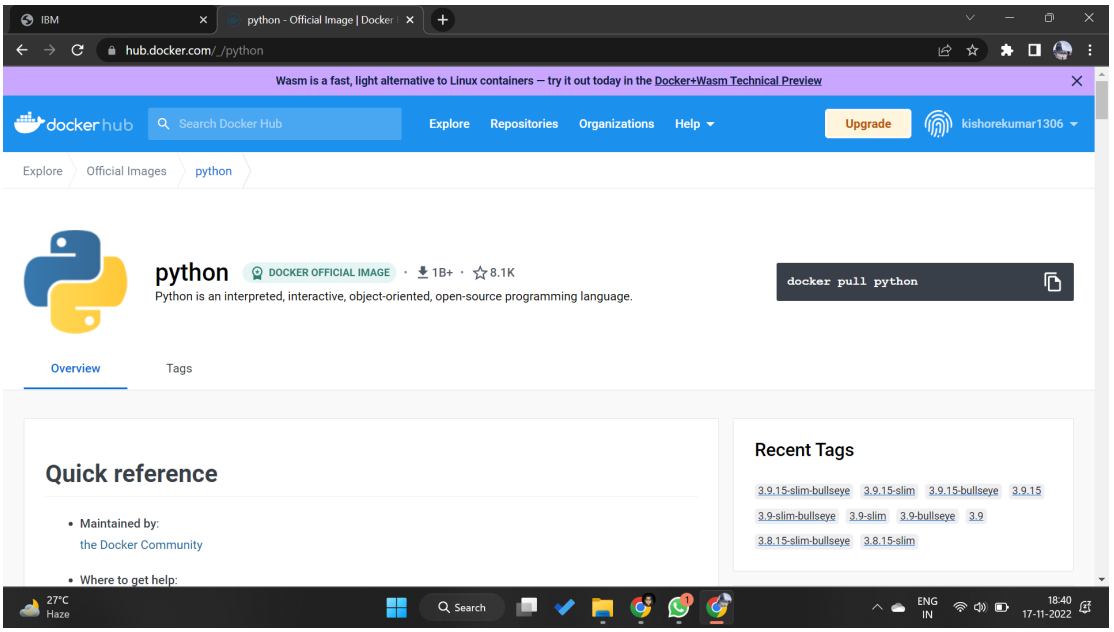
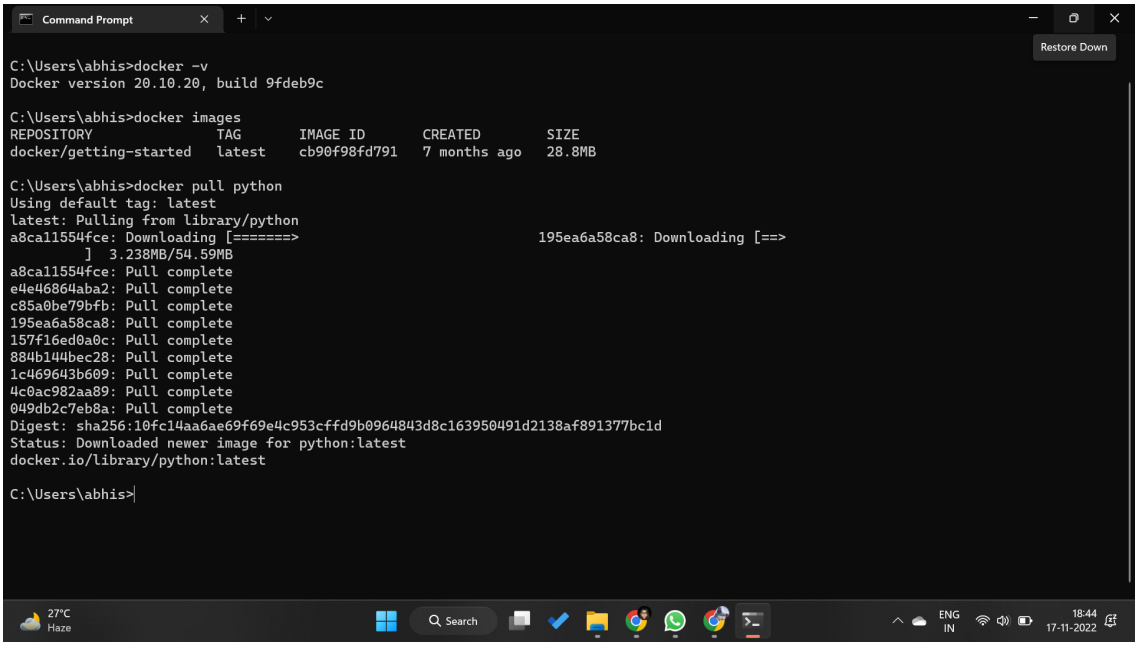
ASSIGNMENT 4

