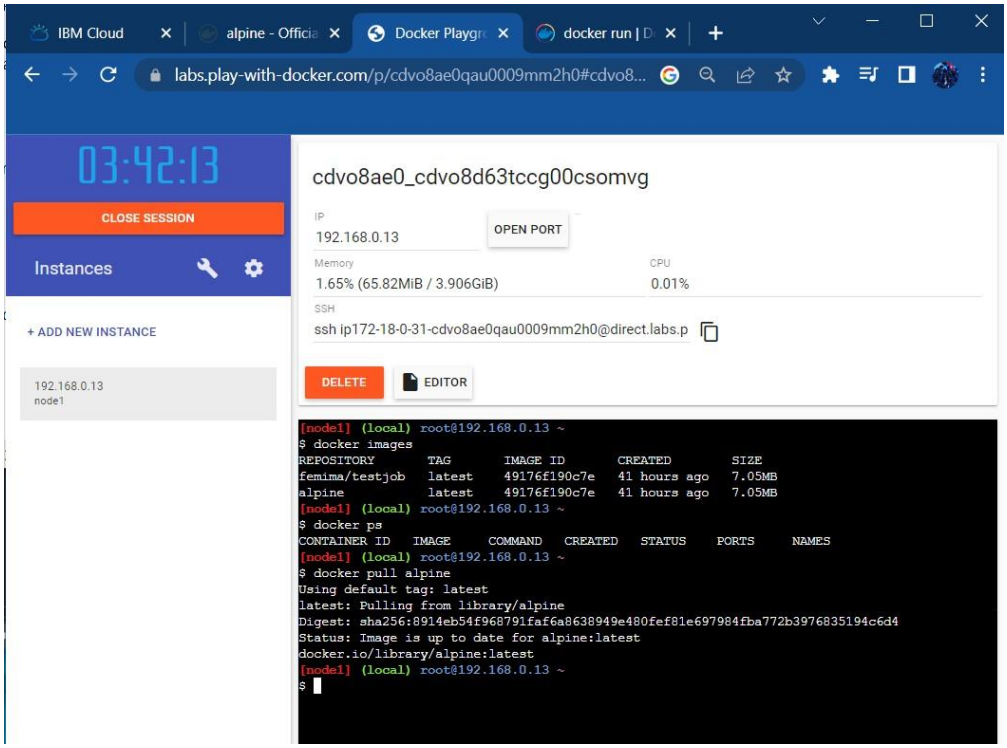
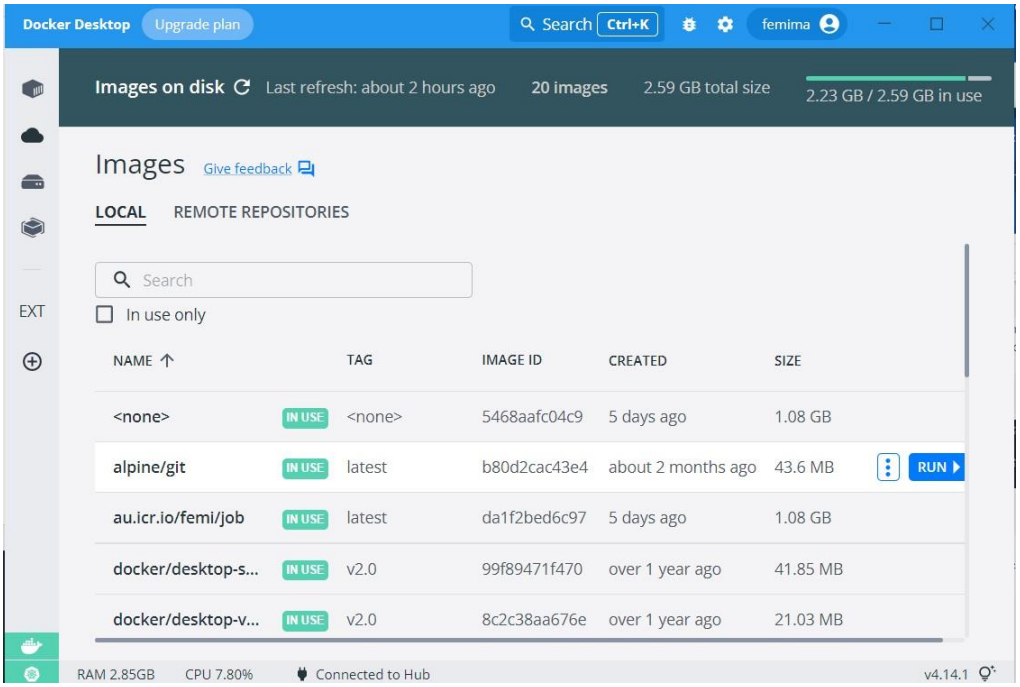
ASSIGNMENT 4

