

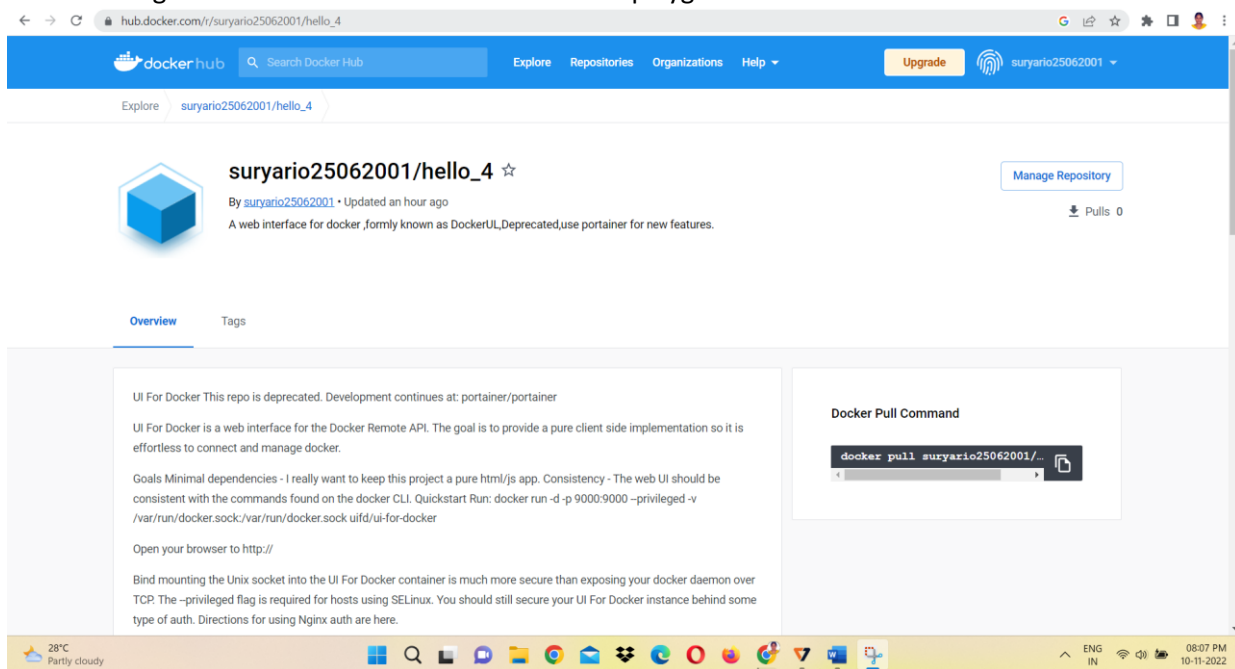
Assignment – 4

Docker and Kubernetes

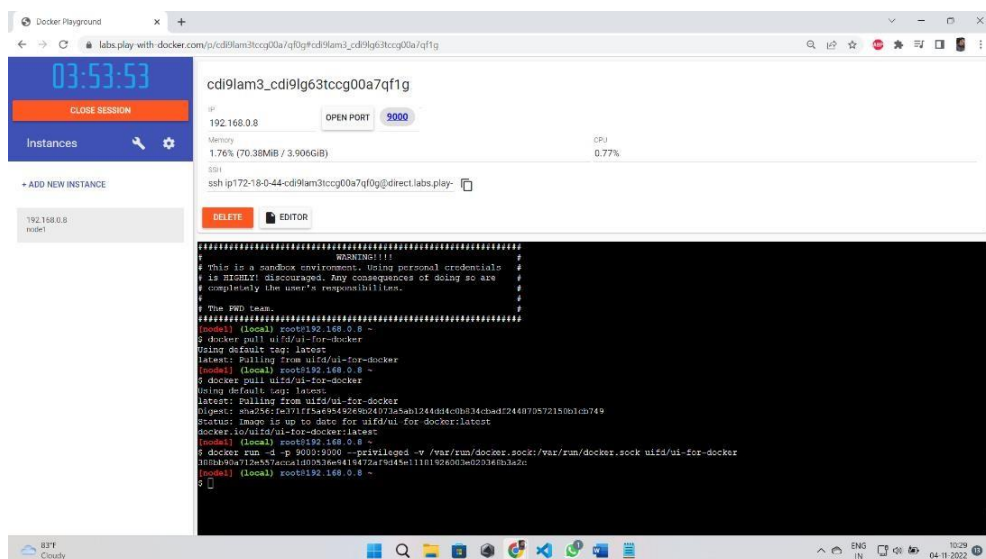
Assignment Date	04 November 2022
Student Name	Vinoth Kumar A
Student Roll Number	927619BIT4123
Maximum Marks	2 Marks

