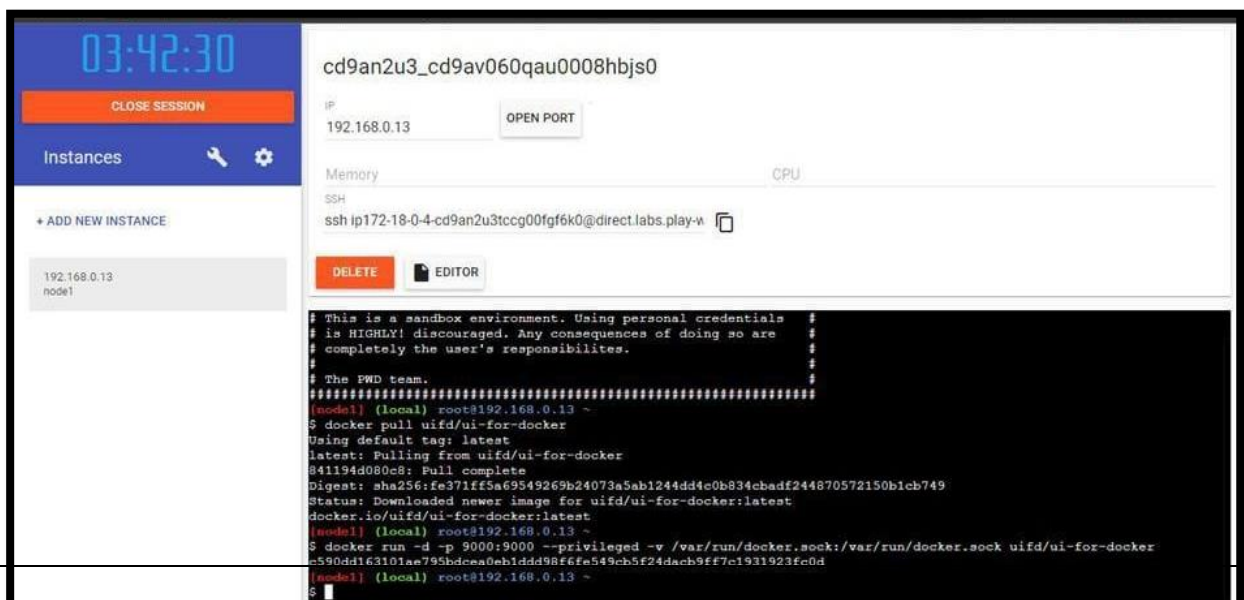
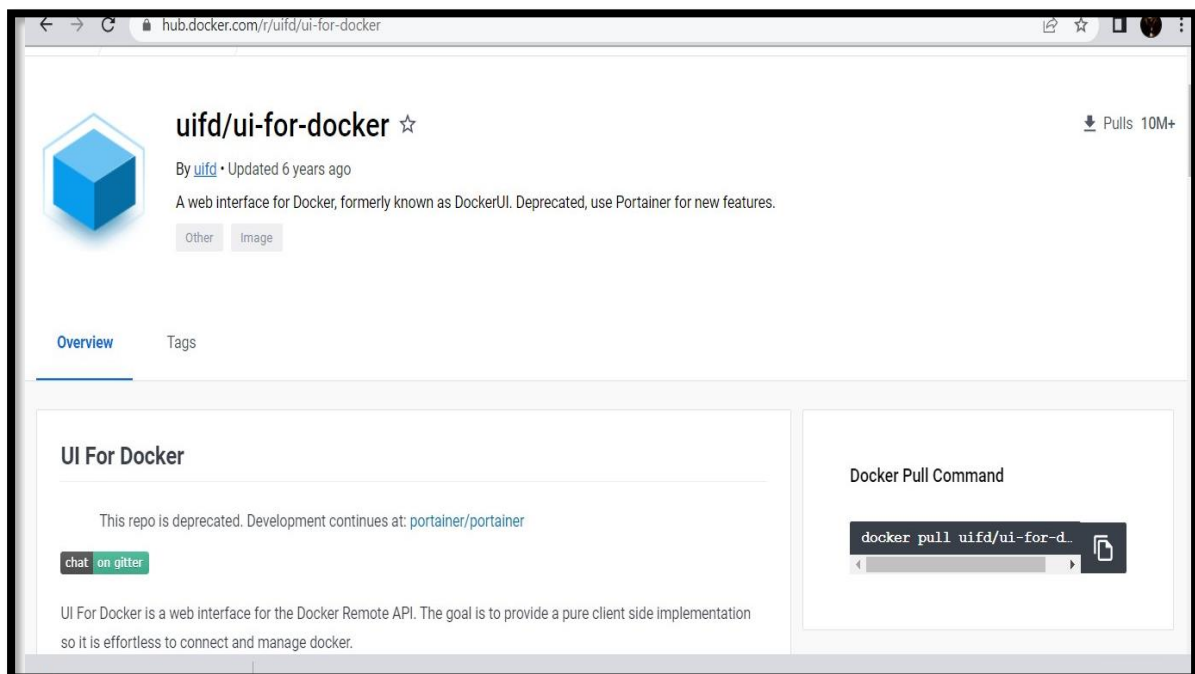


