

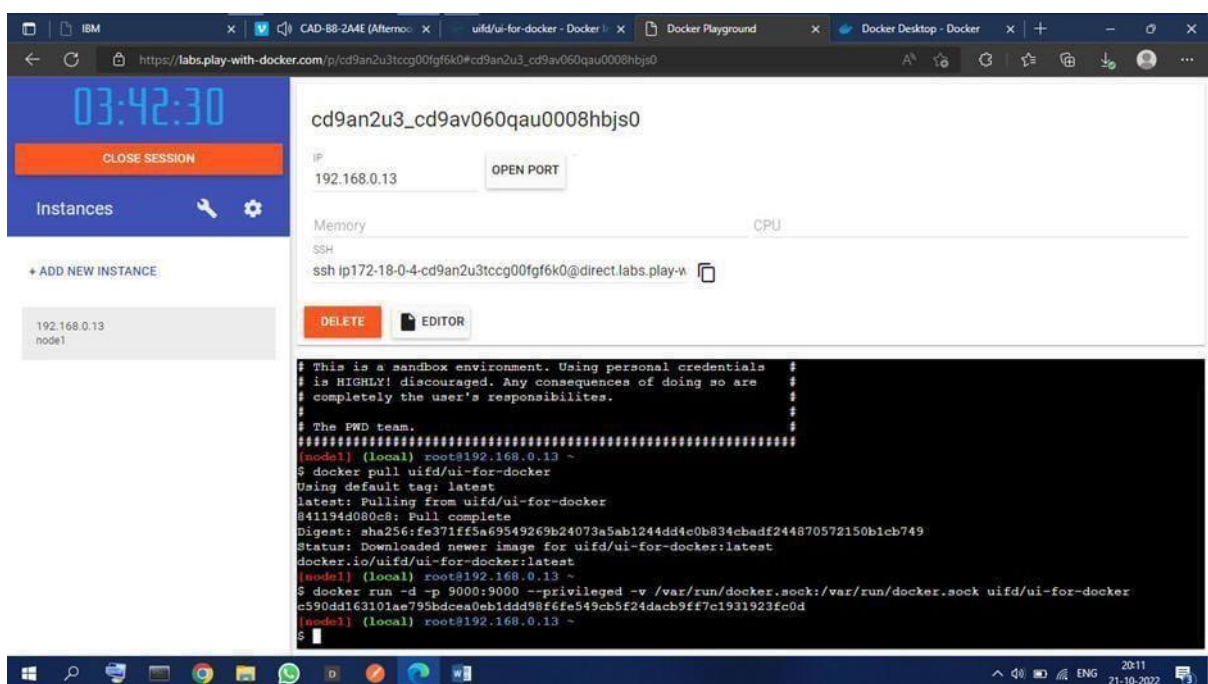
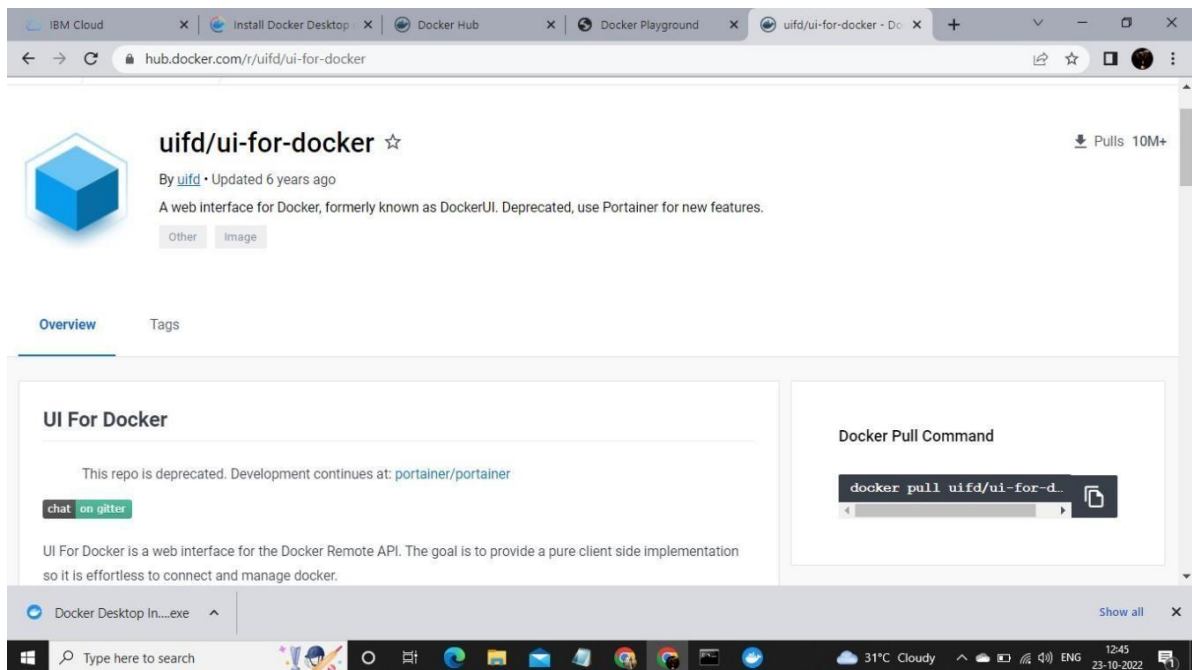
## ASSIGNMENT - 4