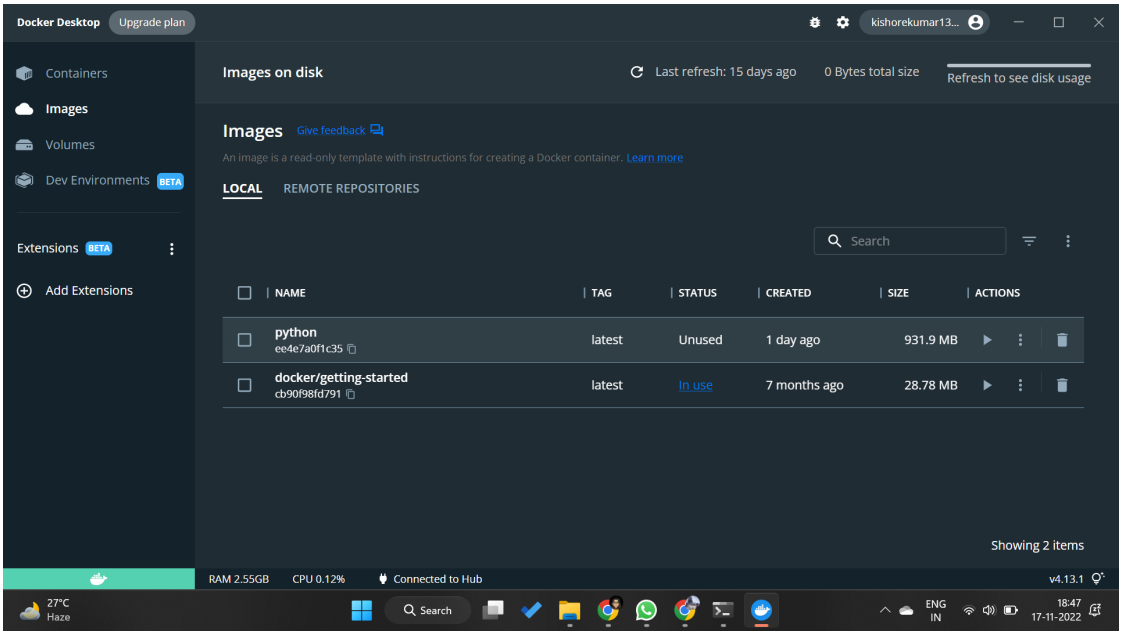
Team ID	PNT2022TMID17803
Project Name	Plasma Donor Application
Student ID	713319CS003
Student Name	Abhirami SS

