

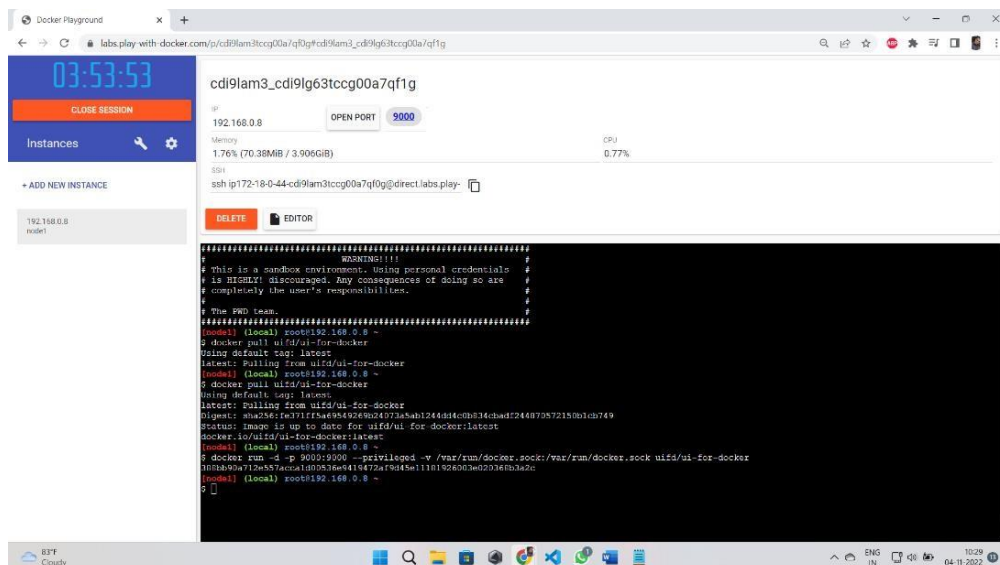
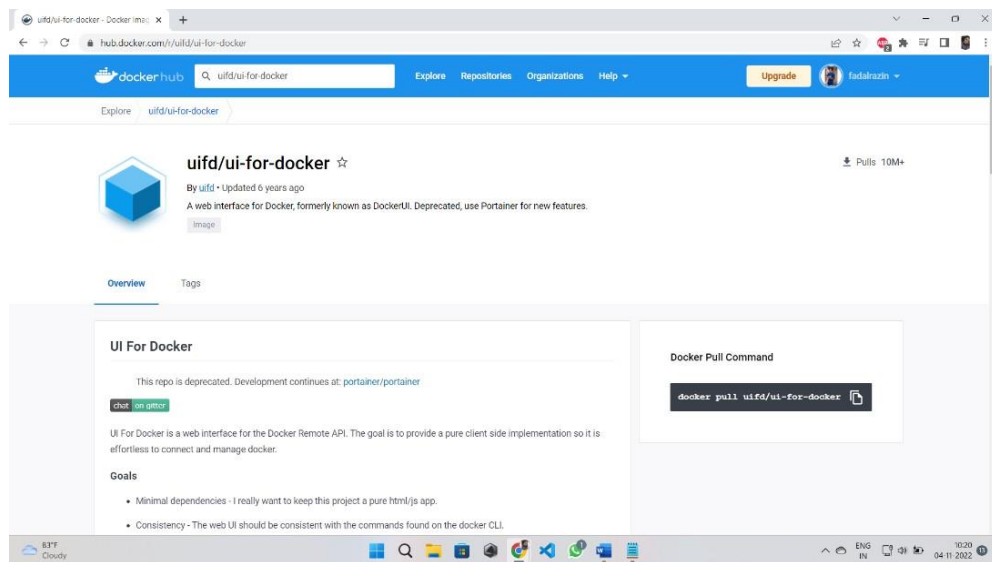
## Assignment – 4

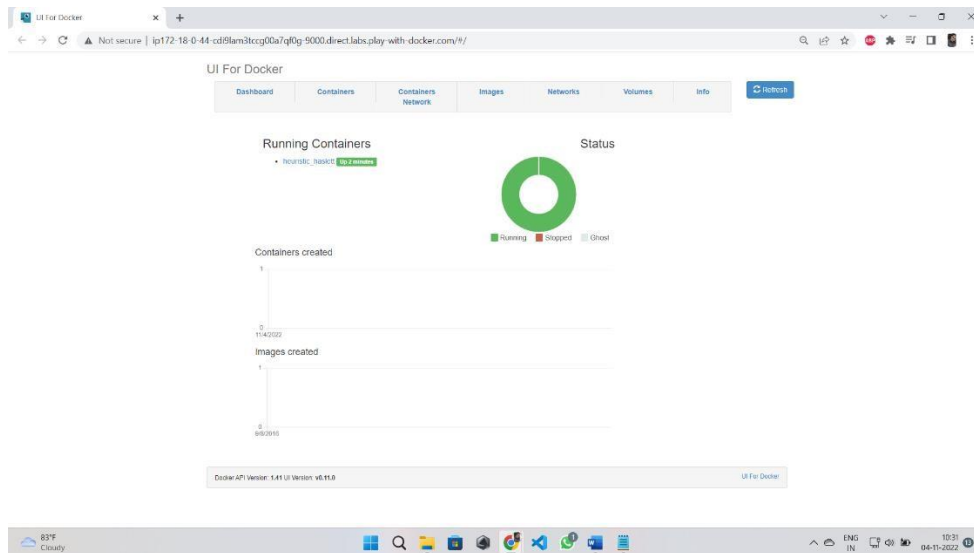
### Docker and Kubernetes

Assignment Date	05 November 2022
Student Name	KALKI D
Student Roll Number	513119104015
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.

```
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.

The screenshot shows the Docker Desktop application window. The left sidebar contains navigation options: Containers, Images, Volumes, Dev Environments (with a BETA badge), Extensions (with a BETA badge), and Add Extensions. The main panel is titled 'Images on disk' and shows a summary: 'Last refresh: 8 minutes ago', '2 Images', '13.26 KB total size', and '13.26 KB / 13.26 KB in use'. Below this, there's a section for 'Images' with a search bar and a toggle for 'In use only'. A table lists the images:

NAME	TAG	IMAGE ID	CREATED	SIZE
hello-world	latest	feb5d9fea6a5	about 1 year ago	13.26 KB
icr.io/0034ns/helloworld	latest	feb5d9fea6a5	about 1 year ago	13.26 KB

At the bottom, there's a 'Connect to Remote Content' section with three checkmarks: 'Store and backup your images remotely', 'Unlock vulnerability scanning for greater security', and 'Collaborate with your team'. A 'Sign in' button is present. The bottom status bar shows 'RAM 1.76GB', 'CPU 0.06%', 'Not connected to Hub', and 'v4.12.0'.