

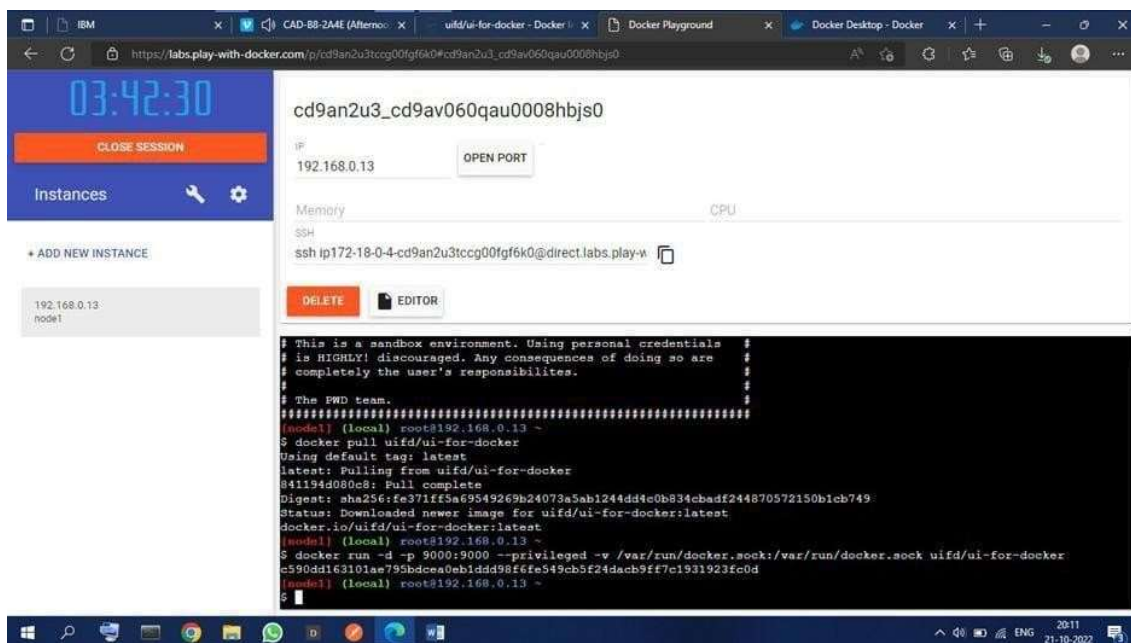
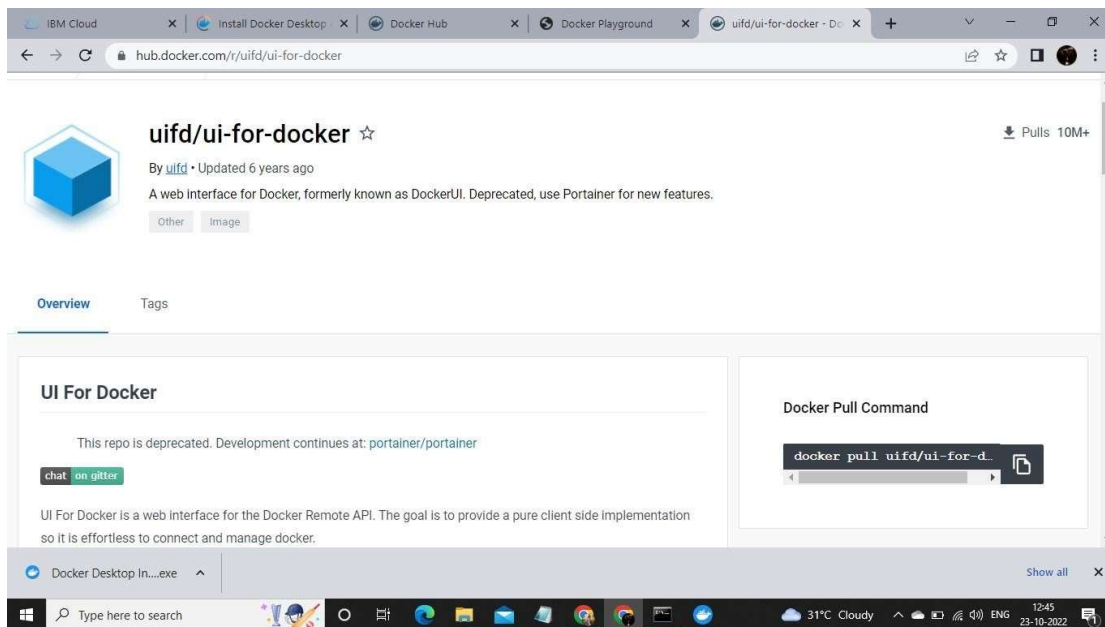
Assignment – 4