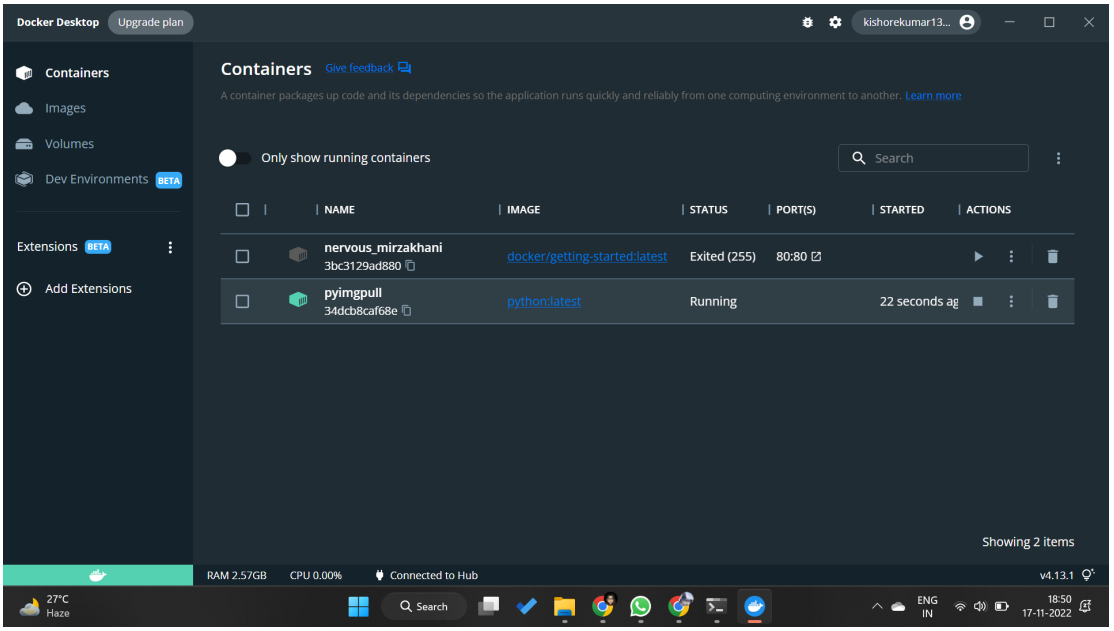
1.Pull an image from docker hub and run it in the docker playground