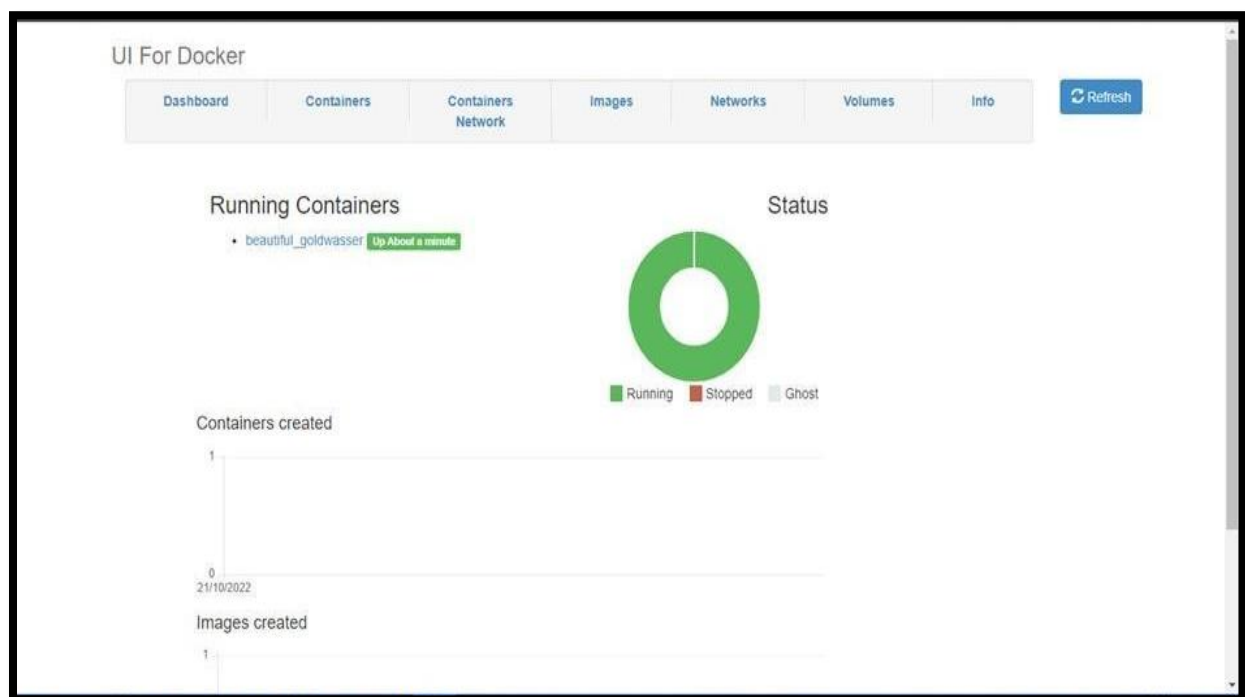
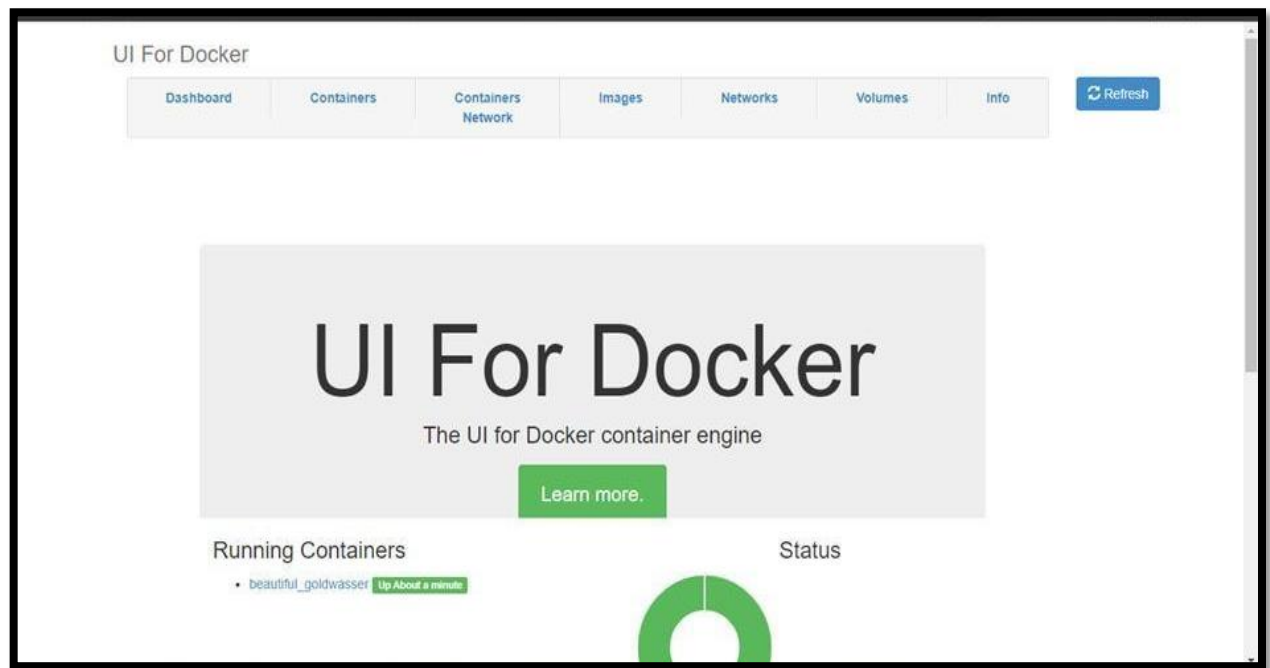
## DOCKER AND KUBERNETES

