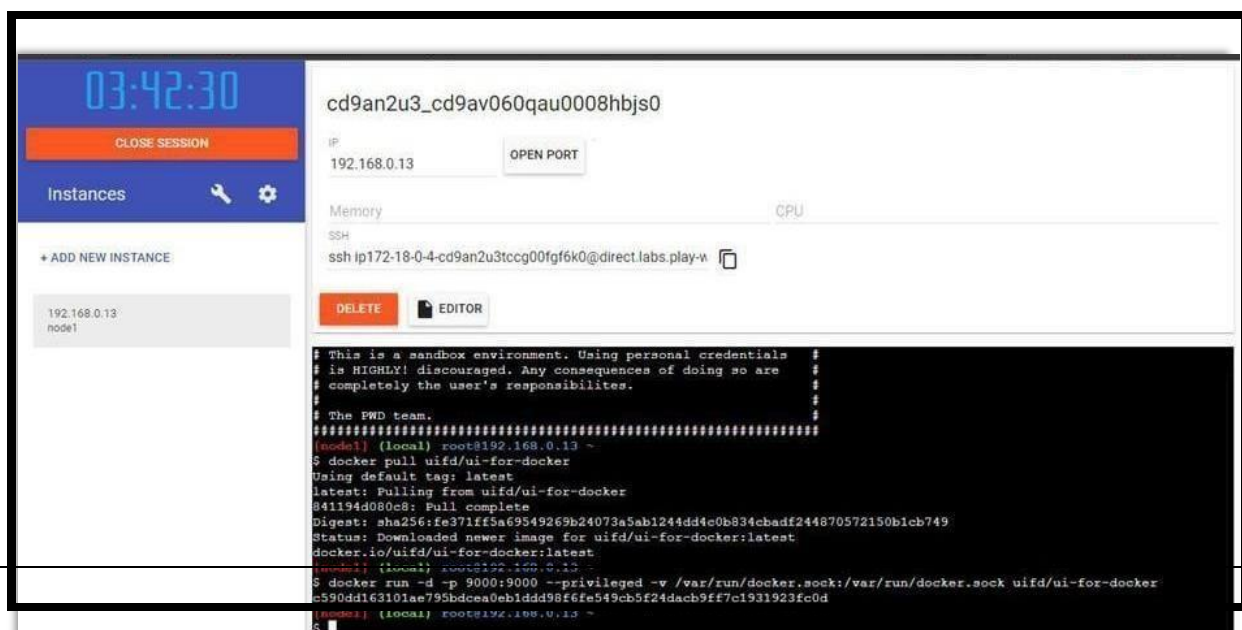
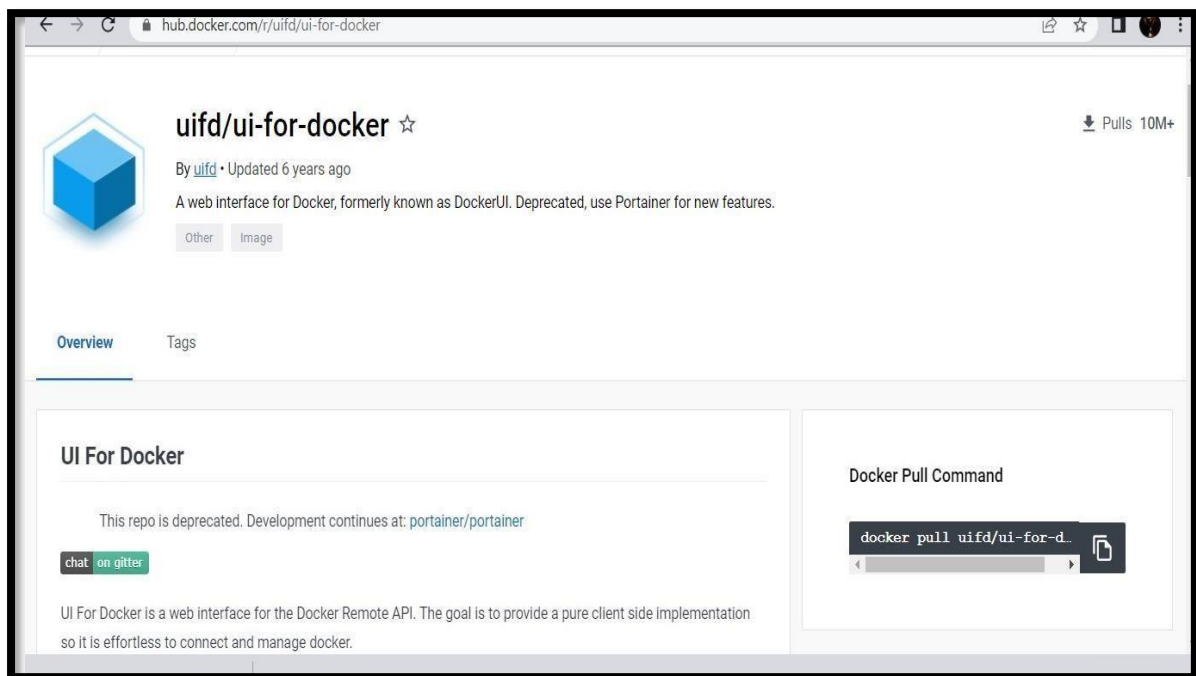