Selecting Python to be the the image to run on docker

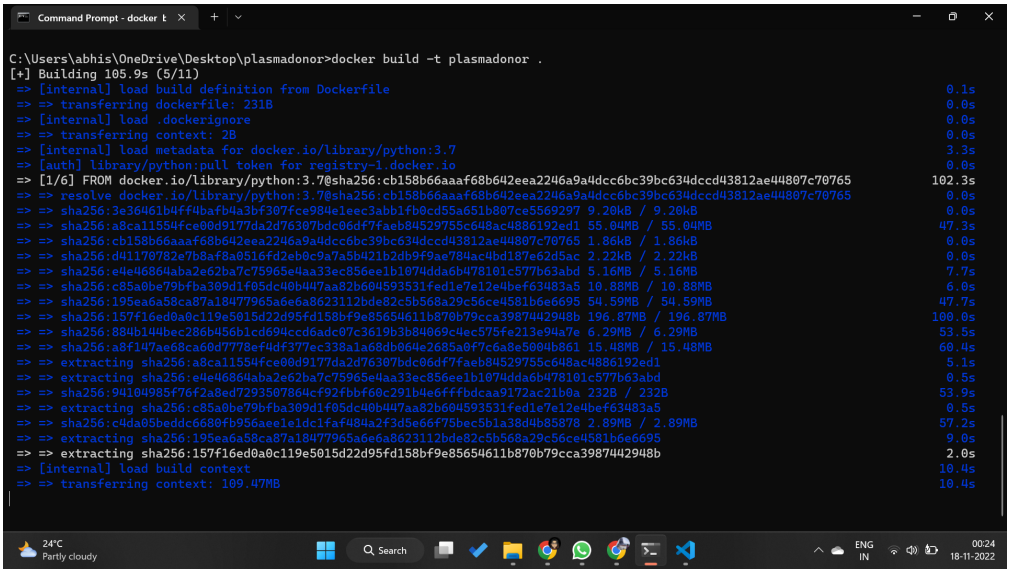


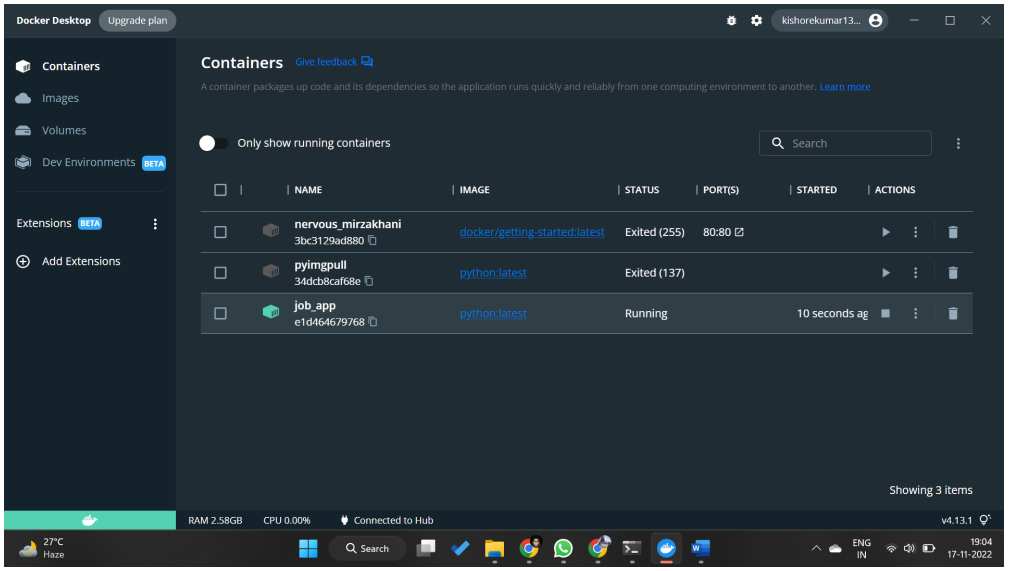



Docker Desktop
Upgrade plan
kishorekumar13...
Containers
Images
Volumes
Dev Environments
BETA
Extensions
BETA
Add Extensions
Images on disk
Last refresh: 15 days ago
0 Bytes total size
Refresh to see disk usage
Images
Give feedback
An image is a read-only template with instructions for creating a Docker container. Learn more
LOCAL
REMOTE REPOSITORIES
Search
NAME
TAG
STATUS
CREATED
SIZE
ACTIONS
python
ee4e7a0f1c35
latest
Unused
1 day ago
931.9 MB
docker/getting-started
cb90f98fd791
latest
In use
7 months ago
28.78 MB
Showing 2 items
RAM 2.55GB
CPU 0.12%
Connected to Hub
v4.13.1
27°C
Haze
Search
ENG
IN
18:47
17-11-2022