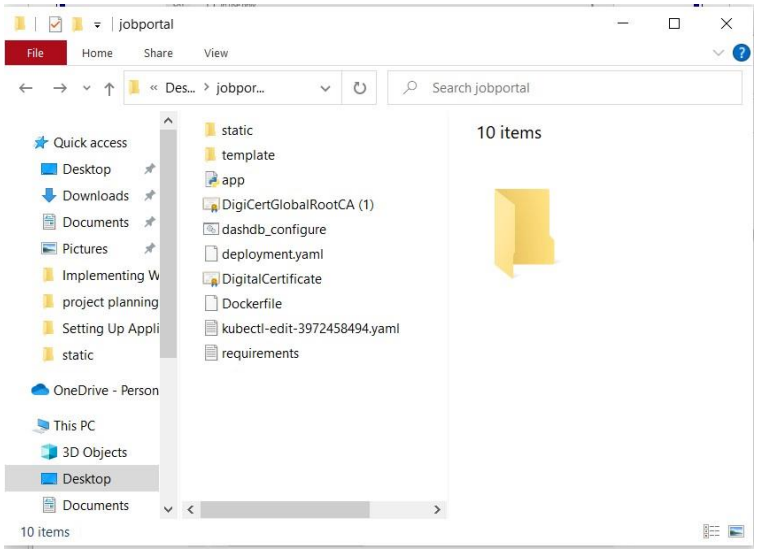
Date	20 November 2022
Student Name	Femima Shelly. A. T.
Roll No	962219104053
