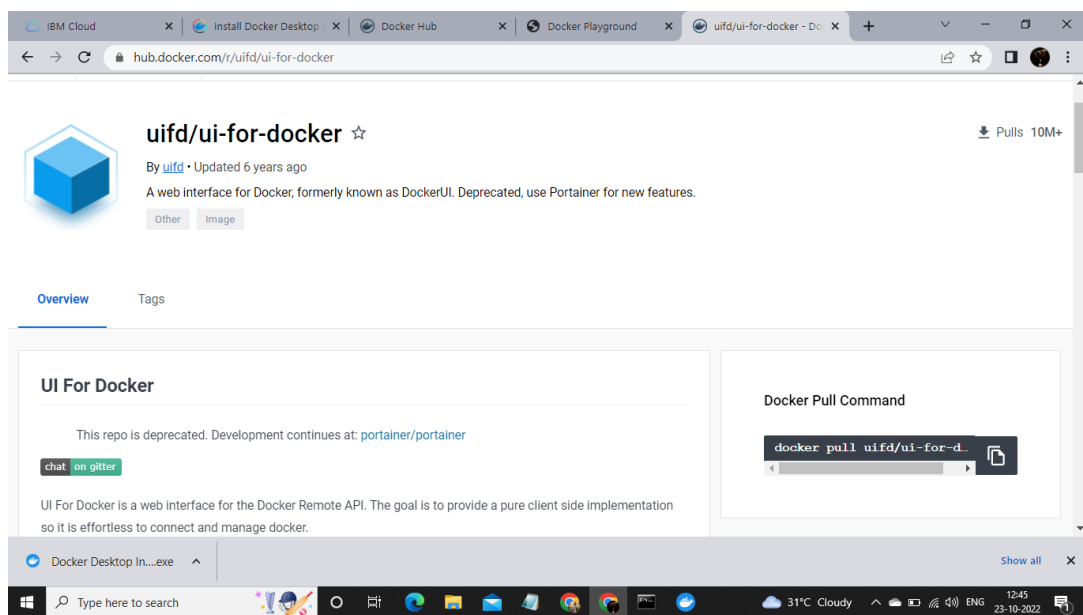


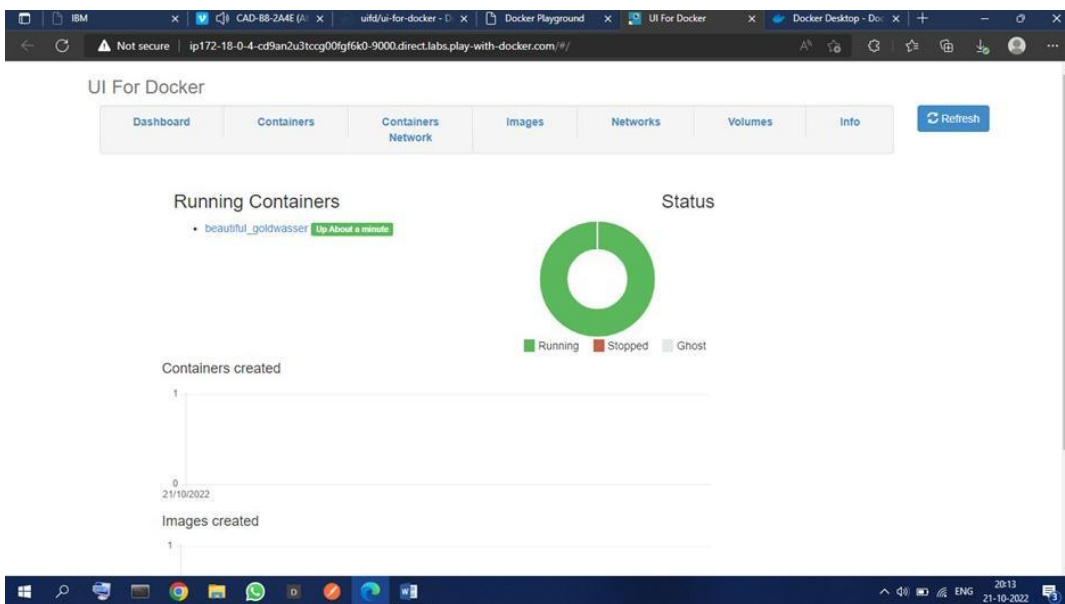
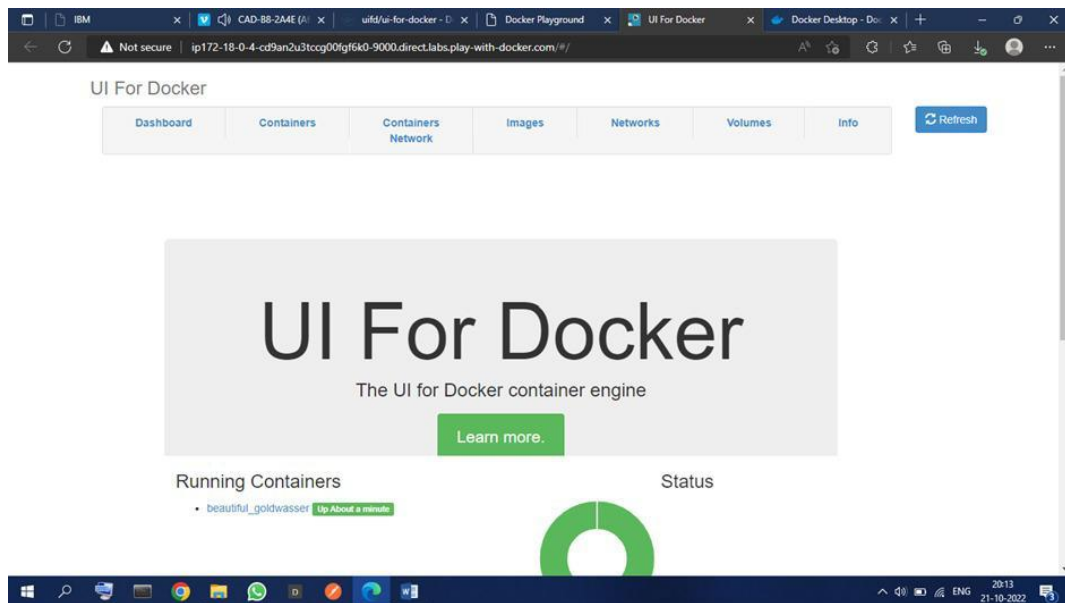
## DOCKER AND KUBERNETES

Assignment Date	21 October 2022
Student Name	JOTHILASHMI R
Student Roll Number	613019104029
Team ID	PNT2022TMID30524
Maximum Marks	2 Marks