Question-1:

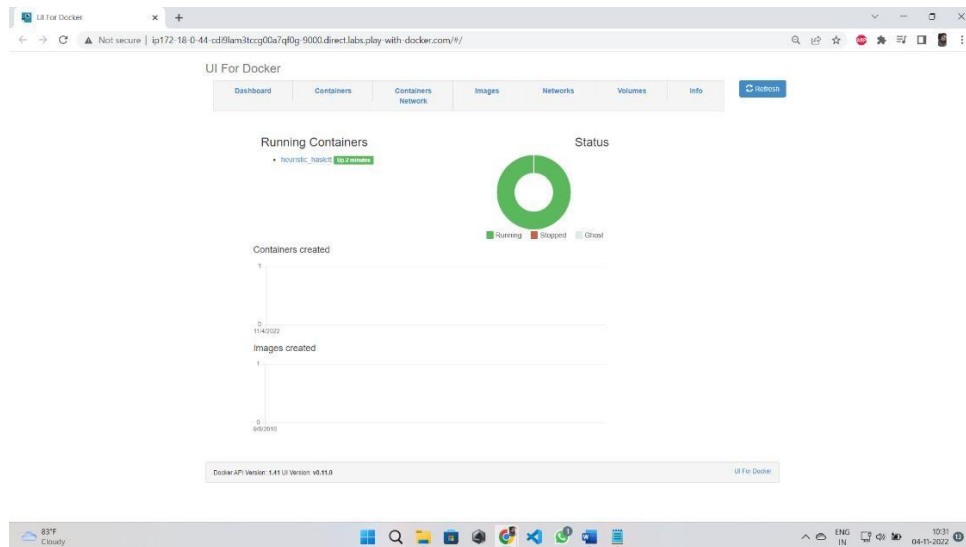
Pull an Image from docker hub and run it in docker playground.



The screenshot shows the Docker Hub repository page for `suryario25062001/hello_4`. The page includes a search bar, navigation links (Explore, Repositories, Organizations, Help), and a user profile for `suryario25062001`. The repository details show it was updated an hour ago and is a web interface for Docker. The Docker Pull Command is displayed as `docker pull suryario25062001/hello_4`. The Overview tab is selected, showing a description of the repository and instructions for running the container.



The screenshot shows the Docker Playground interface. On the left, there is a sidebar with a clock showing 03:53:53, a 'CLOSE SESSION' button, and a list of instances. The main area displays the details of a container named `cdl9lam3_cdl9lg63tccg00a7qf1g`. The container's IP is `192.168.0.8`, and it is running on a host with IP `172.18-0-44-cdl9lam3tccg00a7qf1g`. The container's status is 'Running' and it is using the `latest` tag of the `ui-for-docker` image. The terminal output shows the container's startup logs, including the Docker pull command and the container's initialization process.



Question-2:

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

```
1 FROM helloworld:latest
2 WORKDIR ~/Desktop/
3 ADD . helloworld/
4 WORKDIR ~/Desktop/htmlfile
5 RUN pip install -r requirements
6 RUN chmod +x app.sh
7 CMD ["/bin/sh", "app.sh"]
```

Question-3:

Create a 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 nodeport.