Maximum Marks	2 Marks

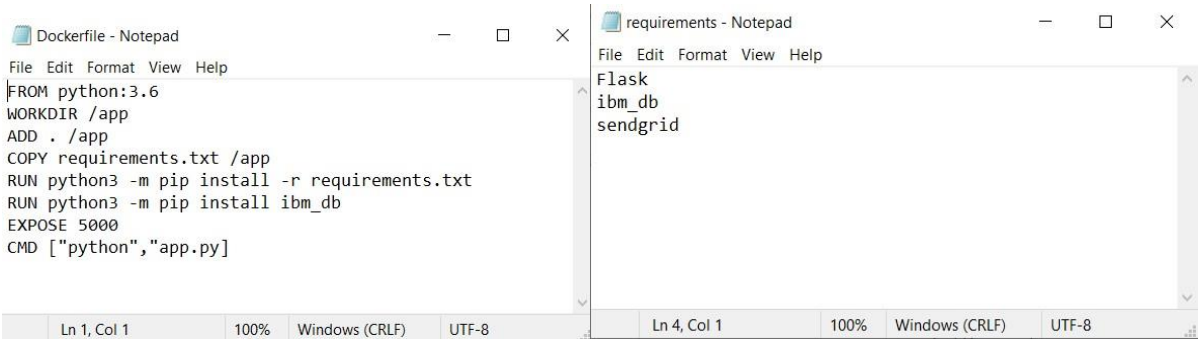
1) Pull an image from docker hub and run it in