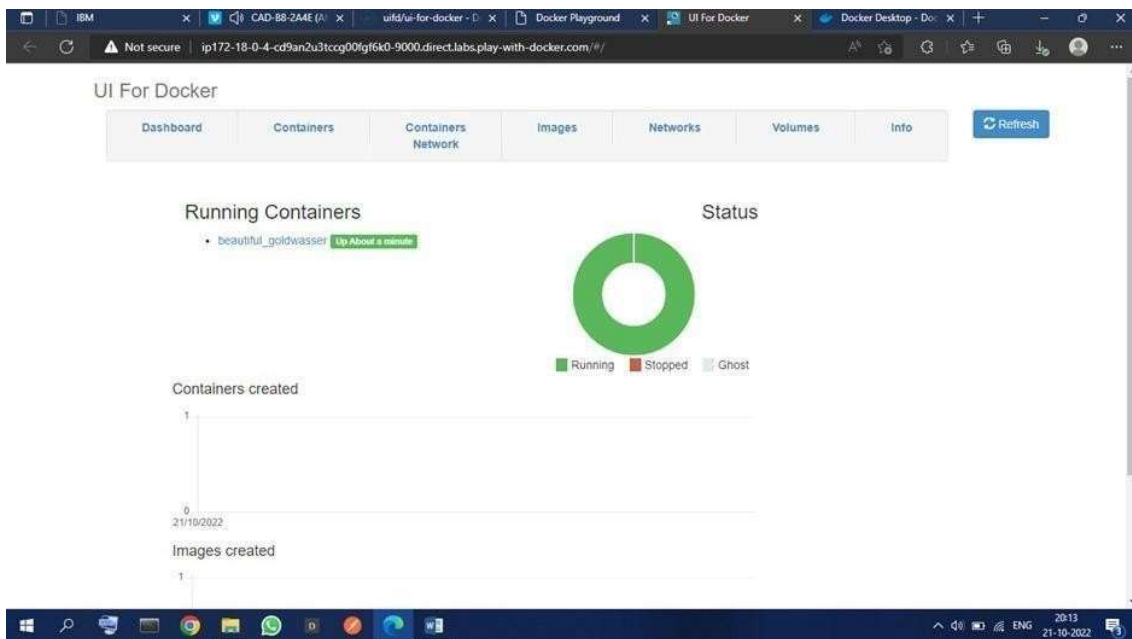
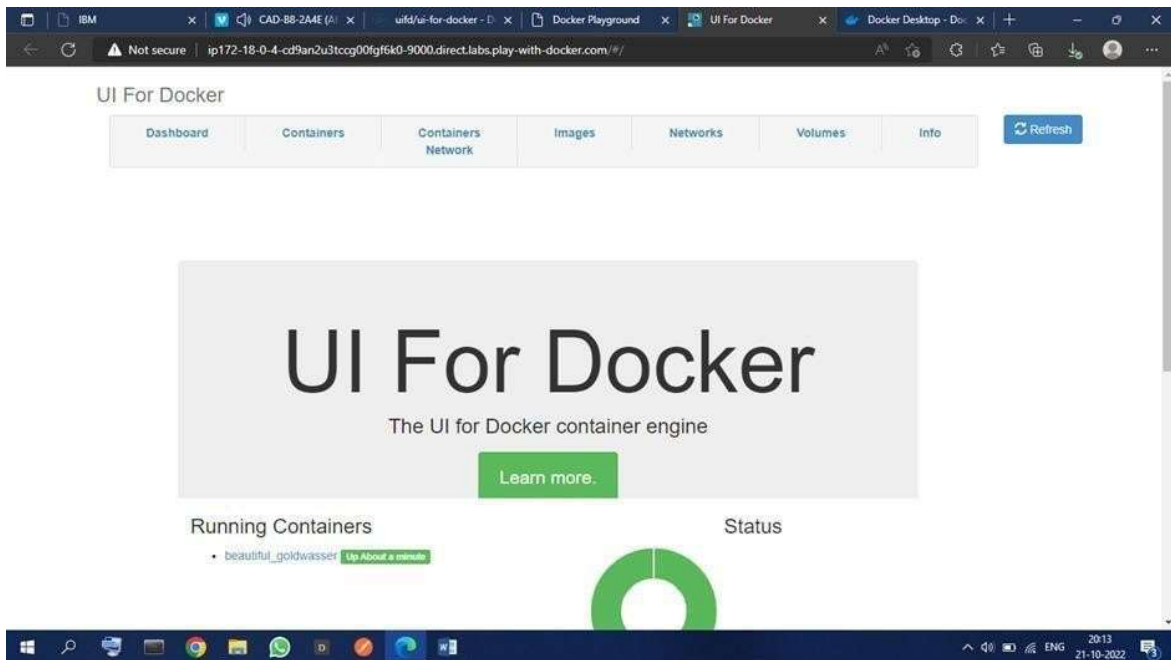
DOCKER AND KUBERNETES