### DOCKER AND KUBERNETES

Assignment Date	21 October 2022
Student Name	Sunandh Kumar L
Team ID	PNT2022TMID15428
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

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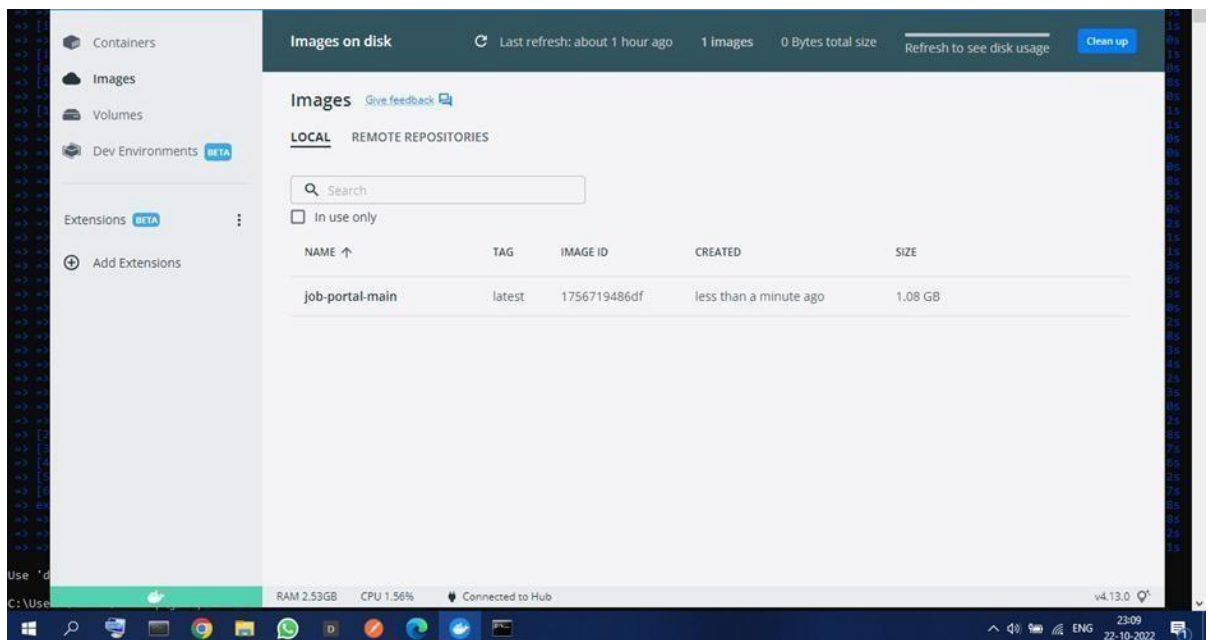
Status

