

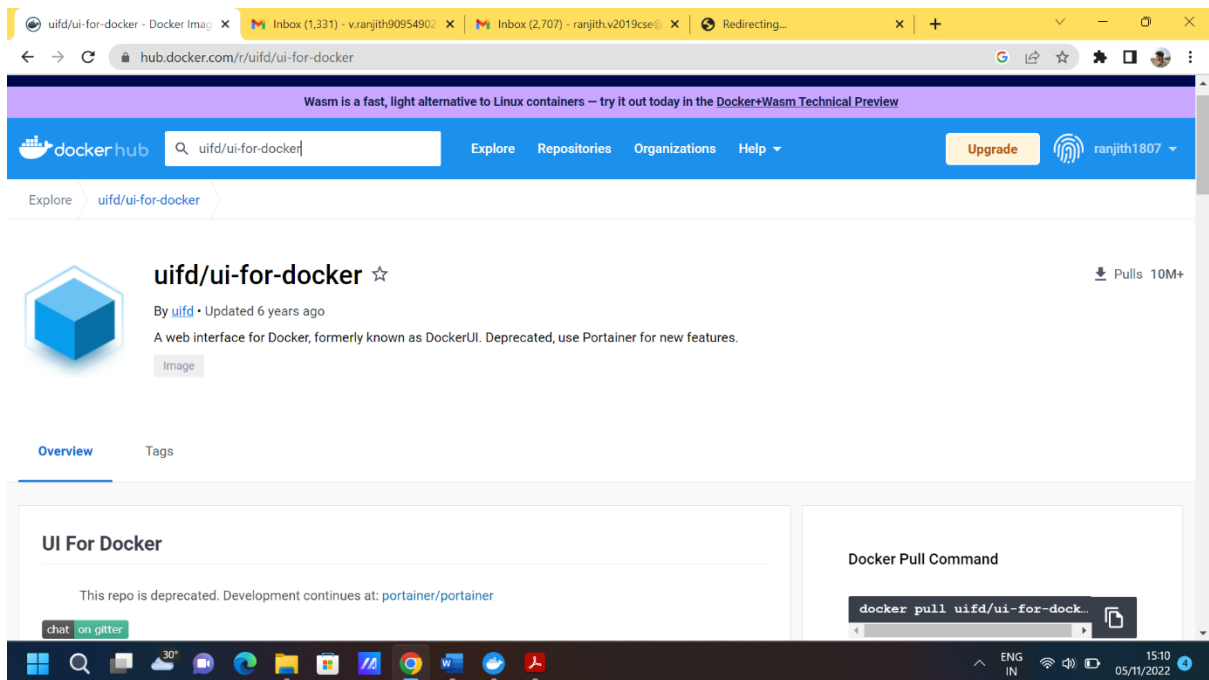
Assignment -4

Docker and Kubernetes

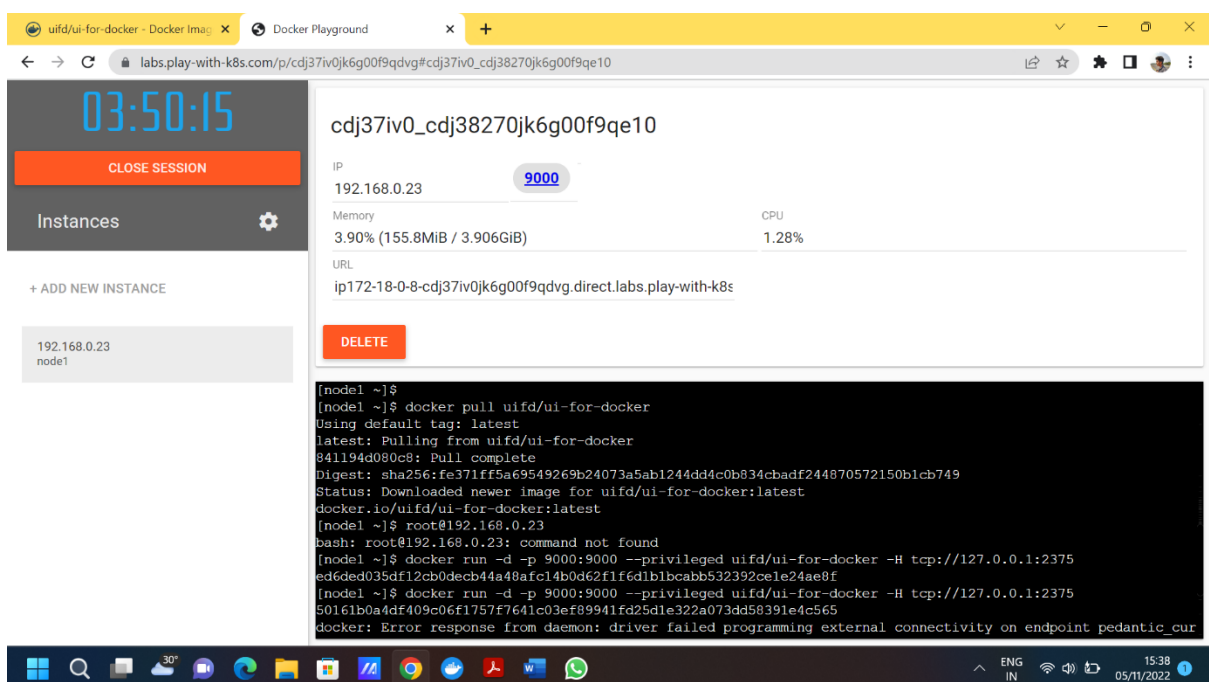
Assignment Date	21 October 2022
Student Name	Sriram R
Student Roll Number	722819104147
Maximum Marks	2 Marks

Question-1:

