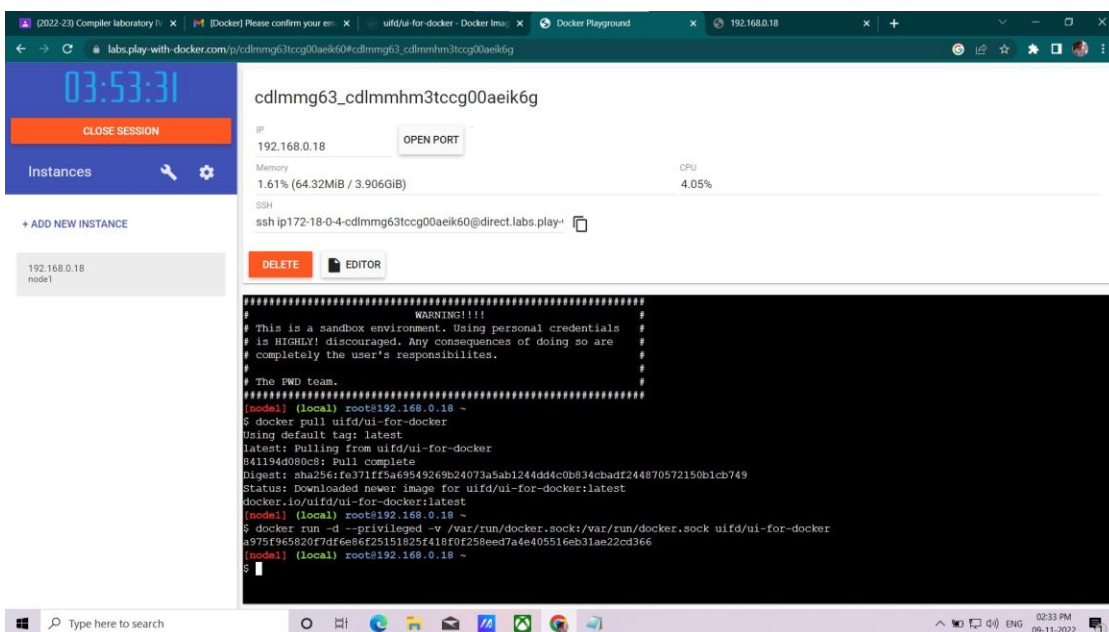
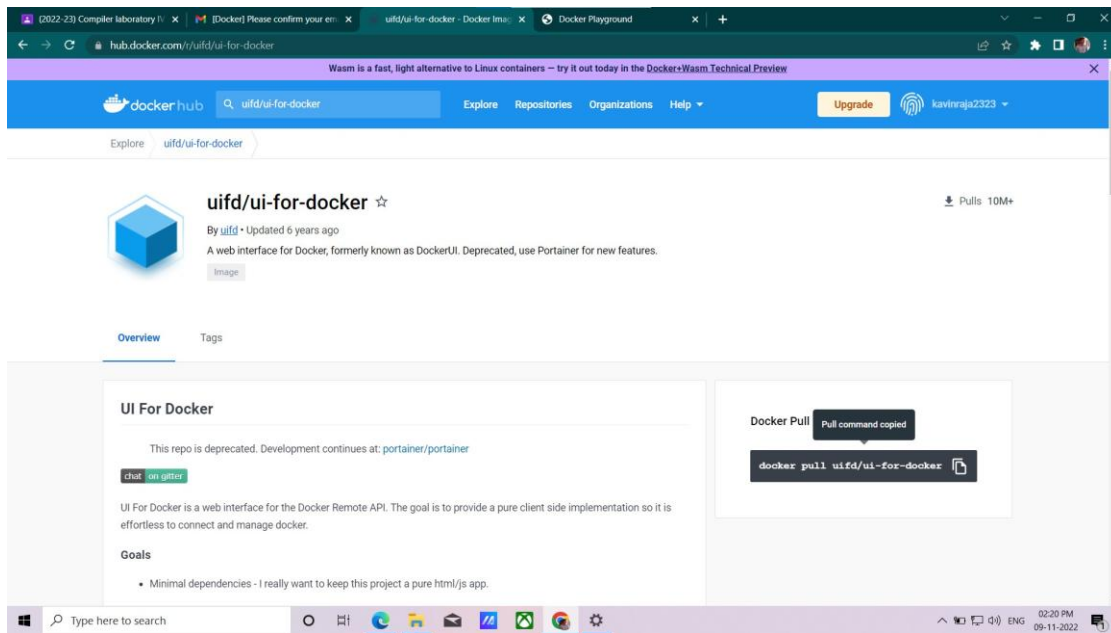