docker playground

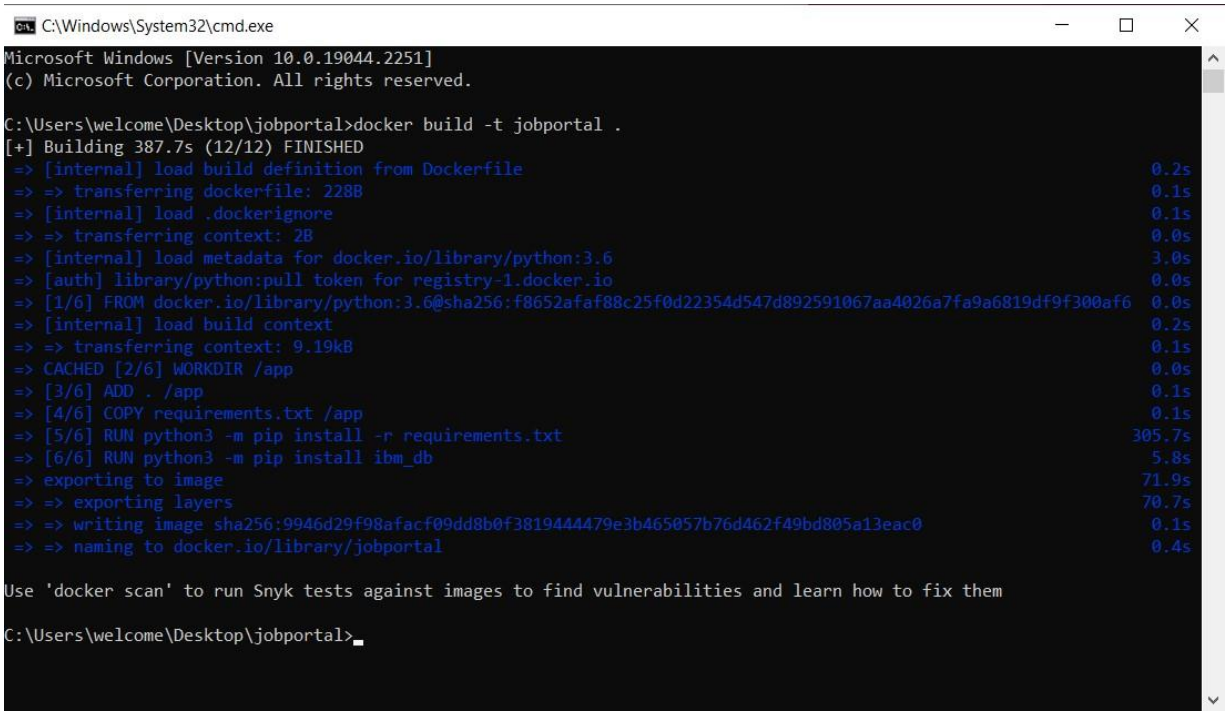


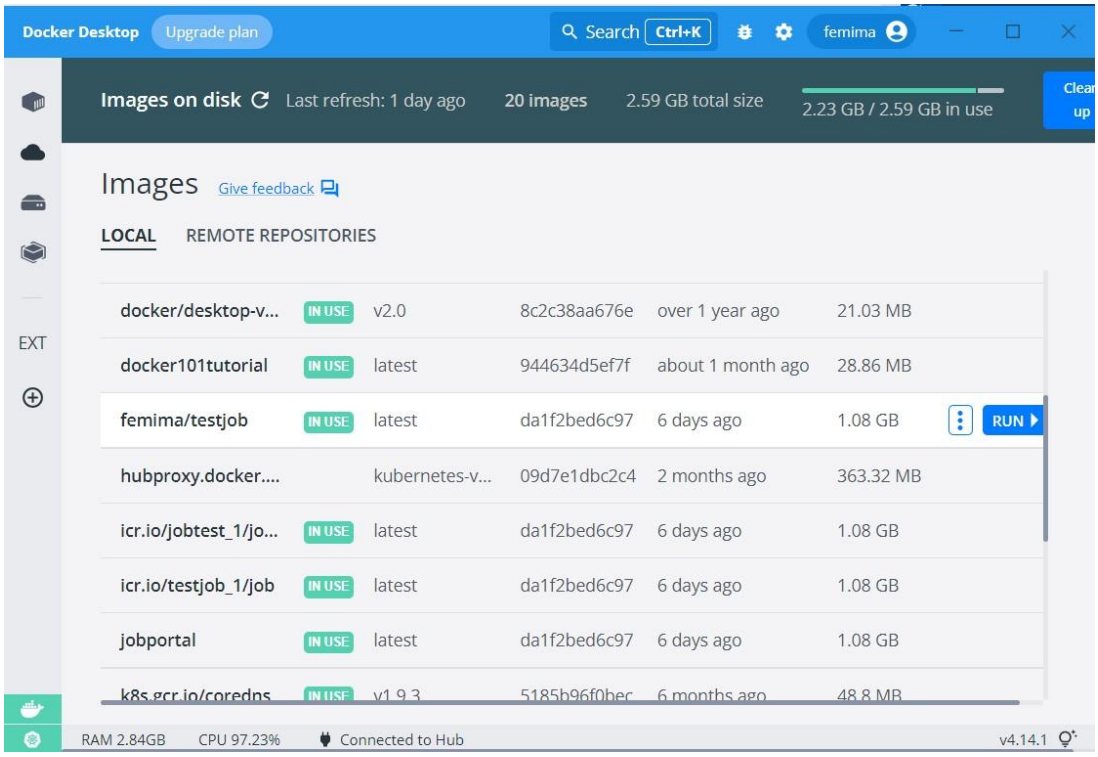