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

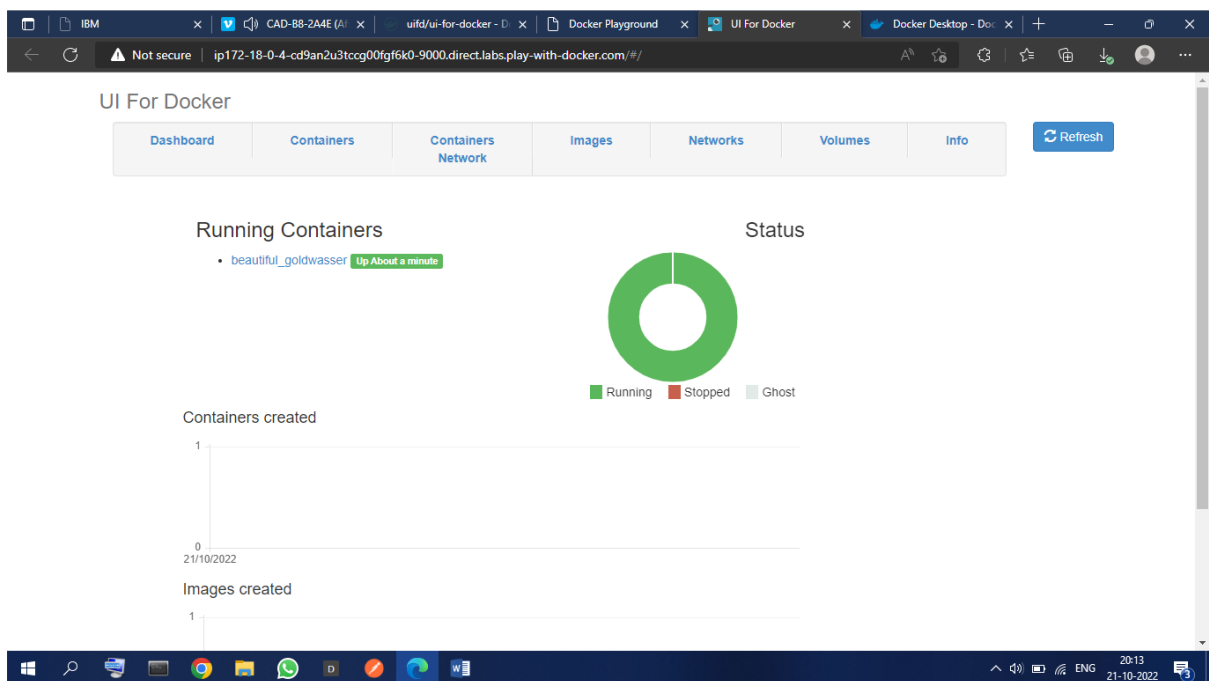
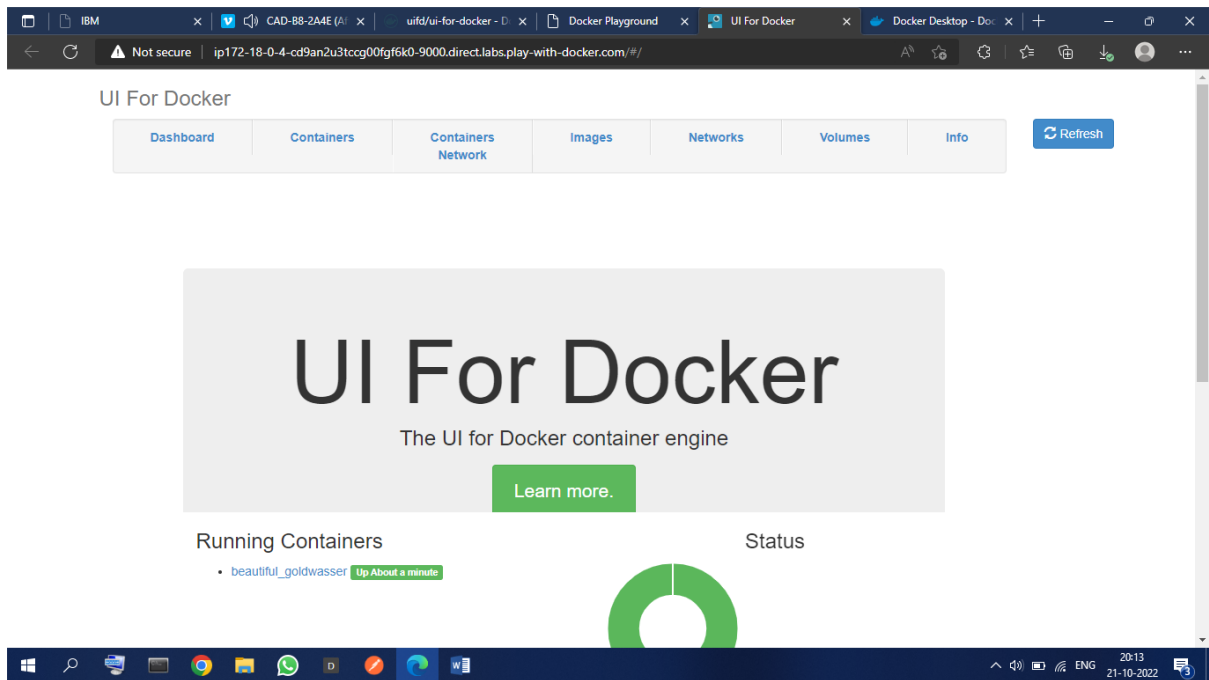


The screenshot shows the Docker Hub page for the repository `uifd/ui-for-docker`. The page header includes the Docker Hub logo, a search bar with the text `uifd/ui-for-docker`, and navigation links for Explore, Repositories, Organizations, and Help. The repository page shows a blue cube icon, the name `uifd/ui-for-docker`, and a star icon. Below the icon, it says "By uifd · Updated 6 years ago" and "A web interface for Docker, formerly known as DockerUI. Deprecated, use Portainer for new features." The page also shows a "Pulls 10M+" badge. The "Overview" tab is selected, showing a description of the repository and a "chat on gitter" link. The "Tags" tab is also visible. The "UI For Docker" section states "This repo is deprecated. Development continues at: portainer/portainer". The "Docker Pull Command" section shows the command `docker pull uifd/ui-for-docker`.



