

Assignment -4

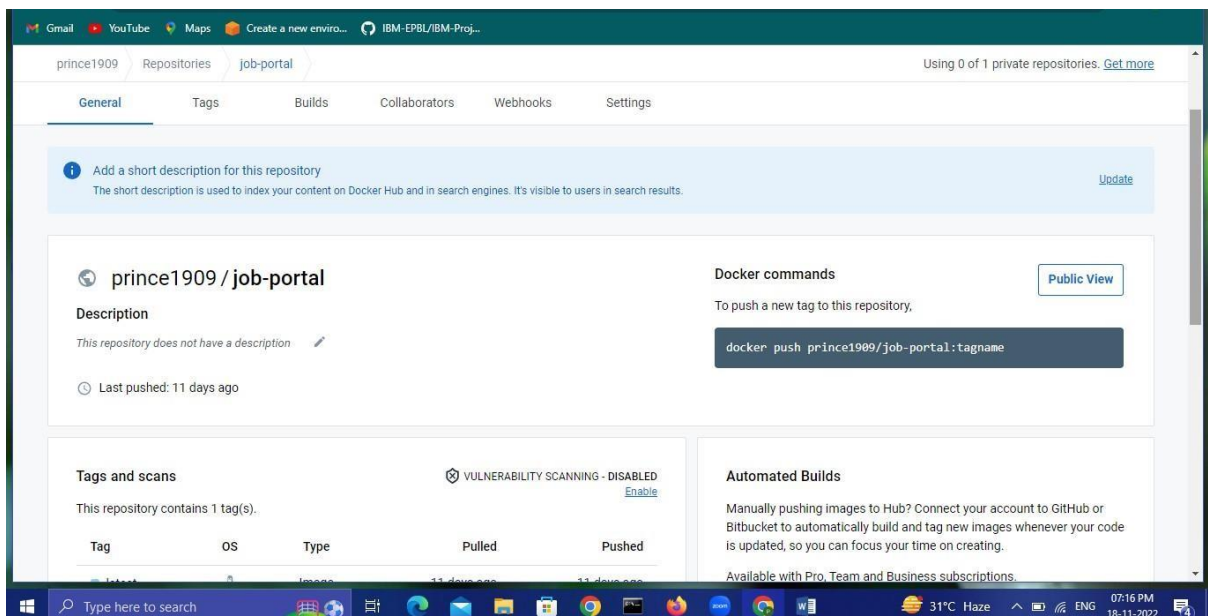
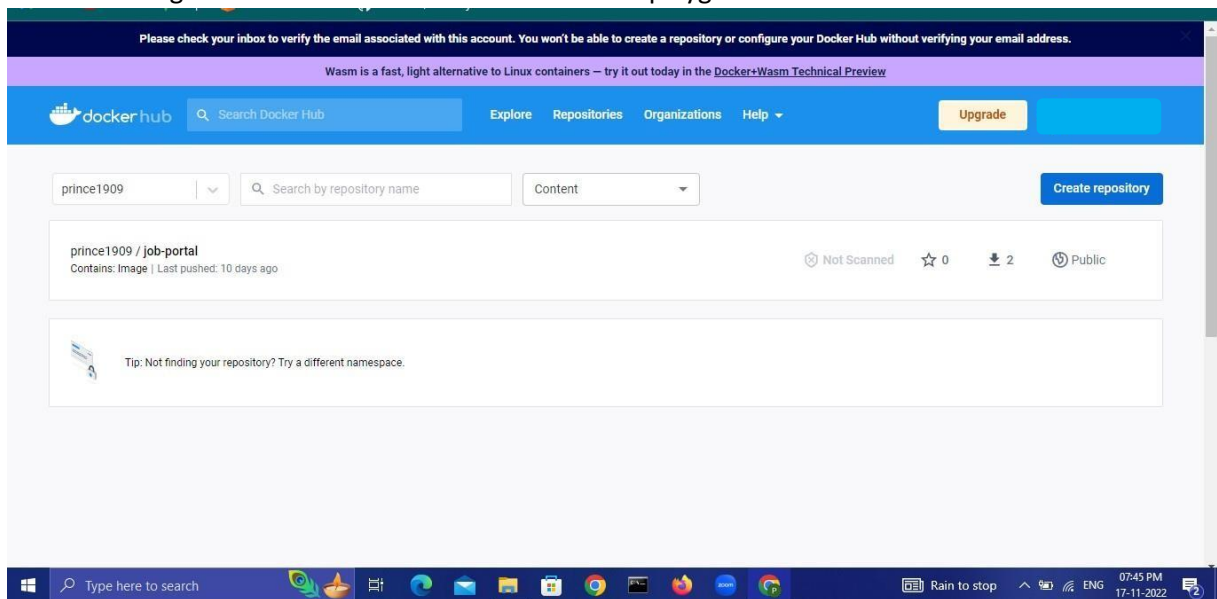
Kubernetes / Docker