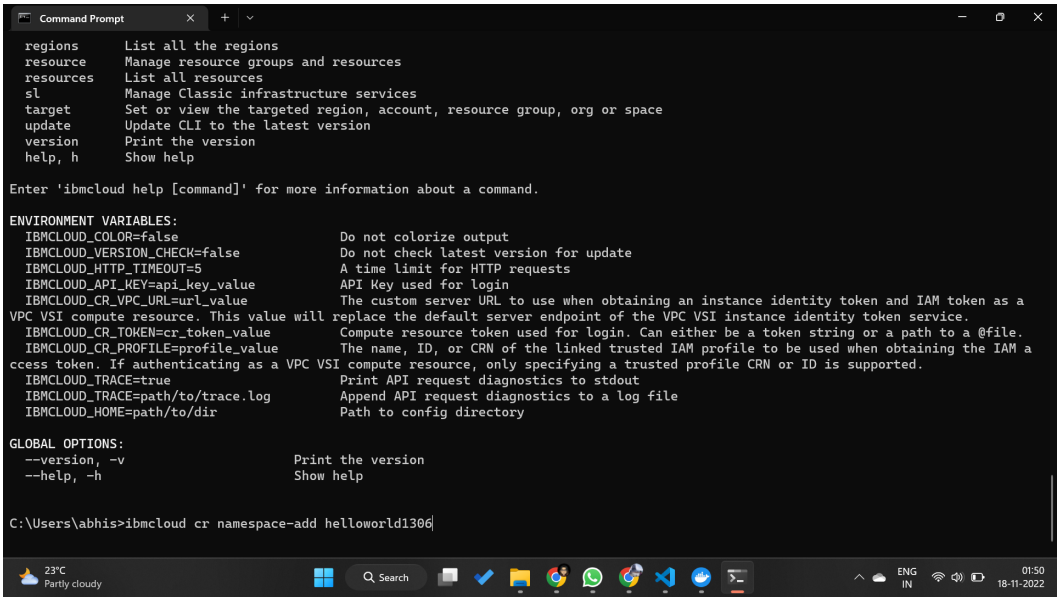

Docker Desktop
Upgrade plan
kishorekumar13...
Containers
Images
Volumes
Dev Environments
BETA
Extensions
BETA
Add Extensions
Containers
Give feedback
A container packages up code and its dependencies so the application runs quickly and reliably from one computing environment to another. Learn more
Only show running containers
Search
NAME
IMAGE
STATUS
PORT(S)
STARTED
ACTIONS
nervous_mirzakhani
3bc3129ad880
docker/getting-started:latest
Exited (255)
80:80
pyimgpull
34dcb8caf68e
python:latest
Running
22 seconds ag
Showing 2 items
RAM 2.57GB
CPU 0.00%
Connected to Hub
v4.13.1
27°C
Haze
Search
ENG
IN
18:50
17-11-2022

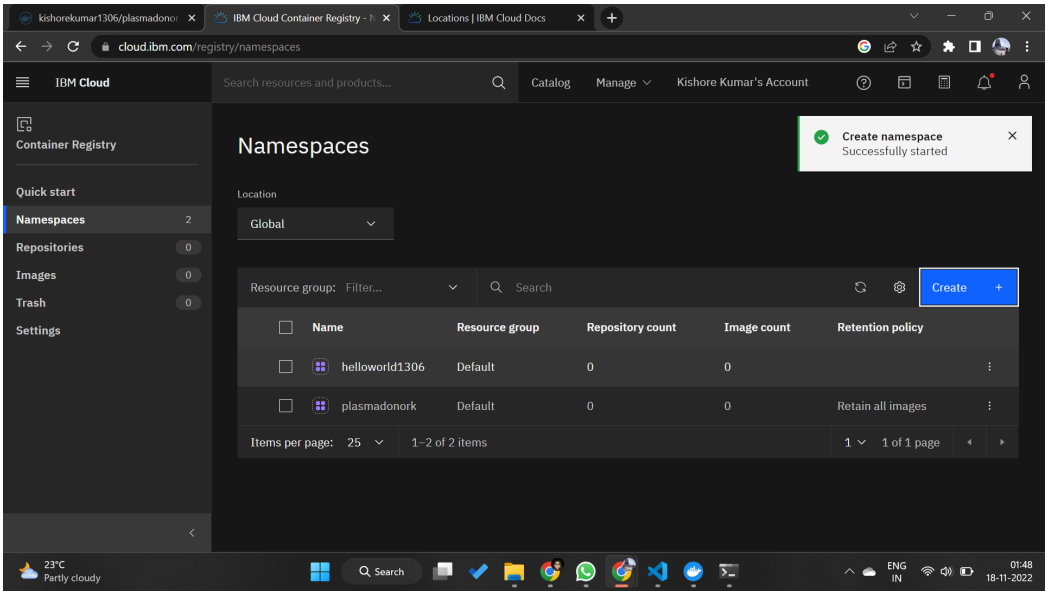
2.Create a docker file for the jobportal application and deploy it in Docker desktop application.