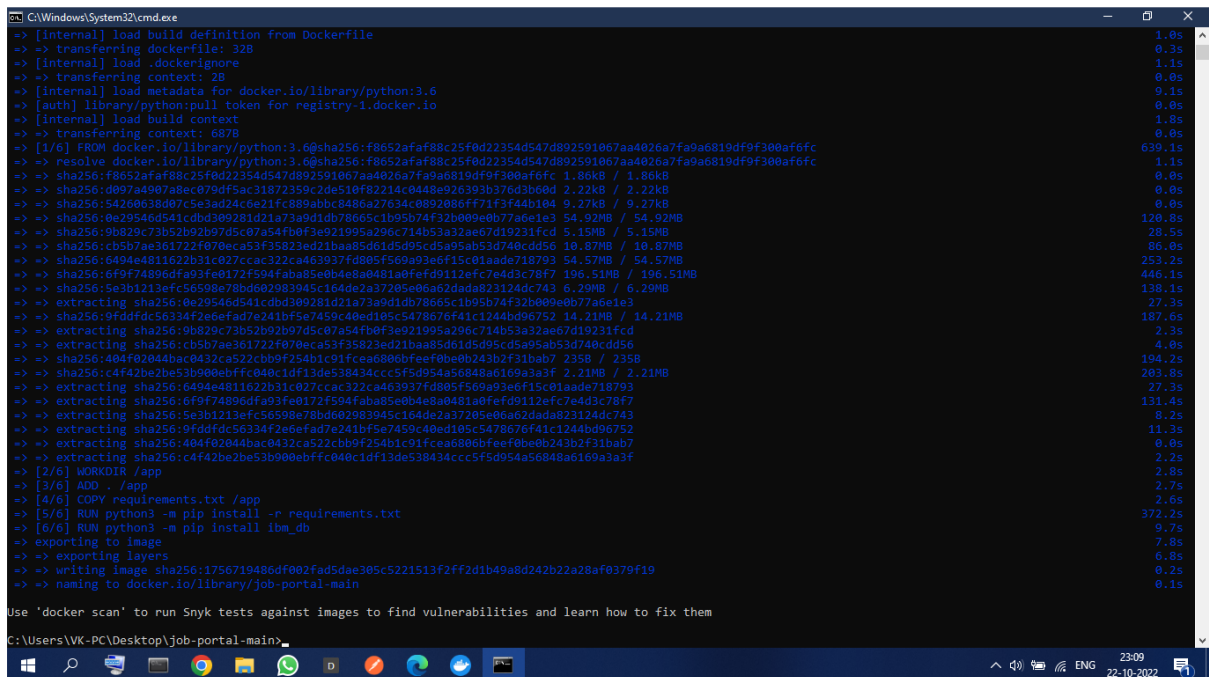
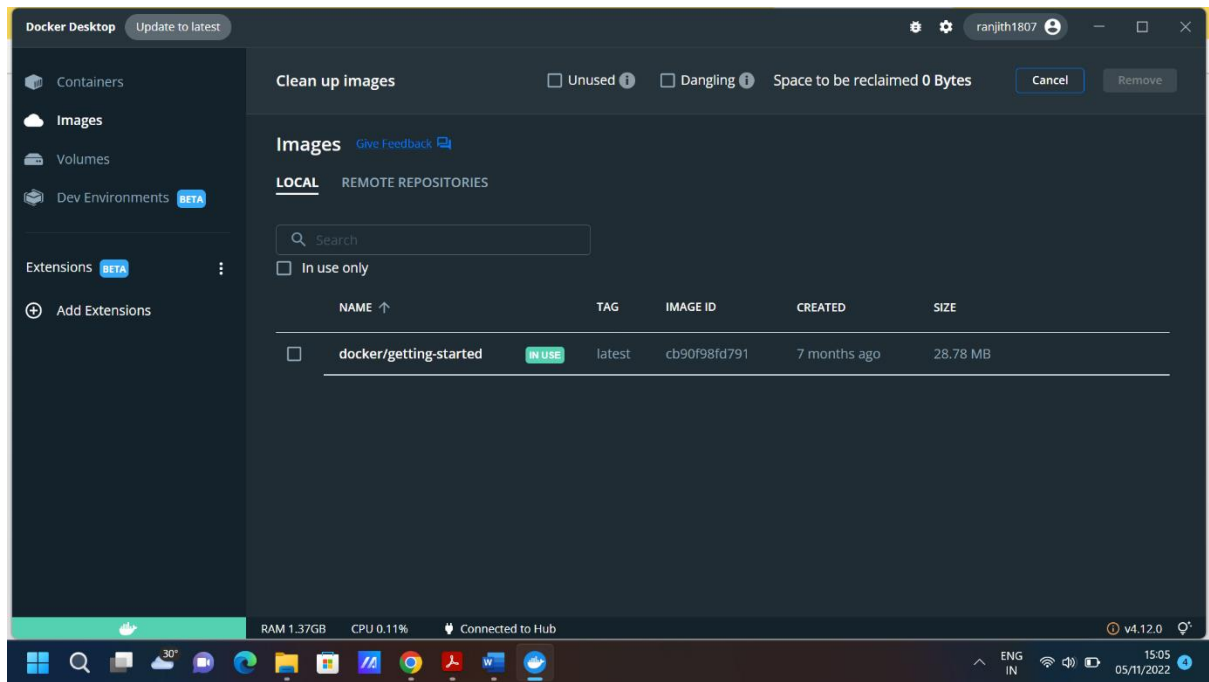
The screenshot shows the Docker Playground interface. The top bar displays the time `03:50:15` and a "CLOSE SESSION" button. The "Instances" section shows a list of instances, including one with IP `192.168.0.23` and name `node1`. The "ADD NEW INSTANCE" button is visible. The main area shows the details of the selected instance `cdj37iv0_cdj38270jk6g00f9qe10`, including its IP `192.168.0.23`, memory usage `3.90% (155.8MiB / 3.906GiB)`, CPU usage `1.28%`, and URL `ip172-18-0-8-cdj37iv0jk6g00f9qdvq.direct.labs.play-with-k8s`. A "DELETE" button is present. The terminal window shows the following commands and output:

```
[node1 ~]$  
[node1 ~]$ docker pull uifd/ui-for-docker  
Using default tag: latest  
latest: Pulling from uifd/ui-for-docker  
841194d080c8: Pull complete  
Digest: sha256:fe371ff5a69549269b24073a5ab1244dd4c0b834cbadf244870572150b1cb749  
Status: Downloaded newer image for uifd/ui-for-docker:latest  
docker.io/uifd/ui-for-docker:latest  
[node1 ~]$ root@192.168.0.23  
bash: root@192.168.0.23: command not found  
[node1 ~]$ docker run -d -p 9000:9000 --privileged uifd/ui-for-docker -H tcp://127.0.0.1:2375  