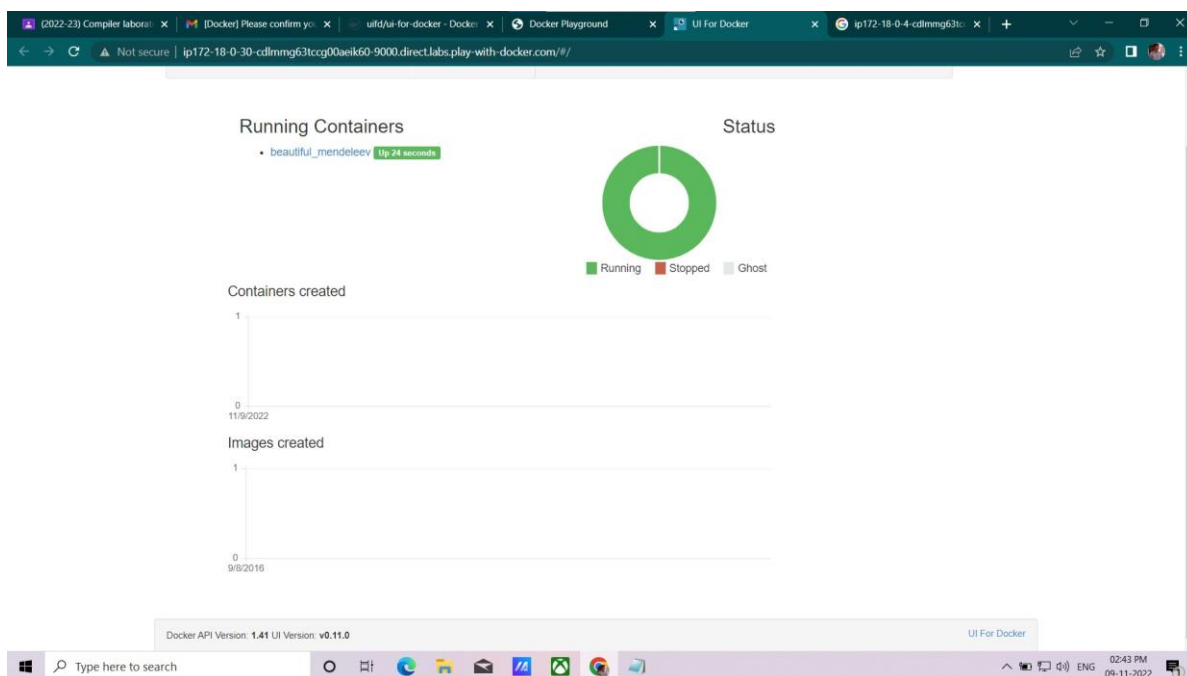
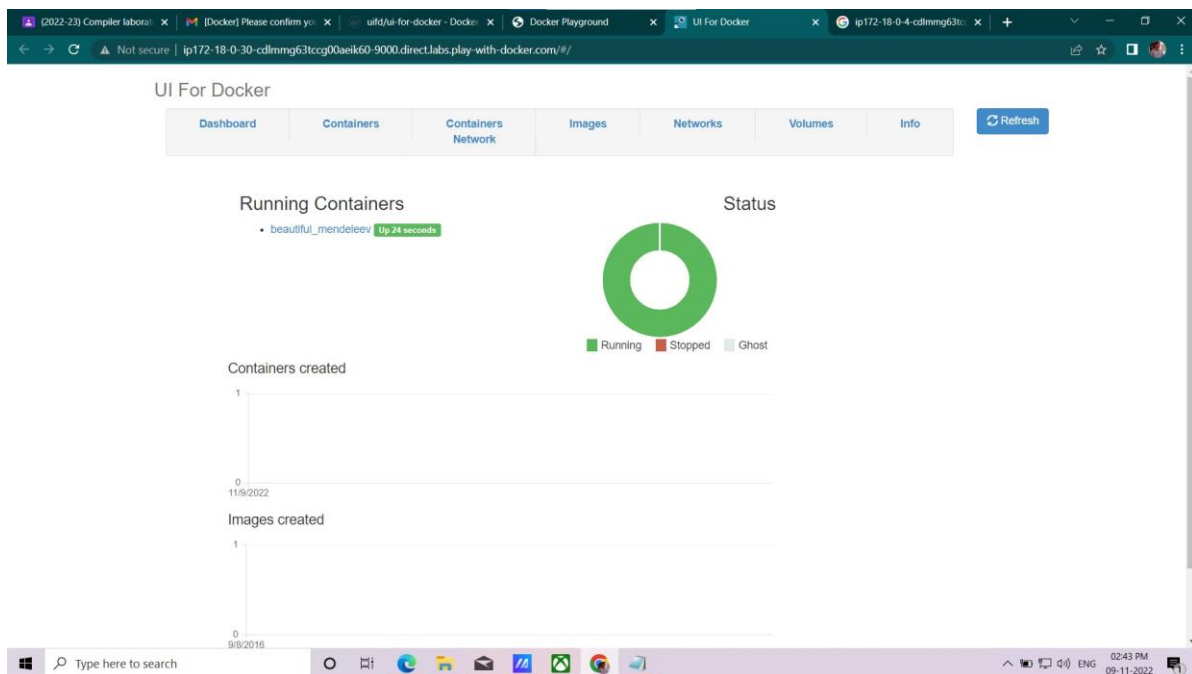
Assignment -4