Assignment Date	10 November 2022
Student Name	Ranjithkumar S
Student Roll Number	61772021L02
Maximum Marks	2 Marks

Question-1:

1. Pull an Image from docker hub and run it in docker playground.
2. Create a docker file for the job portal / flask application and deploy it in Docker desktop application.
3. Create a IBM container registry and push docker image of flask application or job portal app.
4. Create a Kubernetes cluster in IBM cloud and deploy flask application image or job portal image and also expose the same app to run in nodeport.

Step 1: Pull an Image from docker hub and run it in docker playground.



03:59:37

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.13
node1

cd461m0_cdr464m0qau0009ee2l0

IP
192.168.0.13

OPEN PORT

Memory

CPU

SSH
ssh ip172-18-0-33-cdr461m0qau0009ee2k0@direct.labs.pla

DELETE

EDITOR

WARNING!!!!
This is a sandbox environment. Using personal credentials
is HIGHLY! discouraged. Any consequences of doing so are
completely the user's responsibilities.

The PWD team.

[node1] (local) root@192.168.0.13 ~
\$

Type here to search

Rain to stop

ENG

07:50 PM
17-11-2022

08:16:59

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.18
node1

cdfalm60_cdfalnm0qau000c2rt00

IP
192.168.0.18

OPEN PORT
5000

Memory
3.71% (148.5MiB / 3.906GiB)