Assignment Date	21 October 2022
Student Name	Prasanna Kumar E
Student Roll Number	319UEC067
Team ID	PNT2022TMID17475
Maximum Marks	2 Marks

Question 1:

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

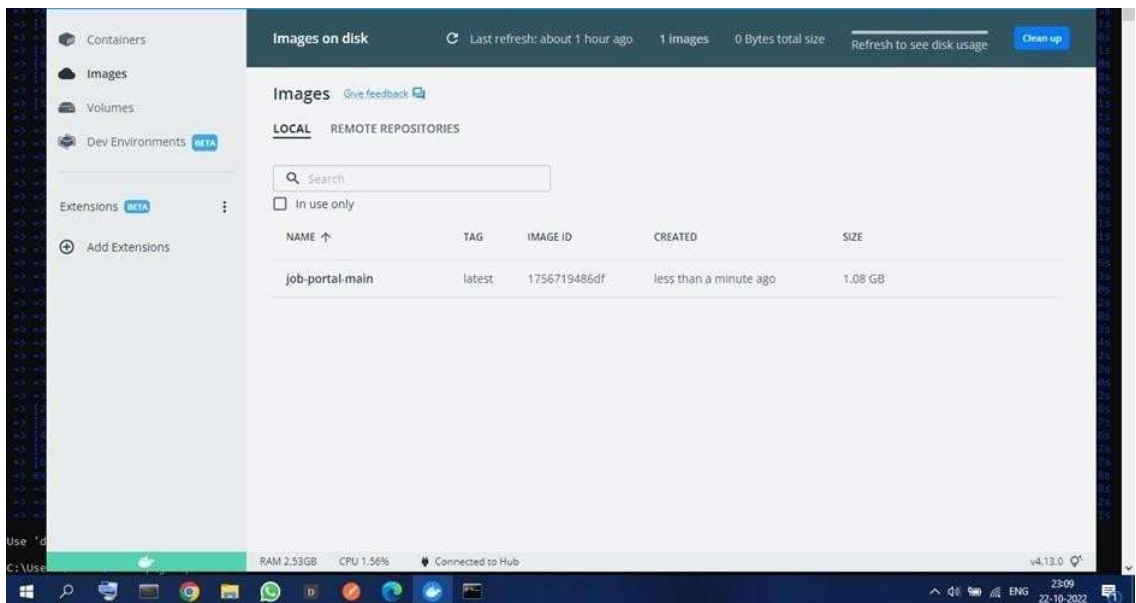




Question 2:

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 context: 32B
-> [internal] load .dockerignore
-> transferring context: 4B
-> [internal] load metadata for docker.io/library/python:3.5
-> [auth] library/python:pull token for registry-1.docker.io
-> [internal] load build context
-> transferring context: 888B
-> [1/6] FROM docker.io/library/python:3.5@sha256:f852afaf86c23f0d22354d547d893591867aa6026a7f0a6d19af9f308af0fc
-> resolve docker.io/library/python:3.5@sha256:f852afaf86c23f0d22354d547d893591867aa6026a7f0a6d19af9f308af0fc
-> sha256:809214af48e23f6d325a4547d893591867aa6026a7f0a6d19af9f308af0fc 1.8kB / 1.8kB
-> sha256:809214af48e23f6d325a4547d893591867aa6026a7f0a6d19af9f308af0fc 2.2kB / 2.2kB
-> sha256:84286380f7c3e3a44c6a31f380abbc0486a27634c0892088f7f173f44b104 9.27kB / 9.27kB
-> sha256:8e1354dd412d8309281d1a73a0d1d706b5c3h05024f320000b077ade1e3 54.32kB / 54.32kB
-> sha256:90d29c7305209259745c97a5f0b73e2195a206c214051a32aef7d19231fc0 5.15kB / 5.15kB
-> sha256:c053e3e321721870c457f35823e213a0c1a27a0b3d746cc058 18.07kB / 18.07kB
-> sha256:e498e48122b31c927cc332c46997f4089340a05c4f5c89a0a02203 54.37kB / 54.37kB
-> sha256:e49f7400d0fa3f08172f5a4a05e0ba8a0481a0f09112efc7a6d3c78f7 536.51kB / 196.51kB
-> sha256:5a301213ef56508e70a0d070c3045c1640e2a3720e06a02dad823134d743 6.20kB / 6.20kB
-> extracting sha256:8e29540d8a1c0d309281d1a73a0d1d706b5c3h05024f320000b077ade1e3
-> sha256:9f00f0c5636f2a6efad7a81d5e7a50c0ed1805c5470870f41c1a4b0d9e752 14.11kB / 14.11kB
-> extracting sha256:80d25c70c40a207050704f0b73e2195a206c214051a32aef7d19231fc0
-> extracting sha256:c053e3e321721870c457f35823e213a0c1a27a0b3d746cc058
-> sha256:40497044bacd12ca521b09f3a41c91fca0800bf0a000b243b2f11ba07 235B / 235B
-> sha256:c4422b02b3b0000f7c080c18f136538c34cc5f0594a5004a010a3a3f 2.21kB / 2.21kB
-> extracting sha256:6484e4811022b11927cc322ca403937f085f50b43e6f15c0a0d0718705
-> extracting sha256:6f0f74086f0a3f08172f504a05858b0401a0f0d0112efc7a6d3c78f7
-> extracting sha256:5a301213ef56508e70a0d070c3045c1640e2a3720e06a02dad823134d743
-> extracting sha256:f0d0e606333730f0a0e215fc230c40c3210b3c270b0f0f41c1a4b0d9e752
-> extracting sha256:40497044bacd12ca521b09f3a41c91fca0800bf0a000b243b2f11ba07
-> extracting sha256:c4422b02b3b0000f7c080c18f136538c34cc5f0594a5004a010a3a3f
-> [2/6] WORKDIR /app
-> [3/6] ADD ./app
-> [4/6] COPY requirements.txt /app
-> [5/6] RUN python -m pip install -r requirements.txt
-> [6/6] RUN python -m pip install job_db
-> exporting to image
-> exporting layers
-> writing image sha256:1756719486dfcad5da305c521513f2ff7d1b49a0243b22a20a70197f19
-> 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\WK-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.