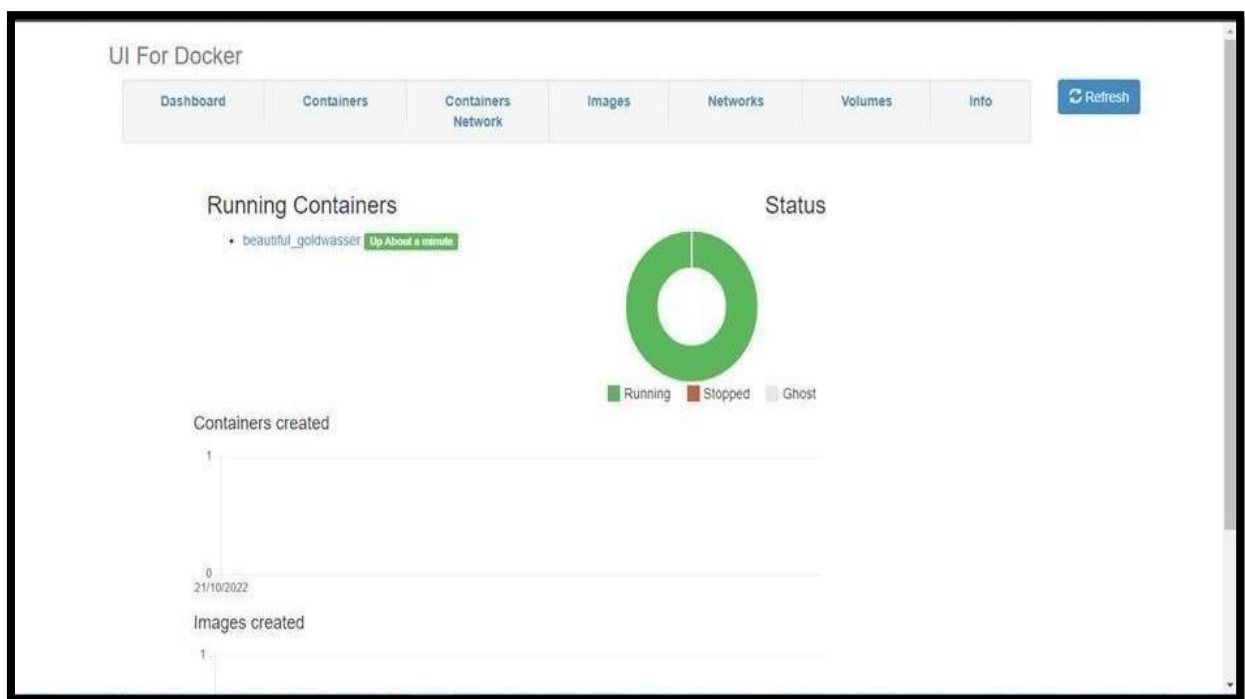
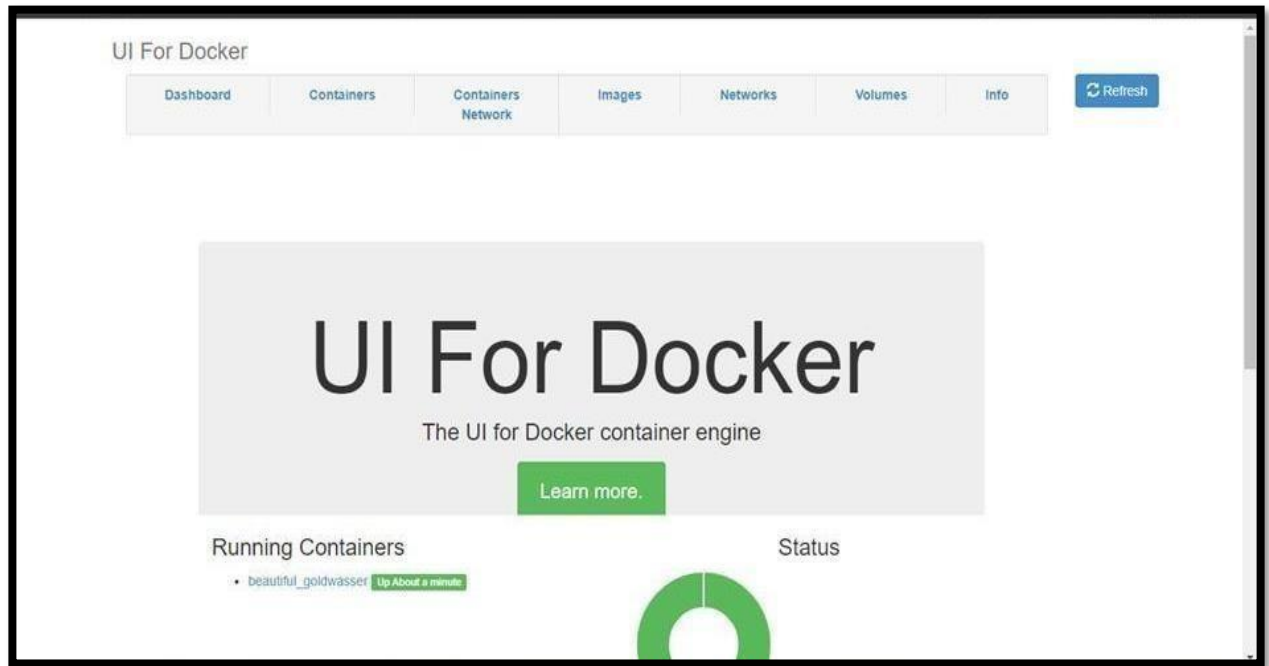
DOCKER AND KUBERNETES