CPU
0.29%

SSH
ssh ip172-18-0-39-cdfalm60qau000c2rsv0@direct.labs.play

DELETE

EDITOR

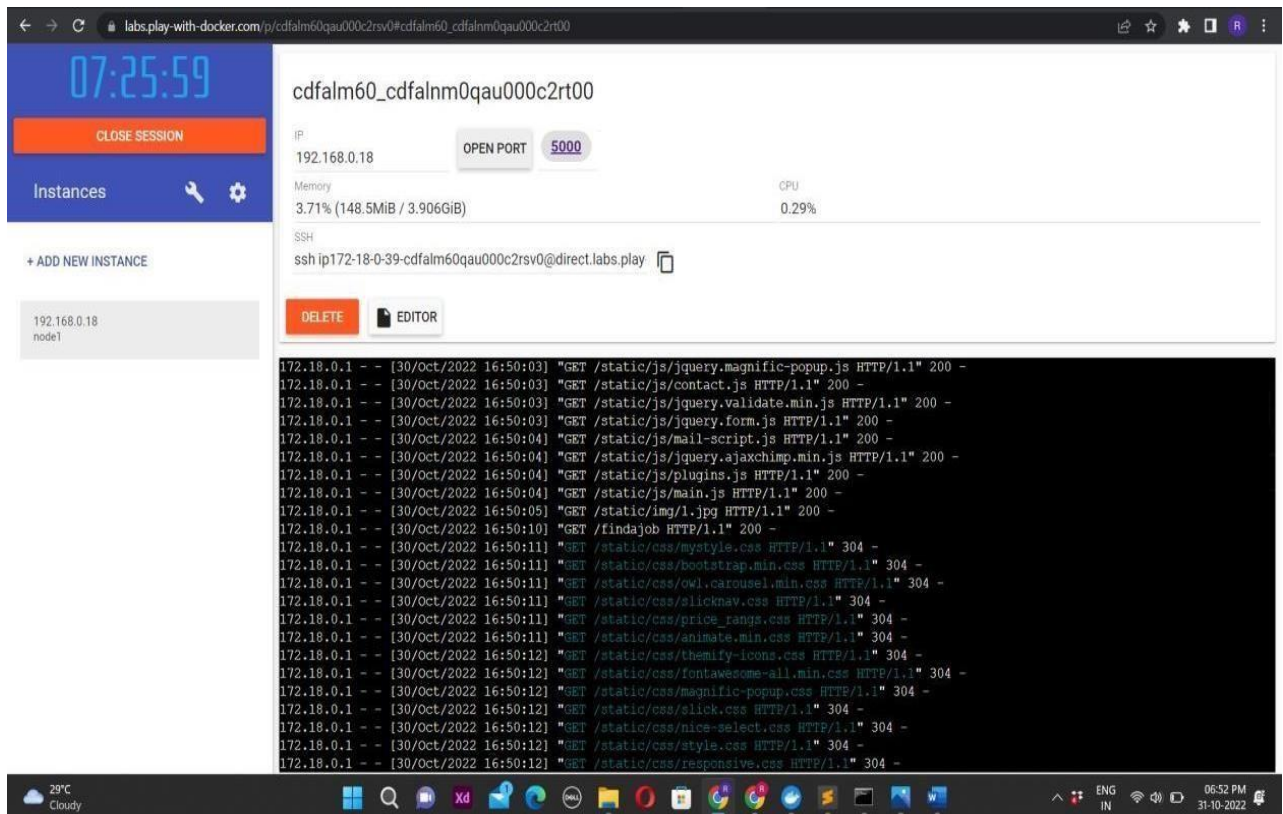
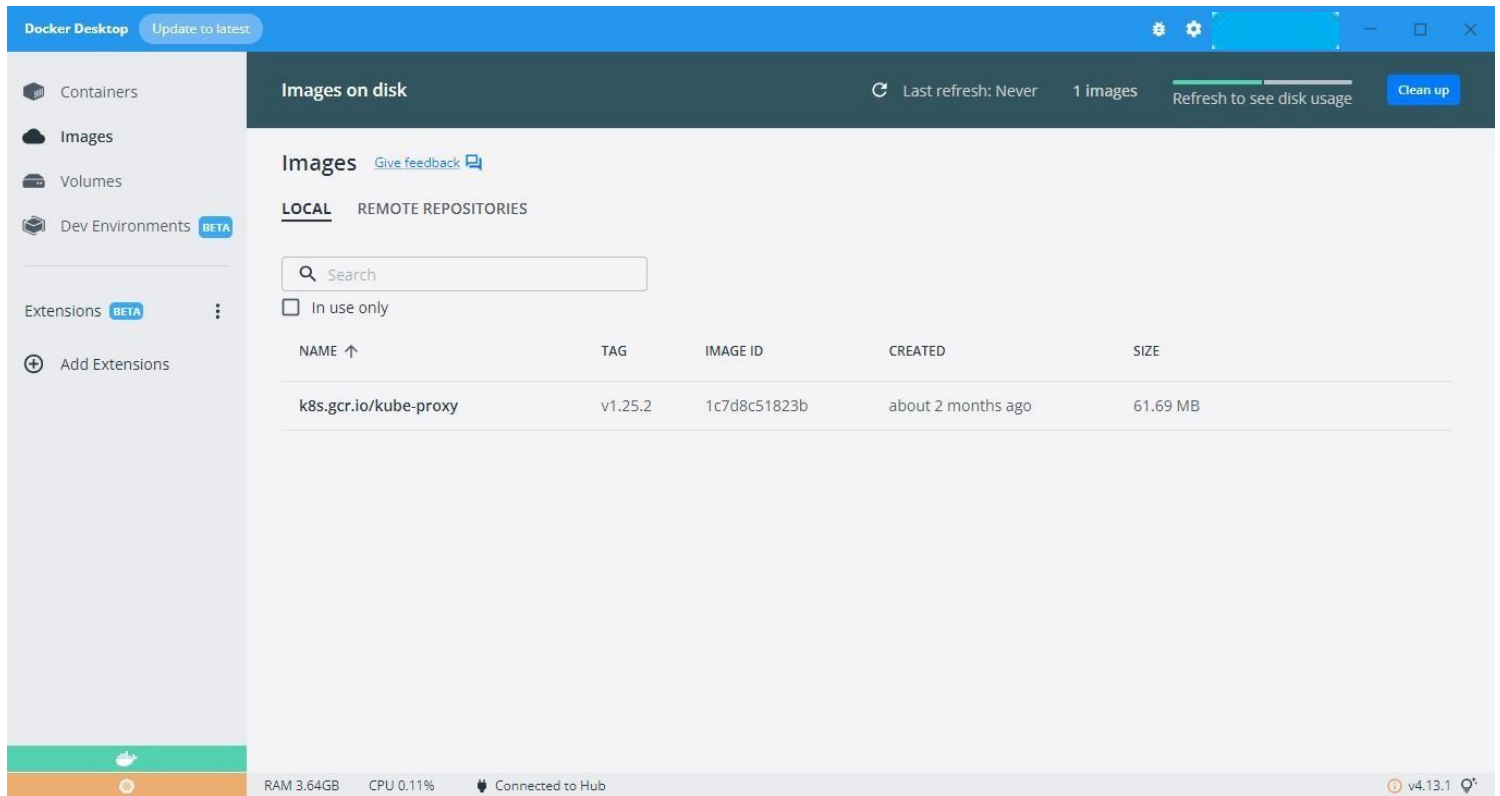
4334b2fe8293: Pull complete
391117b863c3: Pull complete
61e42aafc64b: Pull complete
5b2c840dea71: Pull complete
931d84c4d56f: Pull complete
Digest: sha256:9bccdb5ab46e790b3a2e3a2f03a5998928c8d4987c5123c7ab47e1138b3b55ee
Status: Downloaded newer image for rameshkumar44/job-portal:latest
* Serving Flask app 'app'
* Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:5000
* Running on http://172.17.0.2:5000
Press CTRL+C to quit
172.18.0.1 - - [30/Oct/2022 16:49:59] "GET / HTTP/1.1" 200 -
172.18.0.1 - - [30/Oct/2022 16:49:59] "GET /static/css/mystyle.css HTTP/1.1" 200 -
172.18.0.1 - - [30/Oct/2022 16:49:59] "GET /static/css/bootstrap.min.css HTTP/1.1" 200 -
172.18.0.1 - - [30/Oct/2022 16:49:59] "GET /static/css/owl.carousel.min.css HTTP/1.1" 200 -
172.18.0.1 - - [30/Oct/2022 16:49:59] "GET /static/css/slicknav.css HTTP/1.1" 200 -
172.18.0.1 - - [30/Oct/2022 16:49:59] "GET /static/css/price_rangs.css HTTP/1.1" 200 -
172.18.0.1 - - [30/Oct/2022 16:49:59] "GET /static/css/animate.min.css HTTP/1.1" 200 -
172.18.0.1 - - [30/Oct/2022 16:50:00] "GET /static/css/magnific-popup.css HTTP/1.1" 200 -
172.18.0.1 - - [30/Oct/2022 16:50:00] "GET /static/css/fontawesome-all.min.css HTTP/1.1" 200 -