2) Create a docker file for the jobportal application and deploy it in Docker desktop application

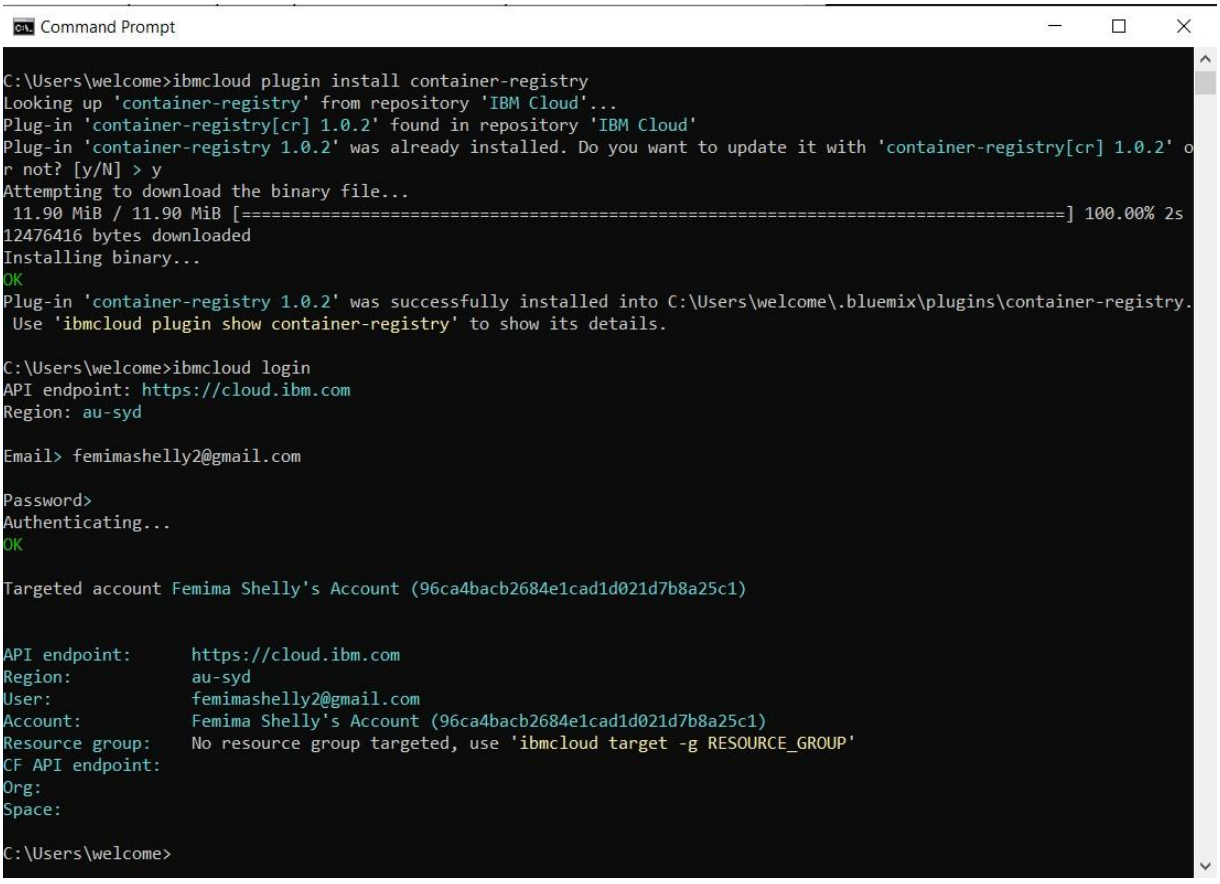


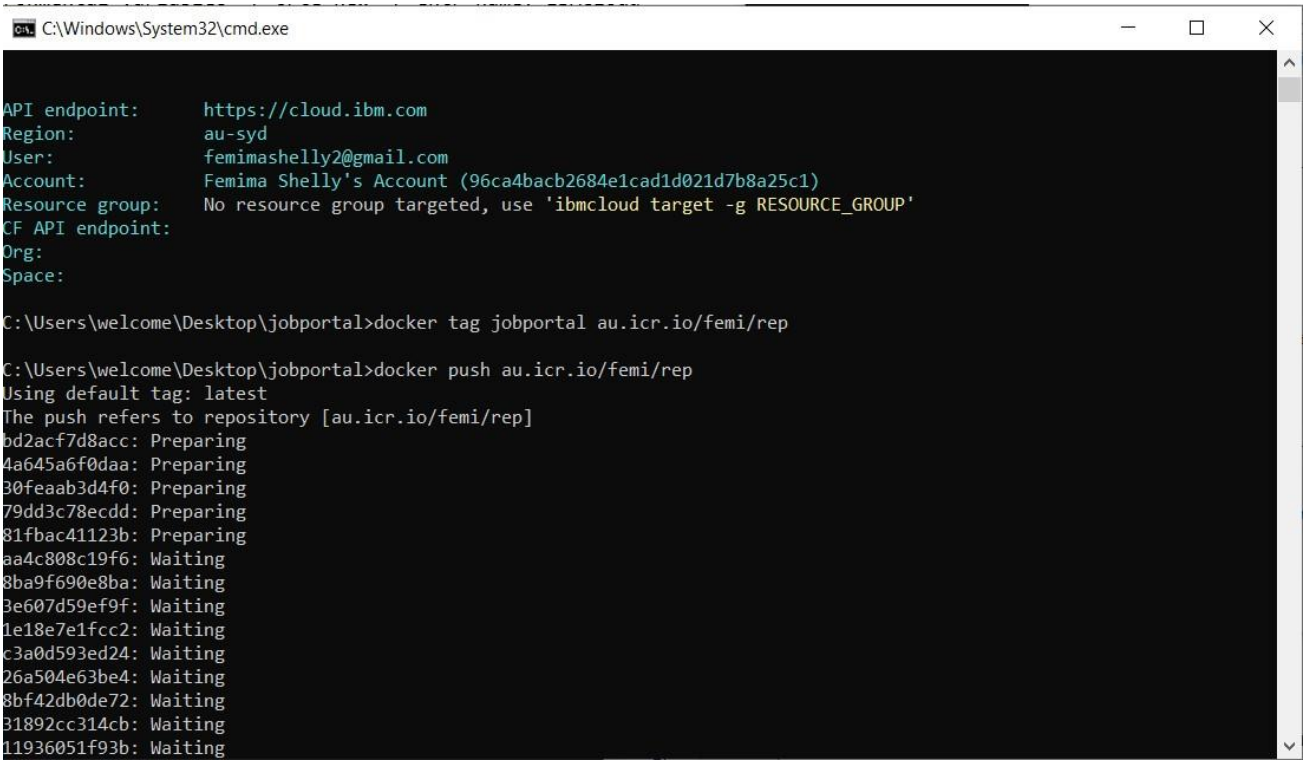


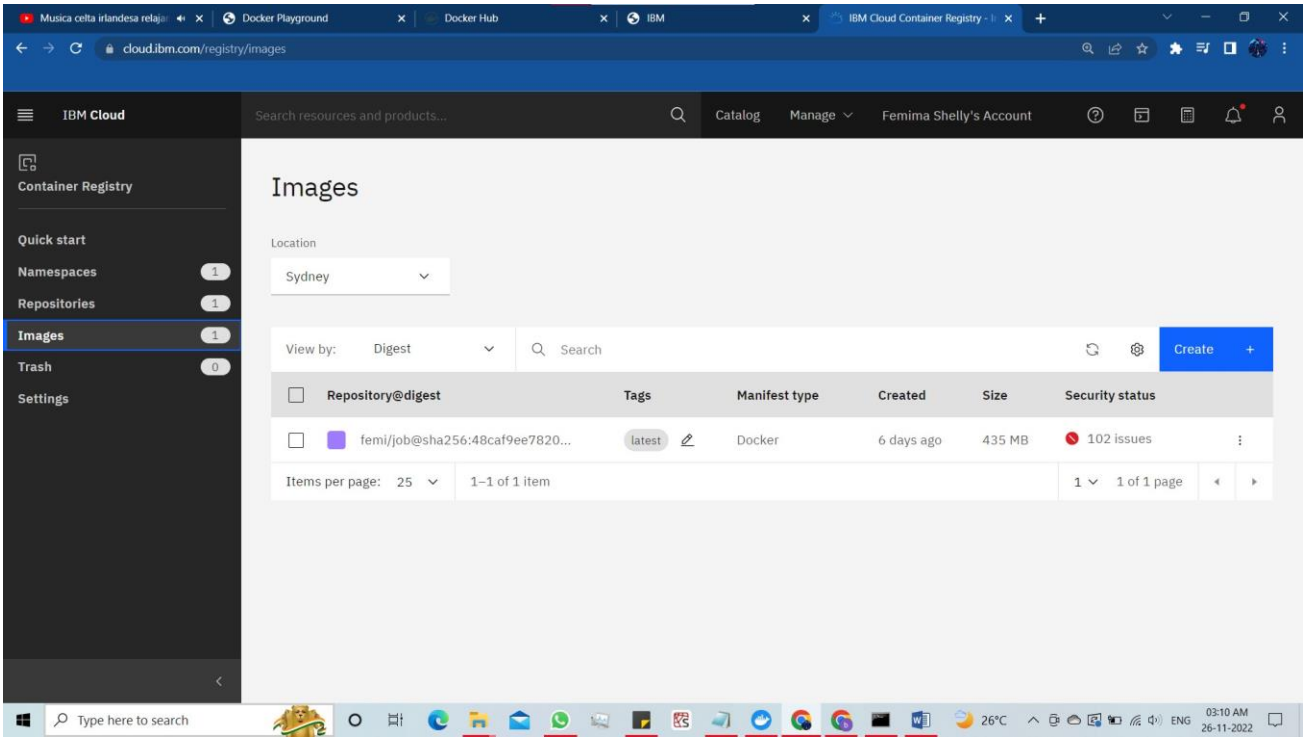