Assignment Date	4 November 2022
Student Name	JAISRI V
Student Roll Number	7376191EC163
Team ID	PNT2022TMID01737
Maximum Marks	2 Marks

### Question 1:

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



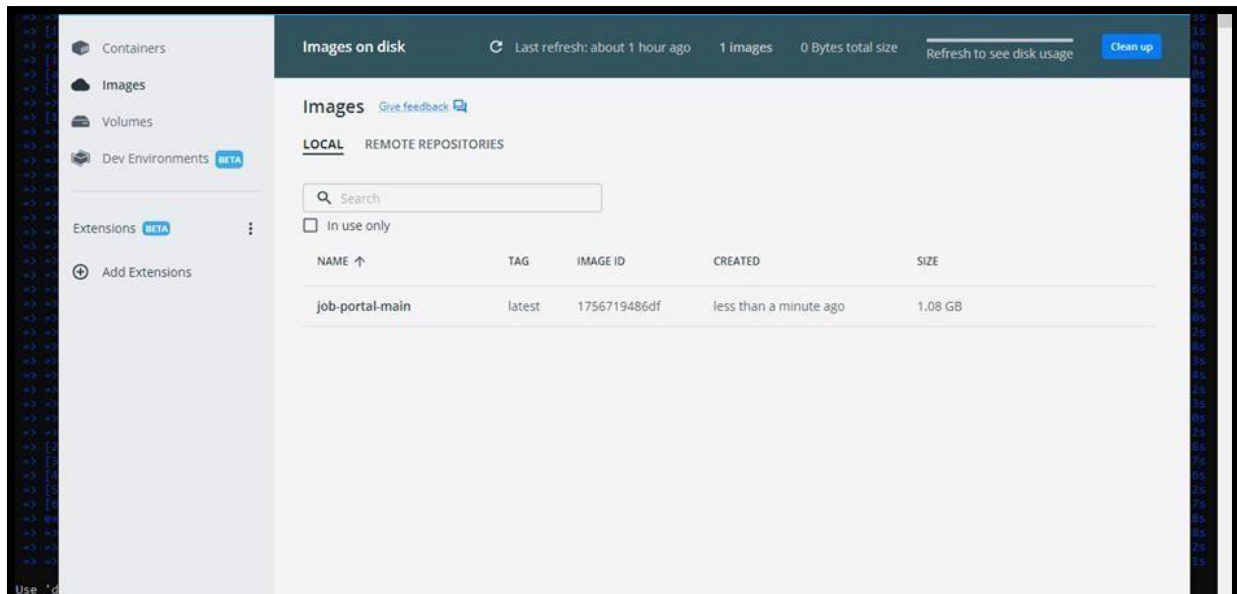


## Question 2:

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:3.6
=> [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:f8052afaf8bc25f8d22354d547d892591867aa4026a7fa9a6819df9f300af6fc
=> resolve docker.io/library/python:3.6@sha256:f8052afaf8bc25f8d22354d547d892591867aa4026a7fa9a6819df9f300af6fc
=> sha256:f8052afaf8bc25f8d22354d547d892591867aa4026a7fa9a6819df9f300af6fc 1.86kB / 1.86kB
=> sha256:0097a007a0ec0790f5ac31b72359c2de510f02214c0448e926393b37bd3b00d 2.22kB / 2.22kB
=> sha256:5426007d007c6ad346621f6809b0c848e027634c009200aff7f354ab104 9.27kB / 9.27kB
=> sha256:8e395462541cd0d309201d01a73a0d1db72685c1b95b74f32000e0b77ade1e3 54.92kB / 54.92kB
=> sha256:90820c73b52b02b97d5c07a54fb8f3e921995a296c714b53a32ae07d192311cd 5.15MB / 5.15MB
=> sha256:cb5b7ae361722f07beca53f35823ed71baa5d61d5d95cd5a95ab53d740cdd56 10.87MB / 10.87MB
=> sha256:6404e4811622b31c027ccac322ca463937fd805f569a93e6f15c01aade718793 54.57MB / 54.57MB
=> sha256:0f9f74800df0a93fe0172f504fab85e0b4e8a041a0efed0112efc7e4d3c78f7 196.51MB / 196.51MB
=> sha256:5e3b1213efc56598e78bd0b2983945c164de2a37205e06a62dada823124dc743 6.29MB / 6.29MB
=> extracting sha256:0e295463541c0b309281d21a73a0d1db72685c1b95b74f32000e0b77ade1e3 27.35
=> sha256:9f0dfdc5632f2a6efad7a2a1bf5c7459c48ed105c470076f41c1244bd96752 14.21MB / 14.21MB