Docker and Kubernetes

Assignment Date	21 October 2022
Student Name	HARSHITHA B.
Student Roll Number	CITC19 05 018
Maximum Marks	2 Marks

1.Pull an image from docker hub and run it in docker Playground





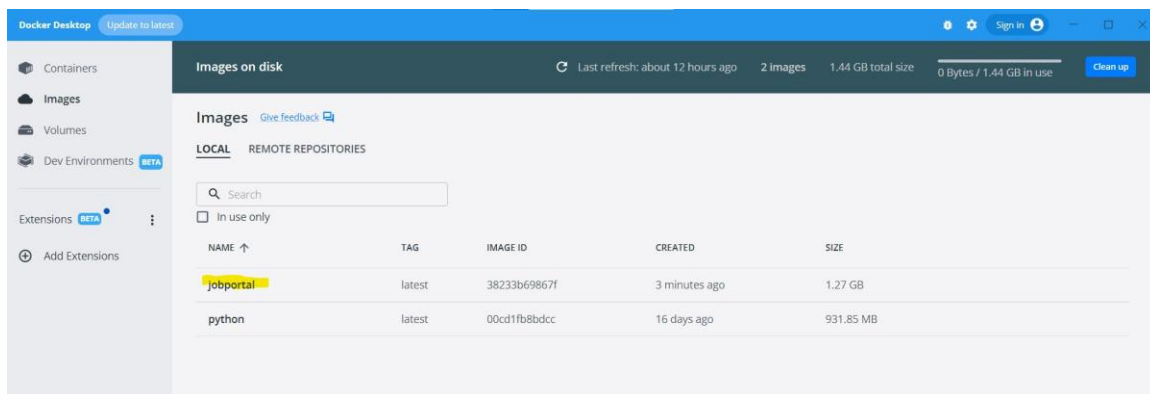
2. Create a docker file for the job portal application and deploy it in Docker desktop application

```
Dockerfile
1
2 FROM python
3 WORKDIR /ibmlast
4 COPY requirements.txt requirements.txt
5 RUN /usr/local/bin/python -m pip install --upgrade pip
6 RUN /usr/local/bin/python -m pip install ibm_db
7 RUN /usr/local/bin/python -m pip install flask
8 ENV IBM_DB_HOME /ibmlast/db2_license/licenses/clidriver
9 ENV LD_LIBRARY_PATH /ibmlast/db2_license/licenses/clidriver/lib:$LD_LIBRARY_PATH
10 EXPOSE 5000
11 COPY . .
12 CMD [ "python3", "-m", "flask", "--debug", "run" ]
13
```

```
Build Log  Dashboard

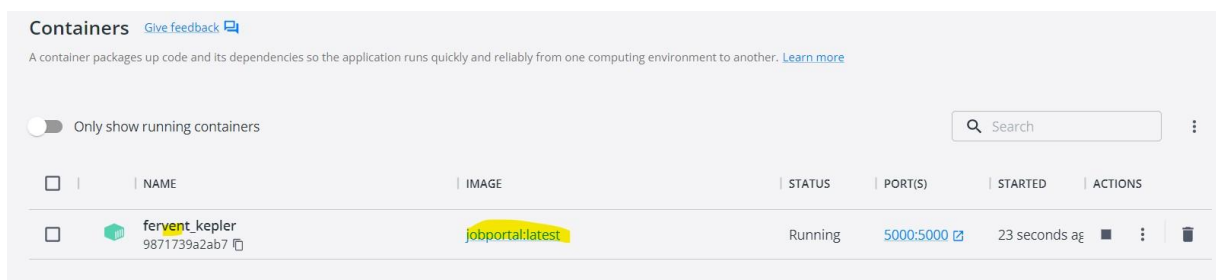
Step 9/11 : EXPOSE 5000
---> Using cache
---> 22526517563c
Step 10/11 : COPY . .
---> 933590780154
Step 11/11 : CMD [ "python3", "-m" , "flask", "--debug", "run"]
---> Running in 720bc49aaf0f
Removing intermediate container 720bc49aaf0f
---> 38233b69867f

Successfully built 38233b69867f
Successfully tagged jobportal:latest