## 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:3.6
-> [auth] library/python:pull token for registry-1.docker.io
-> [internal] load build context
-> > transferring context: 697B
[1/6] FROM docker.io/library/python:3.6sha256:f8632afe8bc25f0d22354d547d002591067aa48ba7fae0819df9f300afefc
-> resolve docker.io/library/python:3.6sha256:f8632afe8bc25f0d22354d547d002591067aa48ba7fae0819df9f300afefc
-> sha256:f8632afe8bc25f0d22354d547d002591067aa48ba7fae0819df9f300afefc 1.86kB / 1.86kB
-> sha256:0807da907a8ee079d5fac31072359c2de510f8221ca04Aae926303b37bd760dd 2.22kB / 2.22kB
-> sha256:5429063db075e3ad24ce21ffc809abbcb486a27634c009208eff73f3f44b10d 9.27kB / 9.27kB
-> sha256:be29546d541cd9d309201d21a73a9d1db78665c1b95b74f32000eb077a6e193 54.92MB / 54.92MB
-> sha256:90829c73052b20b97d5c07a54fb0f3e921995a296c714b53a32ae67019231fcd 5.15MB / 5.15MB
-> sha256:b507ae367272707beca53f35823ed21ba05a6c1dd5dc5ea5f6a532748cd56 10.97MB / 10.97MB
-> sha256:cf2b6bb9c22b31c1027cca322icaa6393f7d885f569ab106f15c01ade718795 54.57MB / 54.57MB
-> sha256:079742806daf3f8b172f59fab85e0bda08401a0fef0112efc7e4d3c78ff 196.51MB / 196.51MB
-> sha256:5e3b1213efc56598e78bd062983945c164de2a37290e06a62ada82124d743 6.29MB / 6.29MB
-> extracting sha256:be29546d541cd9d309201d21a73a9d1db78665c1b95b74f32000eb077a6e193 27.3%
-> sha256:9fd9dfe5634f2e06fad7e241bf5e7459c40ed105c5478676f41c1244bd96752 14.21MB / 14.21MB
-> extracting sha256:9b82b2c73052b20b97d5c07a54fb0f3e921995a296c714b53a32ae67019231fcd 2.3%
-> extracting sha256:cdb57ae367122f07beca53f35823ed21ba05a6c1dd5dc5ea5f6a530740cd056 4.8%
-> sha256:404782044bac0432ca522cb09725401c91fcea080bfeef0eb0b243b2f31bab7 235B / 235B
-> sha256:cf2b6bb9c22b31c1027cca322icaa6393f7d885f569ab106f15c01ade718795 194.2%
-> extracting sha256:6a90ae4811622b31c1027cca322icaa6393f7d885f569ab106f15c01ade718795 2.21MB / 2.21MB
-> extracting sha256:079742806daf3f8b172f59fab85e0bda08401a0fef0112efc7e4d3c78ff 131.4%
-> sha256:5e3b1213efc56598e78bd062983945c164de2a37290e06a62ada82124d743 0.2%
-> extracting sha256:9fd9dfe5634f2e06fad7e241bf5e7459c40ed105c5478676f41c1244bd96752 13.3%
-> extracting sha256:404782044bac0432ca522cb09725401c91fcea080bfeef0eb0b243b2f31bab7 0.0%
-> extracting sha256:c4f42be2be5b900ebfrcb40c1df13de538434cccsf5d954a5684ba6169a3a3f 2.2%
[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 llm_dh
-> exporting to image
-> exporting layers
-> writing image sha256:175671940ddf002fa5d3e5221513f2f2db4a0d242b22a28af0379f19
-> 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\VJK-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.