Assignment Date	4 November 2022
Student Name	SWETHA BP
Team ID	PNT2022TMID01622
Maximum Marks	2 Marks

Question 1:

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



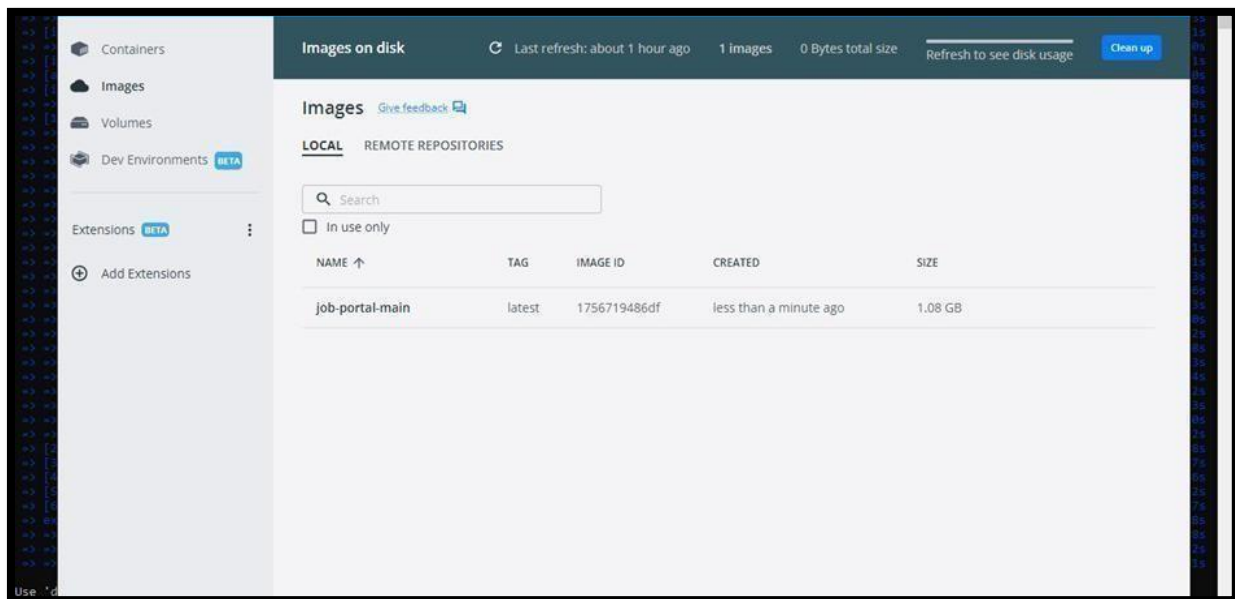


Question 2:

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

```
> [internal] load build definition from Dockerfile
=> 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: 687B
[1/6] FROM docker.io/library/python:3.8@sha256:f852a7af88c25f0d22354d547d892591067aa4026a7fa9a6819df9f300afe9c
=> resolve docker.io/library/python:3.8@sha256:f852a7af88c25f0d22354d547d892591067aa4026a7fa9a6819df9f300afe9c
=> sha256:f852a7af88c25f0d22354d547d892591067aa4026a7fa9a6819df9f300afe9c 1.06GB / 1.06GB
=> sha256:d807e4907adec079df5ac31872359c30e510f02214c0449e826303b376d3b60d 2.22kB / 2.22kB
=> sha256:54208638007c6e3ad4c6a31fc889abbc0486a27634c8092886ff71f3f44b104 0.27kB / 0.27kB
=> sha256:0e29546d541cdd309281d21a73a6d1db786651b95674f32b009a0b77ade1e3 54.92MB / 54.92MB
=> sha256:98829c73b52b92b97d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 5.15MB / 5.15MB
=> sha256:cb5b7ae361722f07eca53f35823ed21baa85d61d5d95cd5a95ab53d740cdd56 10.07MB / 10.07MB
=> sha256:6494e4811622b31c027ccac322ca463937fd805f569a93e6f15c01aade718793 54.57MB / 54.57MB
=> sha256:6f9f74090dfay3fe0172f594faha85e0b4e8a481a0fefd9112efc7e4d3c7877 196.51MB / 196.51MB
=> sha256:9e3b1213efc56508e78e0d07080345c16d62a3720e96e041dad82124c743 6.29MB / 6.29MB
