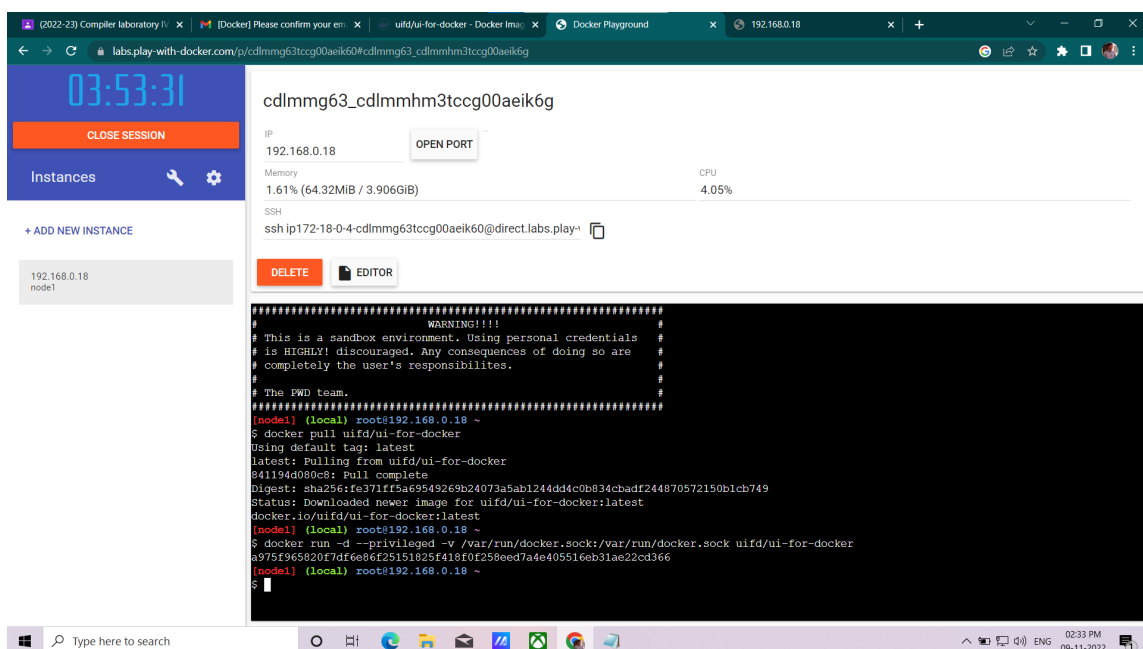
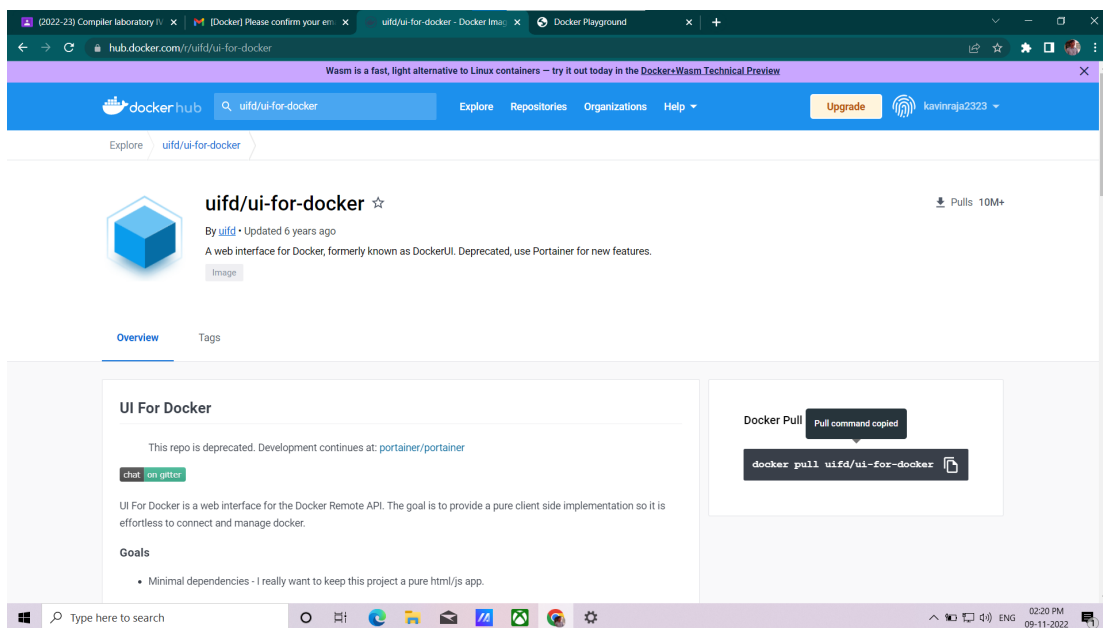