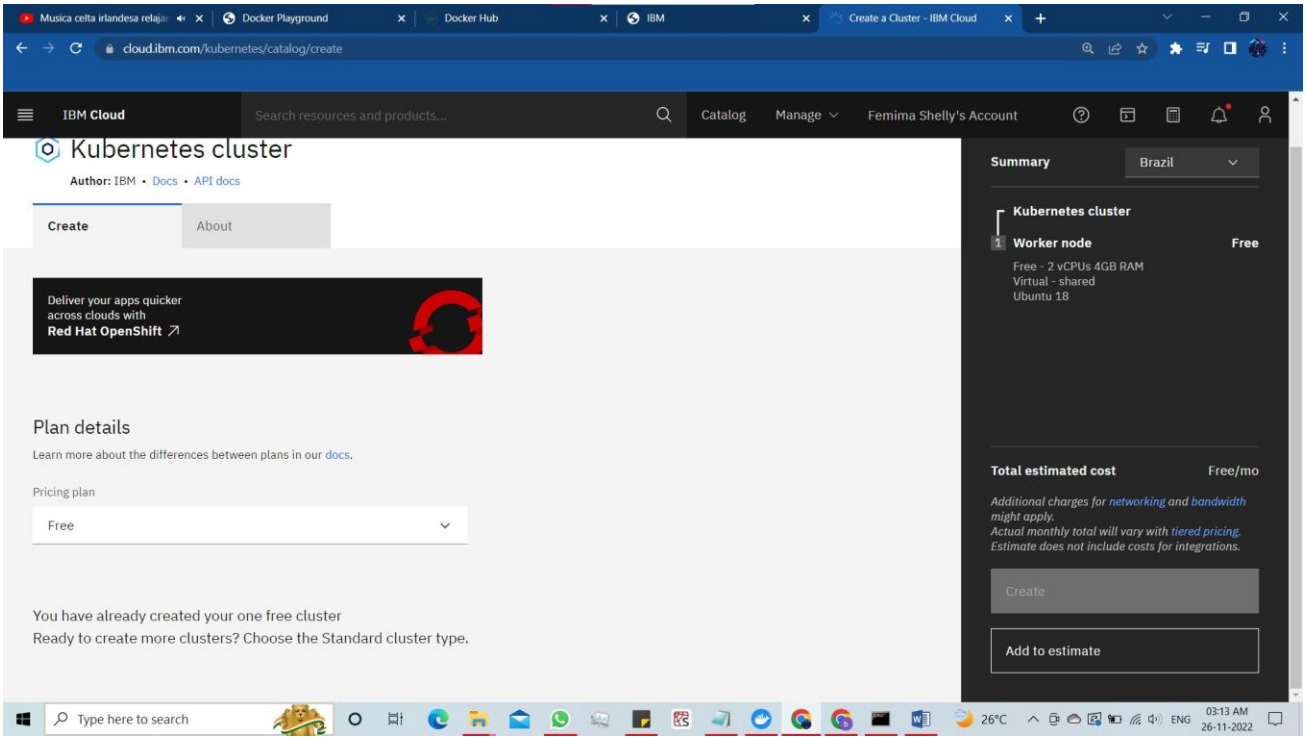
3) Create a IBM container registry and deploy helloworld