ed6ded035df12cb0decbb44a48afc14b0d62f1f6d1b1bcabb532392ce1e24ae8f  
[node1 ~]$ docker run -d -p 9000:9000 --privileged uifd/ui-for-docker -H tcp://127.0.0.1:2375  
50161b0a4df409c06f1757f7641c03ef89941fd25d1e322a073dd50391e4c565  
docker: Error response from daemon: driver failed programming external connectivity on endpoint pedantic_cur
```



Question 2:

Create a docker file for the jobportal application and deploy it in Docker desktop application.



Question 3:

Create a IBM container registry and deploy helloworld app or jobportalapp.



Question 4:

Create a Kubernetes cluster in IBM cloud and deploy helloworld image or jobportal image and also expose the same app to run in nodeport

The screenshot shows the IBM Cloud Kubernetes dashboard. The cluster is named 'mycluster-free' and is in the 'Preparing master, workers...' state. The dashboard displays a table of worker nodes with the following data:

Name	Status	Worker pool	Zone	Private IP	Public IP	Version
000000b2	Normal	default	Milan 01	10.144.183.56	169.51.194.202	1.24.6_1541

The dashboard also includes a sidebar with navigation options like 'Overview', 'Worker nodes', 'Worker pools', and 'DevOps'. The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating 00:36 on 02-11-2022.