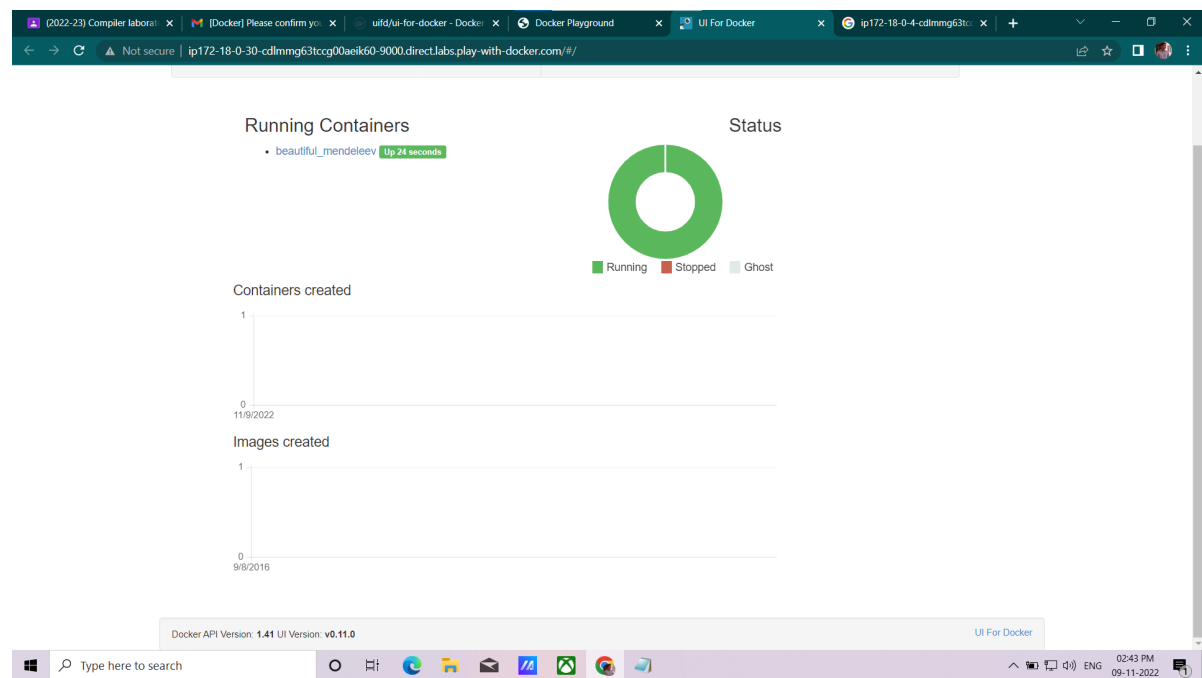
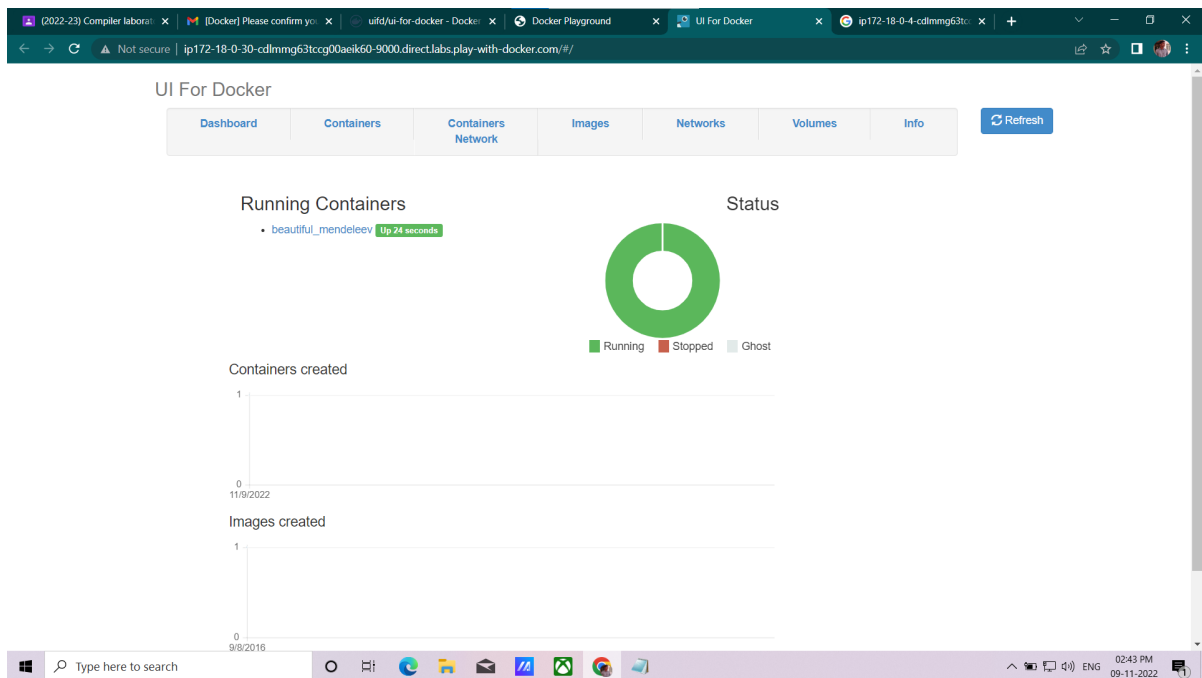
Assignment -4