'jobportal Dockerfile: Dockerfile' has been deployed successfully.
```



```
C:\Users>docker run -d -p 5000:5000 jobportal
9871739a2ab7c15ed9bbe2431037be7d3612d9b2407ce771eb47250e630eae84

C:\Users>
```



Registration

Submit

3. Create a IBM container registry and deploy helloworld app or jobportal

The screenshot shows the IBM Cloud Kubernetes dashboard for a free cluster named 'mycluster-free'. The cluster is in a 'Normal' state and expires in 30 days. The dashboard provides an overview of the cluster's status, including node status (1 of 1), add-on status (0 of 0), master status (Normal), and ingress status (Unknown). It also displays details such as the cluster ID, version, infrastructure type, zones, creation time, resource group, and image security enforcement settings.

Cluster Overview:

- Cluster Name: mycluster-free
- Status: Normal
- Expires in: 30 days

Node Status: 1 of 1 Normal

Add-on Status: 0 of 0 Normal

Master Status: Normal

Ingress Status: Unknown

Details:

- Cluster ID: cdmu15f041kq6n5gq90
- Version: 1.24.7_1542
- Infrastructure: Classic
- Zones: Milan 01
- Created: 11/11/2022, 9:57 AM
- Resource group: Default
- Image security enforcement:

Node health