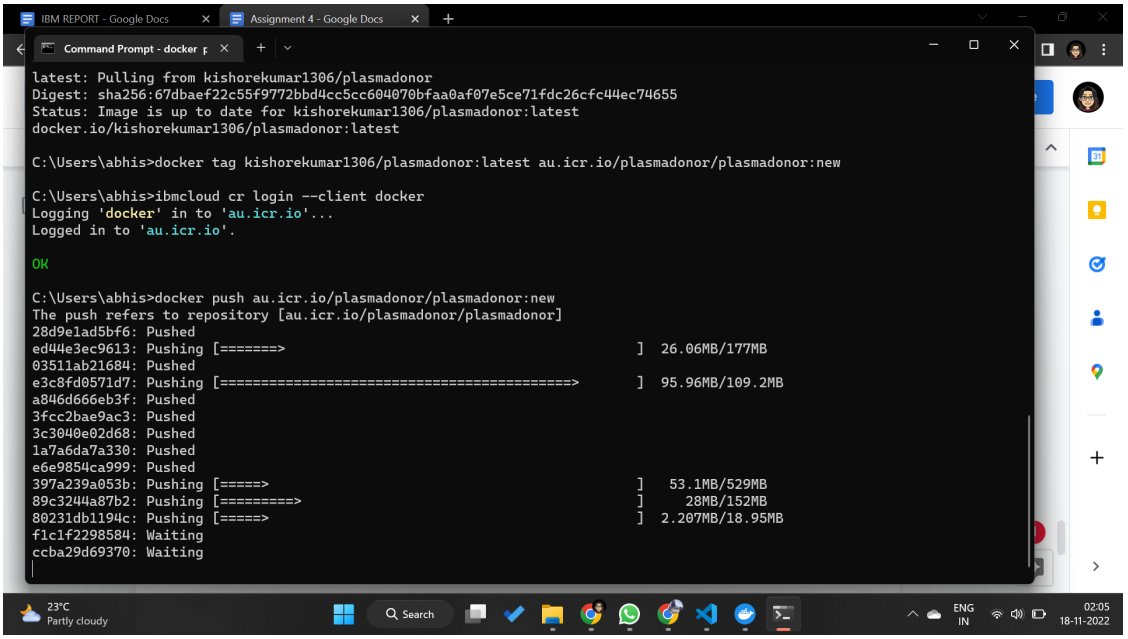


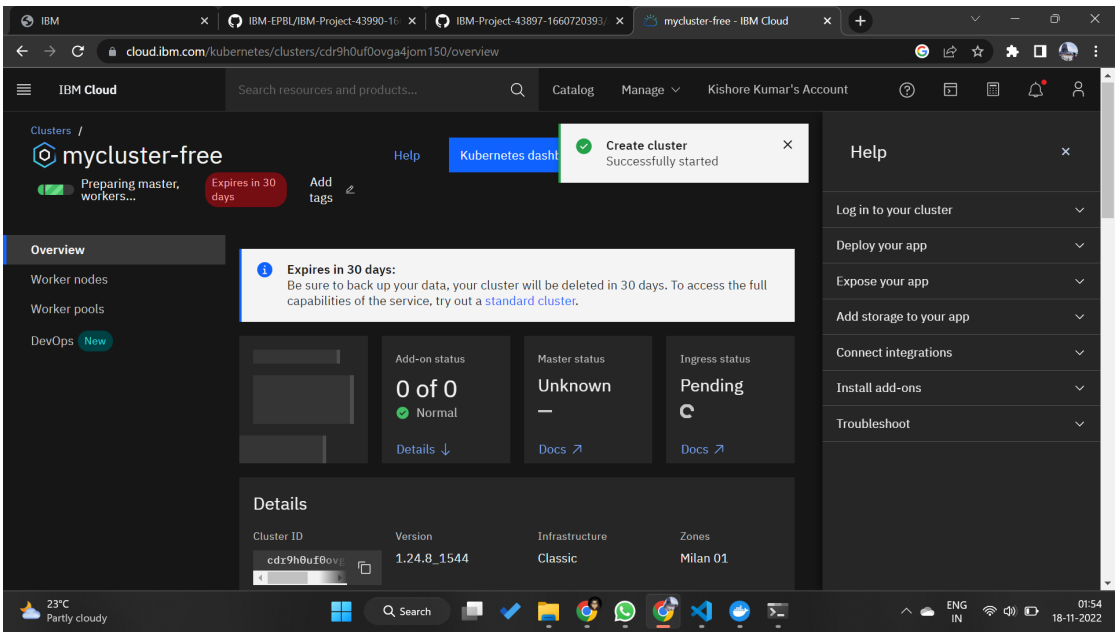
3.Create a IBM container registry and deploy helloworld app or jobportalapp.