Docker and Kubernetes

Assignment Date	21 October 2022
Student Name	KAVINRAJA R
Student Roll Number	CITC1905023
Maximum Marks	2 Marks

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





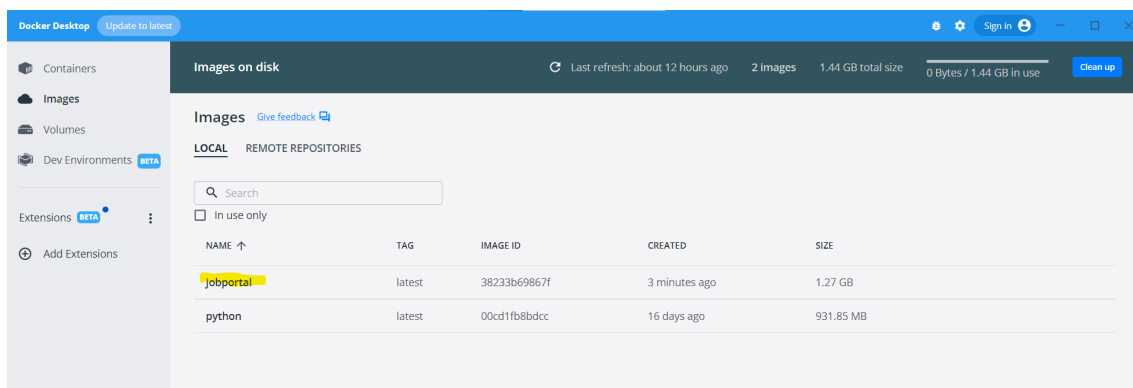
2. Create a docker file for the job portal application and deploy it in Docker desktop application

```
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

<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="password"/>
<input type="button" value="Submit"/>

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

The screenshot shows the IBM Cloud Kubernetes cluster overview page for a cluster named 'mycluster-free'. The cluster is in a 'Normal' state and has an expiration warning: 'Expires in 30 days: Be sure to back up your data, your cluster will be deleted in 30 days. To access the full capabilities of the service, try out a standard cluster.' The left sidebar contains navigation links for 'Overview', 'Worker nodes', 'Worker pools', and 'DevOps' (marked as 'New'). The main content area displays four status cards: 'Node status' (1 of 1, Normal), 'Add-on status' (0 of 0, Normal), 'Master status' (Normal), and 'Ingress status' (Unknown). Below these is a 'Details' section with a table of cluster information.

Details	
Cluster ID	cdmsu15f641kq6n5g9g
Version	1.24.7_1542
Infrastructure	Classic
Zones	Milan 01
Created	11/11/2022, 9:57 AM
Resource group	Default
Image security enforcement	Enable

At the bottom, there is a 'Node health' section and a link for 'Worker node details'.