25°C
Cloudy

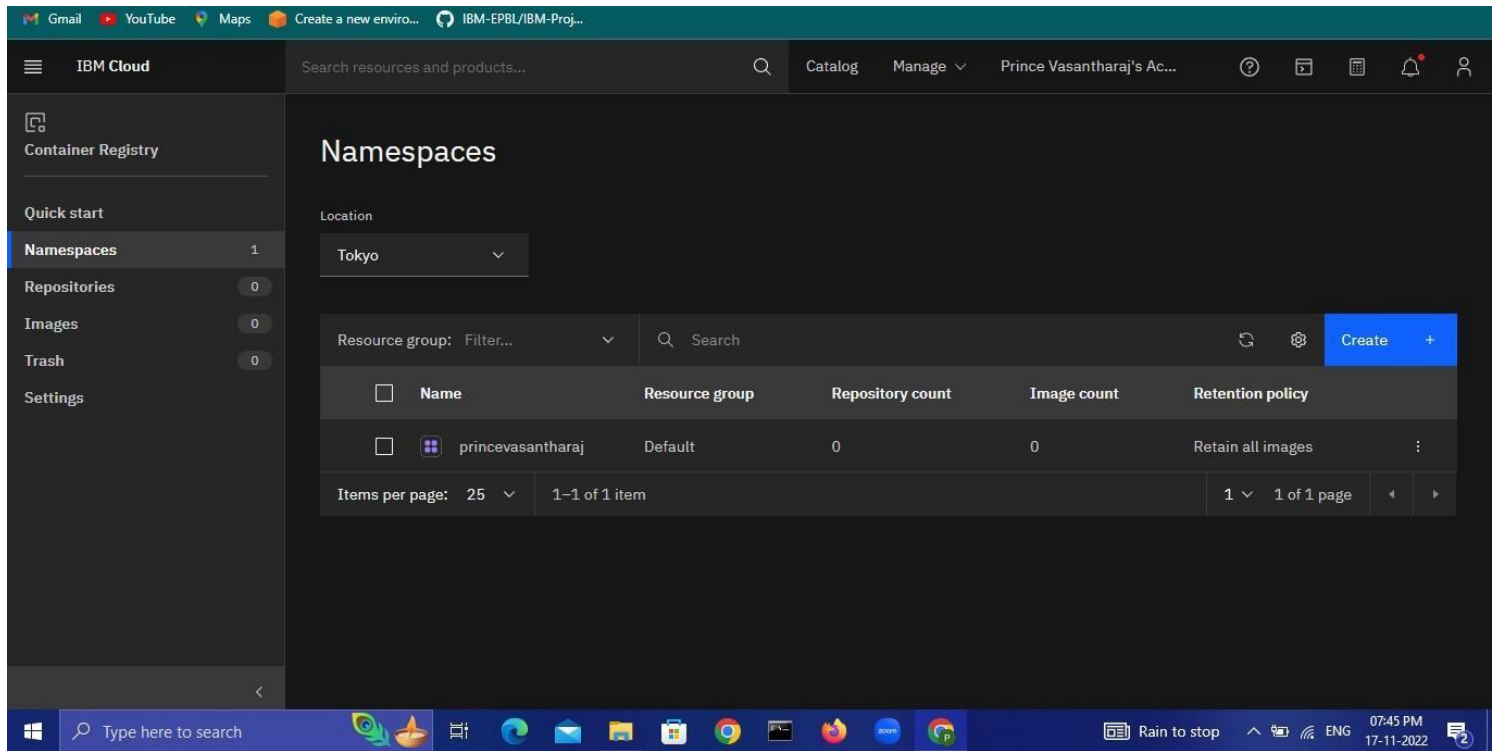
ENG
IN

06:01 PM
31-10-2022

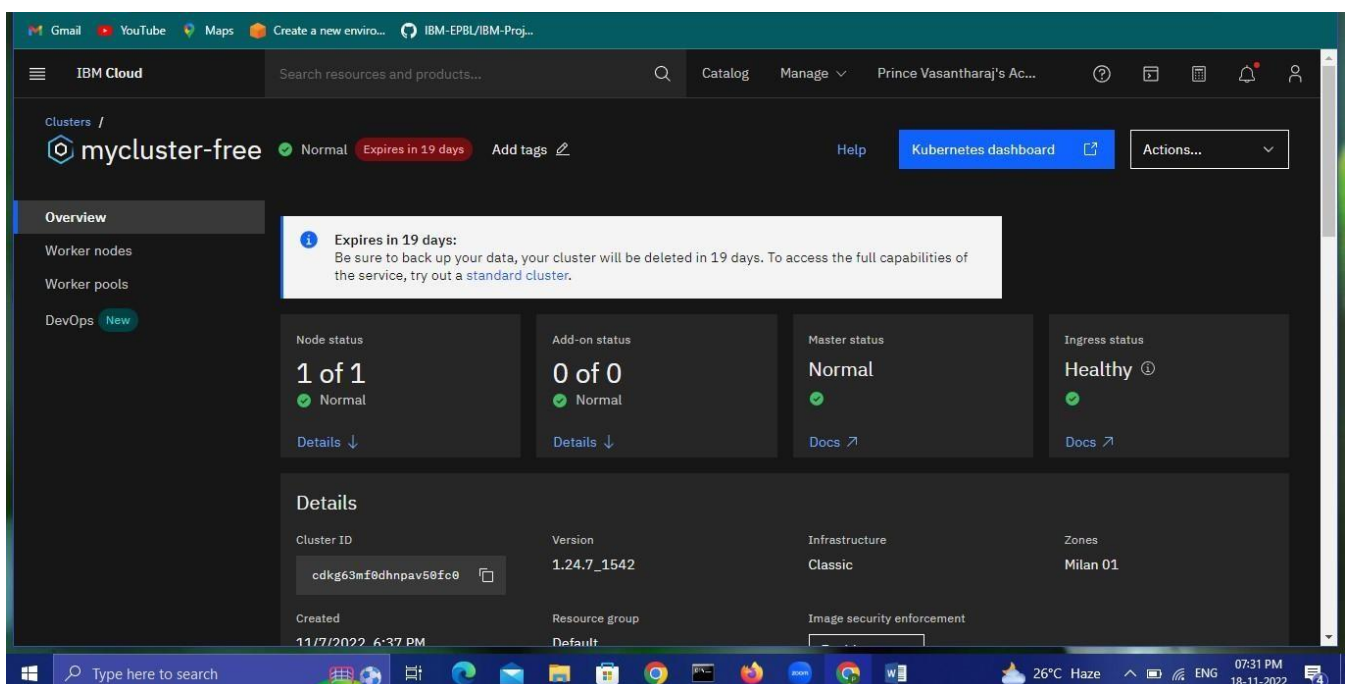
Step 2: Create a dockerfile for the job portal / flask application and deploy it in Docker desktop application.