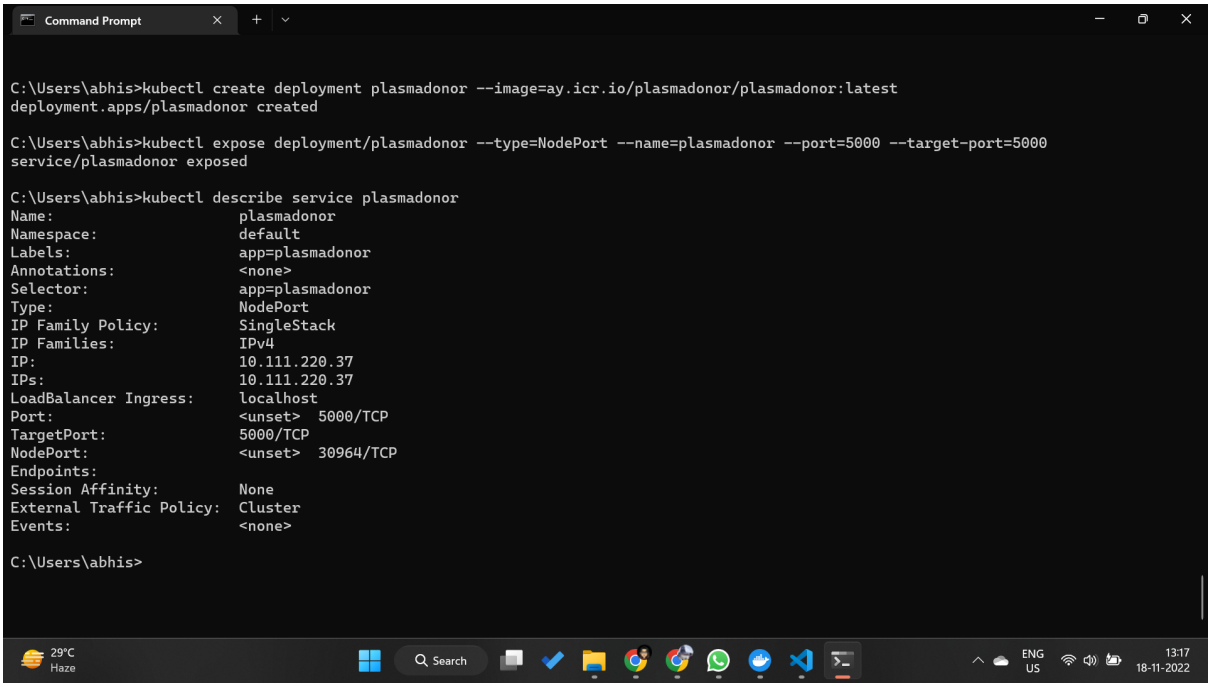


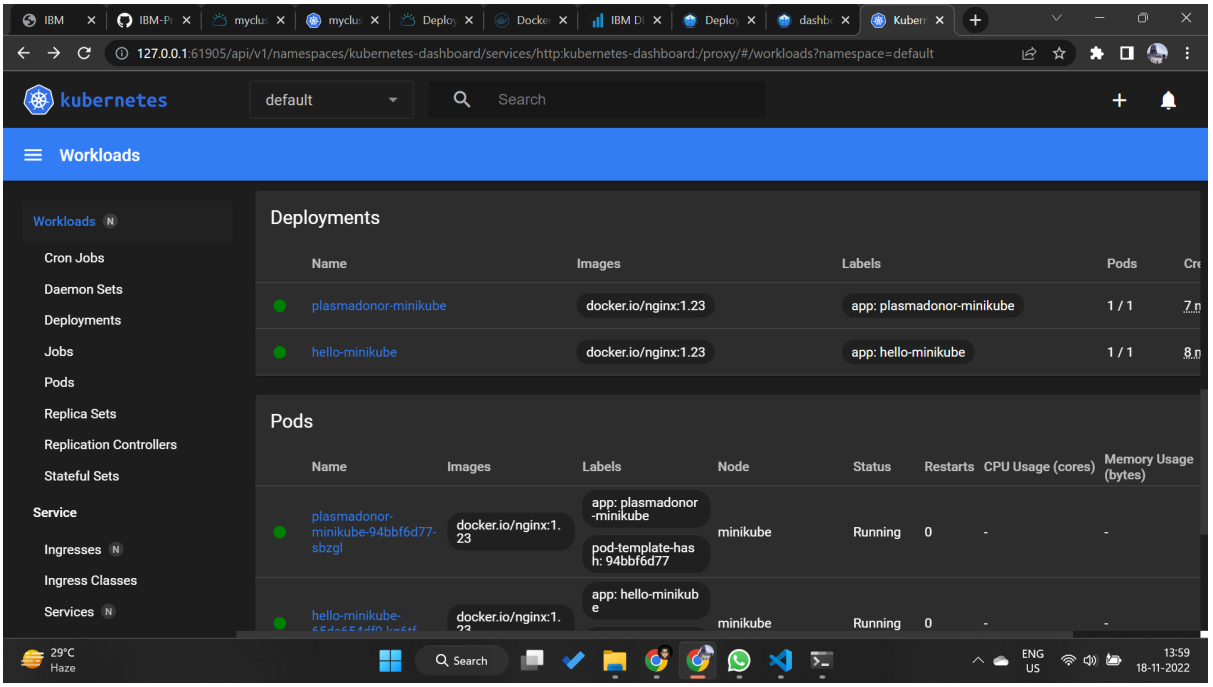


4.Container registry and Kubernetes deployment






Command Prompt
C:\Users\abhis>kubectl create deployment plasmadonor --image=ay.icr.io/plasmadonor/plasmadonor:latest
deployment.apps/plasmadonor created
C:\Users\abhis>kubectl expose deployment/plasmadonor --type=NodePort --name=plasmadonor --port=5000 --target-port=5000
service/plasmadonor exposed
C:\Users\abhis>kubectl describe service plasmadonor
Name: plasmadonor
Namespace: default
Labels: app=plasmadonor
Annotations: <none>
Selector: app=plasmadonor
Type: NodePort
IP Family Policy: SingleStack
IP Families: IPv4
IP: 10.111.220.37
IPs: 10.111.220.37
LoadBalancer Ingress: localhost
Port: <unset> 5000/TCP
TargetPort: 5000/TCP
NodePort: <unset> 30964/TCP
Endpoints:
Session Affinity: None
External Traffic Policy: Cluster
Events: <none>
C:\Users\abhis>
29°C
Haze
Search
ENG
US
13:17
18-11-2022


127.0.0.1:61905/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/#/workloads?namespace=default
kubernetes
default
Search
Workloads
Workloads
Cron Jobs
Daemon Sets
Deployments
Jobs
Pods
Replica Sets
Replication Controllers
Stateful Sets
Service
Ingresses
Ingress Classes
Services
Deployments
Name
Images
Labels
Pods
plasmadonor-minikube
docker.io/nginx:1.23
app: plasmadonor-minikube
1 / 1
hello-minikube
docker.io/nginx:1.23
app: hello-minikube
1 / 1
Pods
Name
Images
Labels
Node
Status
Restarts
CPU Usage (cores)
Memory Usage (bytes)
plasmadonor-minikube-94bbf6d77-sbzgl
docker.io/nginx:1.23
app: plasmadonor-minikube
pod-template-hash: 94bbf6d77
minikube
Running
0
-
-
hello-minikube-
docker.io/nginx:1.
app: hello-minikube
minikube
Running
0
-
-
29°C
Haze
Search
ENG
US
13:59
18-11-2022