=> extracting sha256:0e29546d541cdd309281d21a73a6d1db786651b95674f32b009a0b77ade1e3 27.35
=> sha256:9f0dddc56334f2a6efad7e241bf567459c48ed186c5470676f41c1244bd06752 14.21MB / 14.21MB
=> extracting sha256:98829c73b52b92b97d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 2.36
=> extracting sha256:cb5b7ae361722f07eca53f35823ed21baa85d61d5d95cd5a95ab53d740cdd56 4.40
=> sha256:40af02044bac432ca522cb09f254b1c91fcea0806bfee0be0b243b2f31bab7 235B / 235B
=> sha256:c4f42be2b53b900ebffc040c1df13de530434ccc5f5d954a56848a6169a3a3f 2.21MB / 2.21MB
=> extracting sha256:6494e4811622b31c027ccac322ca463937fd805f569a93e6f15c01aade718793 37.35
=> extracting sha256:6f9f74090dfay3fe0172f594faha85e0b4e8a481a0fefd9112efc7e4d3c7877 111.44
=> extracting sha256:5e3b1213efc56508e78e0d07080345c16d62a3720e96e041dad82124c743 0.23
=> extracting sha256:9f0dddc56334f2a6efad7e241bf567459c48ed186c5470676f41c1244bd06752 11.73
=> extracting sha256:40af02044bac432ca522cb09f254b1c91fcea0806bfee0be0b243b2f31bab7 0.05
=> extracting sha256:c4f42be2b53b900ebffc040c1df13de530434ccc5f5d954a56848a6169a3a3f 2.25
[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
=> exporting layers
=> writing image sha256:1756719486df002fa05da6305c5221513f2ff2d1b9a8d242b22a28af0379f19
=> 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



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.