Step 3: Create a IBM container registry and push docker image of flask application or job portal app.



Step 4: Create a Kubernetes cluster in IBM cloud and deploy flask application image or job portal image and also expose the same app to run in Nodeport.



cloud.ibm.com/kubernetes/clusters/cdkg63mf0dhnvav50fc0/pools

IBM Cloud Search resources and products... Catalog Manage Prince Vasantharaj's Ac... Help Kubernetes dashboard Actions...

Clusters / mycluster-free Normal Expires in 19 days Add tags

Overview Worker nodes Worker pools DevOps New

Search Add

Name	Zones	Status	Workers per zone	Actual / Declared workers	Flavor
default	Milan 01	Active	1	1 / 1	Free - 2 vCPUs 4GB RAM

Items per page: 25 1-1 of 1 item 1 1 of 1 page

https://cloud.ibm.com/kubernetes/clusters/cdkg63mf0dhnvav50fc0/pools

```
C:\Windows\System32\cmd.exe

Targeted account Prince Vasantharaj's Account (59d82df90eb6488aa0ef9b89c4ebda15)

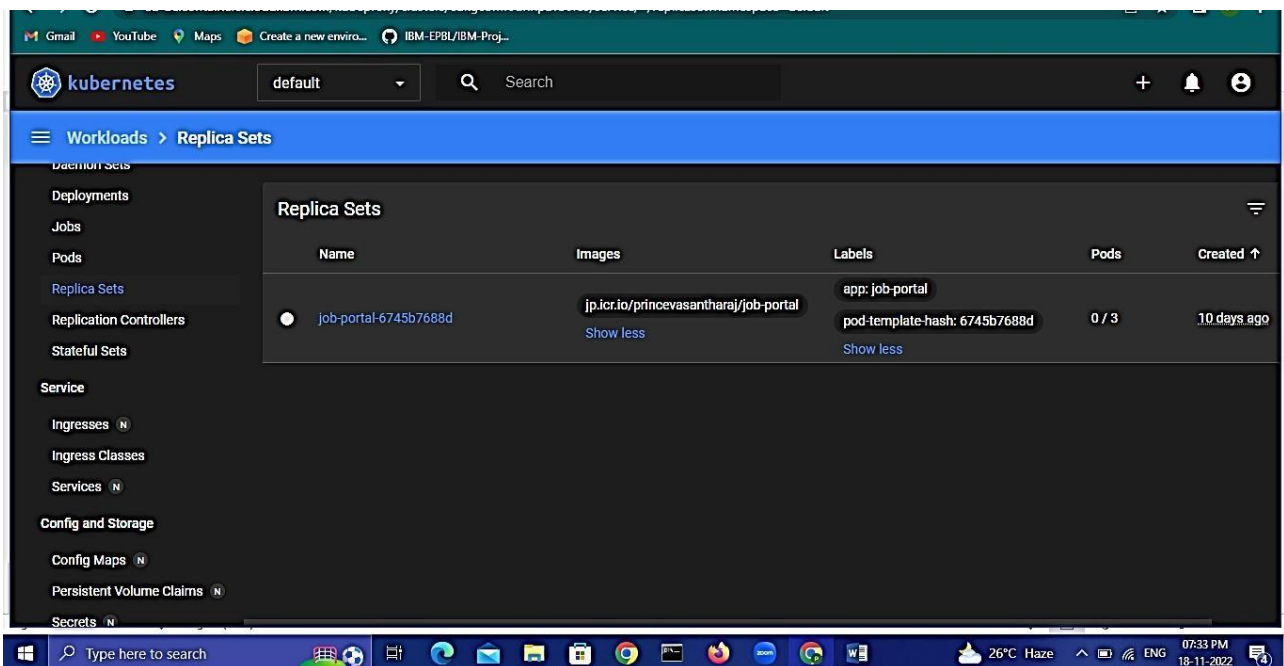
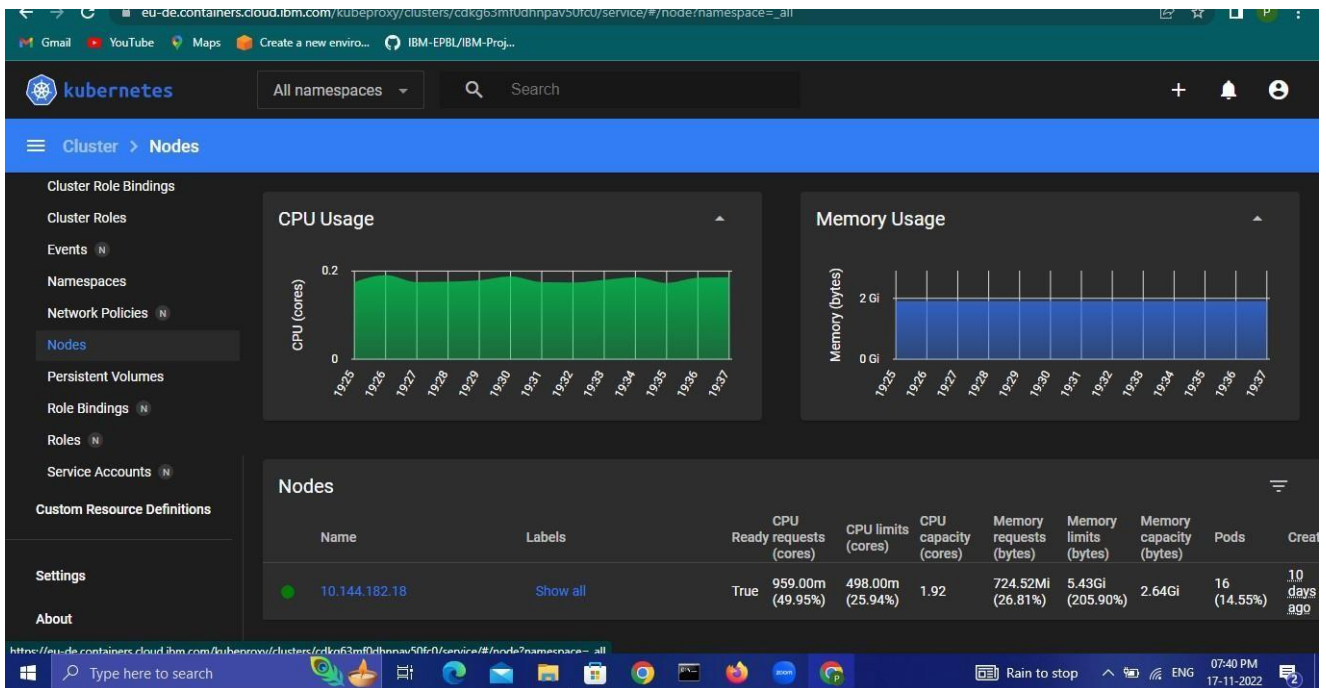
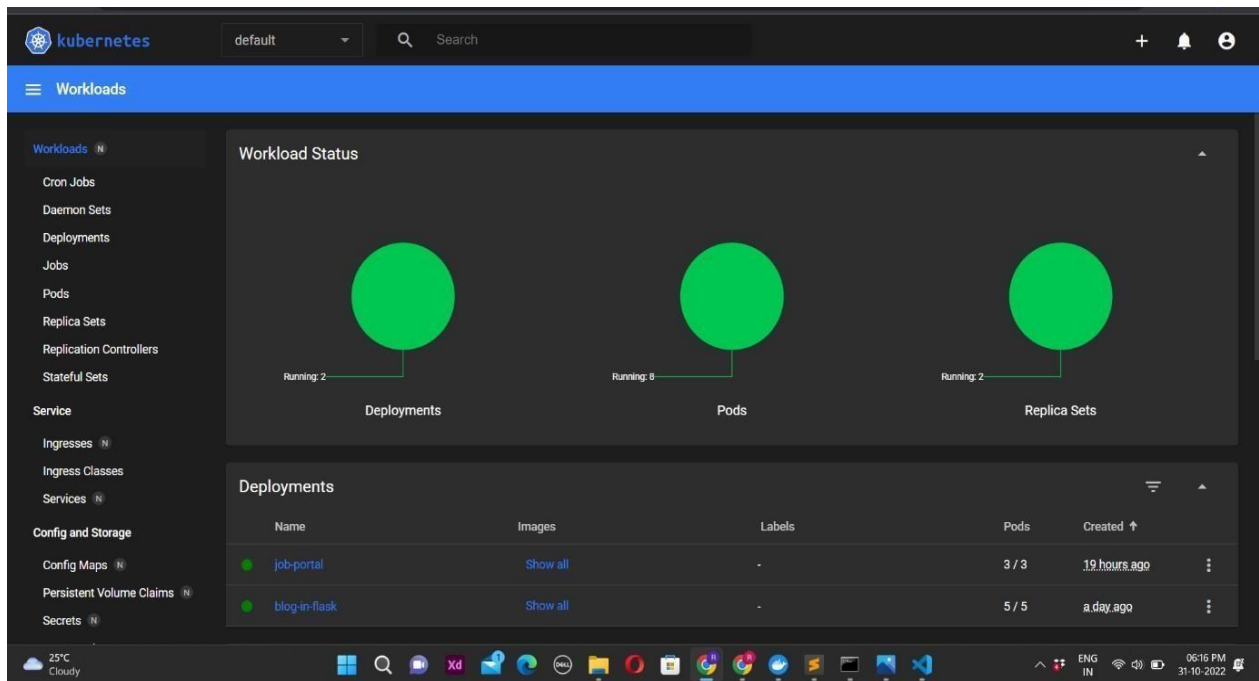
Select a region (or press enter to skip):
1. au-syd
2. in-che
3. jp-osa
4. jp-tok
5. kr-seo
6. eu-de
7. eu-gb
8. ca-tor
9. us-south
10. us-east
11. br-sao
Enter a number> 4
Targeted region jp-tok

API endpoint: https://cloud.ibm.com
Region: jp-tok
User: 19urcs043@aaacet.ac.in
Account: Prince Vasantharaj's Account (59d82df90eb6488aa0ef9b89c4ebda15)
Resource group: No resource group targeted, use 'ibmcloud target -g RESOURCE_GROUP'
CF API endpoint:
Org:
Space:

C:\Users\Prince Vasantharaj\Desktop\job-portal>
```

to search

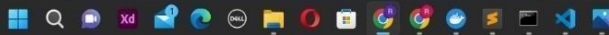
28°C Haze ENG 07:36 PM 18-11-2022



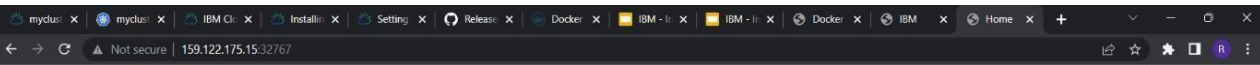
Find the
most
exciting
startup jobs



25°C
Cloudy



ENG
IN 06:02 PM
31-10-2022



FEATURED TOURS PACKAGES

Browse Top Categories

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(653)

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(658)

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(658)

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(658)

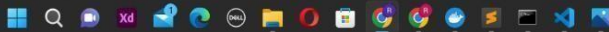
Construction
(658)

Information Technology
(658)

Real Estate
(658)

Content Writer
(658)

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Cloudy



ENG
IN 06:02 PM
31-10-2022