### Question 1:

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

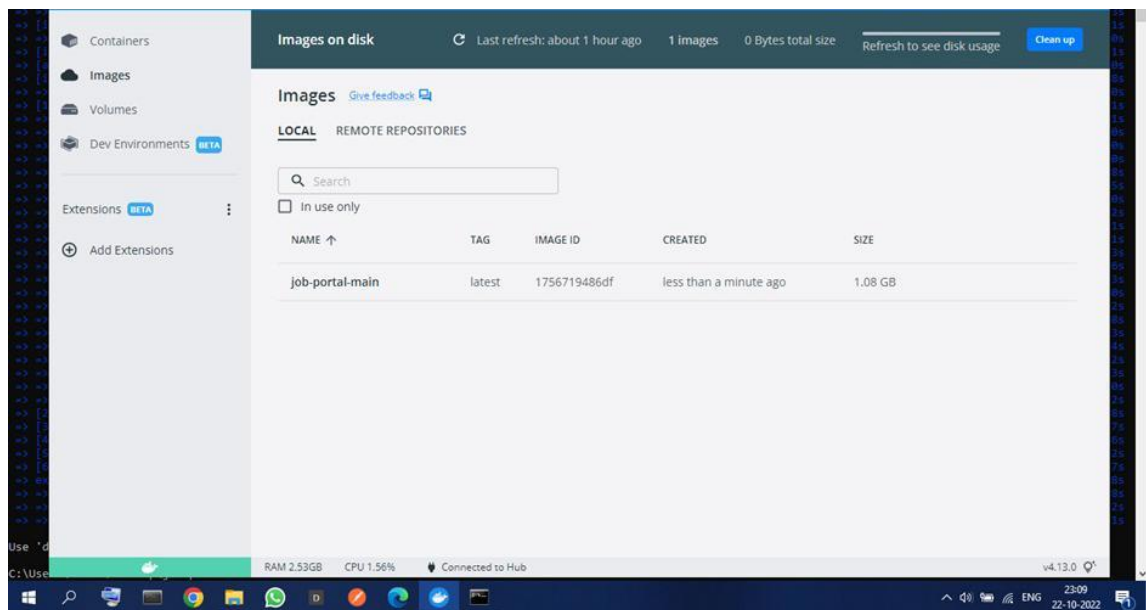




## Question 2:

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

```
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:3.8
[auth] library/python:pull token for registry-1.docker.io
-> [internal] load build context
-> transferring context: 682B
[1/6] FROM docker.io/library/python:3.8@sha256:f0622af4b8c25f0d22194d547d802591067aad01ea7f0a6819d9f300aef6fc
-> resolve docker.io/library/python:3.8@sha256:f0622af4b8c25f0d22194d547d802591067aad01ea7f0a6819d9f300aef6fc
-> sha256:f0622af4b8c25f0d22194d547d802591067aad01ea7f0a6819d9f300aef6fc 1.06kB / 1.06kB
-> sha256:080744907a8ec079d5ac31872359c2de510f82214c044be926393b376d3b60d 2.22kB / 2.22kB
-> sha256:5A20863807c5e3ad24c6e21fc889ab0c8488a27634c0892086ff719f44b104 9.27kB / 9.27kB
-> sha256:0e795460541cdd409281021a73a9410b7865c1b93074f12b009e067746e1e3 34.92kB / 34.92kB
-> sha256:9a829c7105209207d0c07254f0a73a82196a286c71405392ae010211c0 5.15kB / 5.15kB
-> sha256:c05b7ae361722f070ca53f35823ed21ba8546105d95c45495ab53d748cdd56 10.07kB / 10.07kB
-> sha256:6494e4811622b31c027ccac122ca63937fd80f569a9a6f15c01ade718793 54.57kB / 54.57kB
-> sha256:6f9f74806d9a93fe01727594f8a85e0b4a8a81a0fef09112efc7e4d3c78f7 106.51kB / 106.51kB
-> sha256:5e3b311efc56508e78bd609083945c154de2a37208e06e03dada8231240c743 6.29kB / 6.29kB
-> extracting sha256:0e29946d041cd0309281021a73a9410b7865c1b93074f12b009e067746e1e3 27.38 / 27.38
-> sha256:9f40f4c54336f2e6f0ad7e241bf5e7850c486c3470676f81c1244b496752 14.21kB / 14.21kB
-> extracting sha256:9b82bc73b52b92b97d5c07e54f60f3e921995a20ac714b53a2ae67d19231fcd 2.35 / 2.35
-> extracting sha256:c05b7ae361722f070ca53f35823ed21ba8546105d95c45495ab53d748cdd56 4.05 / 4.05
-> sha256:404f02044bac0432ca522cb0f254b1c91fcea0886bfee0be0b243b2f31ab7 235B / 235B
-> sha256:c4f42b2be3b000ebff040bc1df13de538434cc5f5d954a50848a0169a3a3f 2.21kB / 2.21kB
-> extracting sha256:6494e4811622b31c027ccac122ca63937fd80f569a9a6f15c01ade718793 27.38 / 27.38
-> extracting sha256:6f9f74806d9a93fe01727594f8a85e0b4a8a81a0fef09112efc7e4d3c78f7 131.45 / 131.45
-> extracting sha256:5e3b311efc56508e78bd609083945c154de2a37208e06e03dada8231240c743 0.25 / 0.25
-> extracting sha256:9fddfd650334f2e6fad7e241bf5e7450c48ed105c5470670f41c1244b496752 11.38 / 11.38
-> extracting sha256:404f02044bac0432ca522cb0f254b1c91fcea0886bfee0be0b243b2f31ab7 0.00 / 0.00
-> extracting sha256:c4f42b2be3b000ebff040bc1df13de538434cc5f5d954a50848a0169a3a3f 2.28 / 2.28
[0/4] WORKDIR /app
[3/6] RUN /app
[4/6] COPY requirements.txt /app
[5/6] RUN python3 -m pip install -r requirements.txt
[6/6] RUN python3 -m pip install lba_db
-> exporting to image
-> exporting layers
-> writing image sha256:1756719406df0a2fad5da0305c522151372ff3d1b40a60342023a28af0379f19
-> 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.