=> extracting sha256:90820c73b52b02b97d5c07a54fb8f3e921995a296c714b53a32ae07d192311cd 2.35
=> extracting sha256:cb5b7ae361722f07beca53f35823ed71baa5d61d5d95cd5a95ab53d740cdd56 4.80
=> sha256:404f02044bac0432ca522cb09f254b1c1caad800afef0be0b243b2f31bab7 2350 / 2350
=> sha256:c4f42be2be3b000ebff040c1df13de538434cc5f5d954a56848a0169a3a3f 2.21MB / 2.21MB
=> extracting sha256:6404e4811622b31c027ccac322ca463937fd805f569a93e6f15c01aade718793 27.34
=> extracting sha256:0f9f74800df0a93fe0172f504fab85e0b4e8a041a0efed0112efc7e4d3c78f7 131.45
=> extracting sha256:5e3b1213efc56598e78bd0b2983945c164de2a37205e06a62dada823124dc743 8.25
=> extracting sha256:9f0dfdc5632f2a6efad7a2a1bf5c7459c48ed105c470076f41c1244bd96752 11.35
=> extracting sha256:404f02044bac0432ca522cb09f254b1c1caad800afef0be0b243b2f31bab7 0.00
=> extracting sha256:c4f42be2be3b000ebff040c1df13de538434cc5f5d954a56848a0169a3a3f 2.28
[2/6] WORKDIR /app
=> [2/6] WORKDIR /app 2.79
[3/6] ADD . /app
=> [3/6] ADD . /app 2.66
[4/6] COPY requirements.txt /app
=> [4/6] COPY requirements.txt /app 372.25
[5/6] RUN python3 -m pip install -r requirements.txt
=> [5/6] RUN python3 -m pip install -r requirements.txt 0.75
[6/6] RUN python3 -m pip install lm_db
=> [6/6] RUN python3 -m pip install lm_db 7.85
=> exporting layers
=> exporting image sha256:1756719486df6ad1dae385c5221513f2ff2d1b49a80242b22a20af0379f19 6.05
=> writing image sha256:c4f42be2be3b000ebff040c1df13de538434cc5f5d954a56848a0169a3a3f 0.15
=> 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.