app or jobportal app

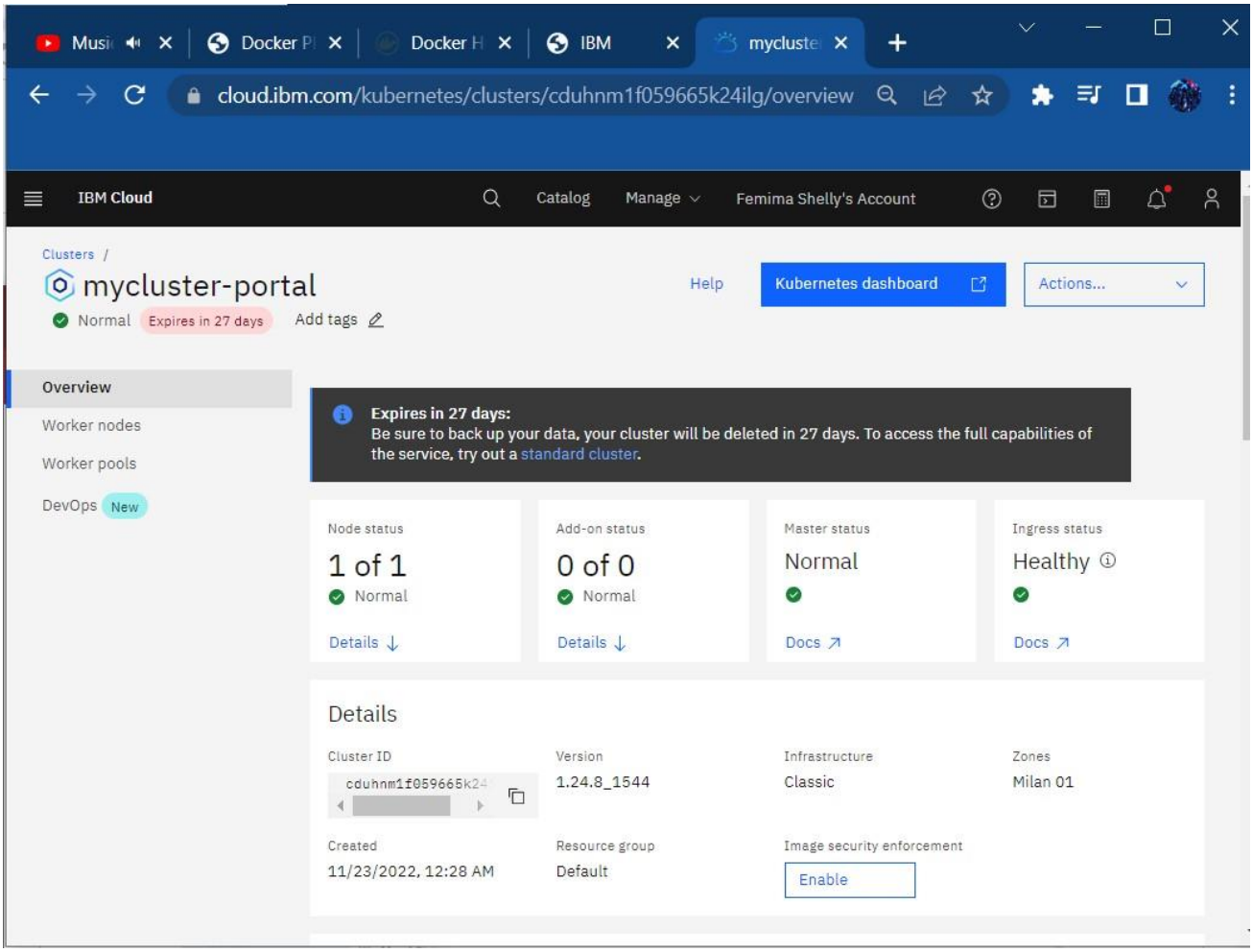


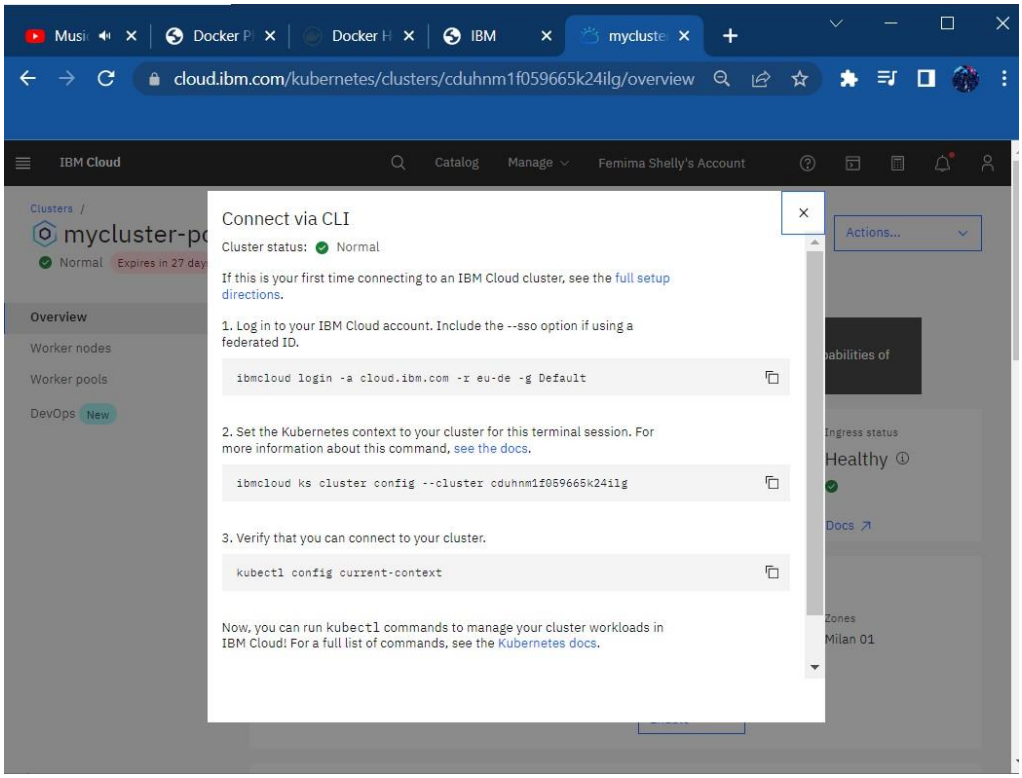


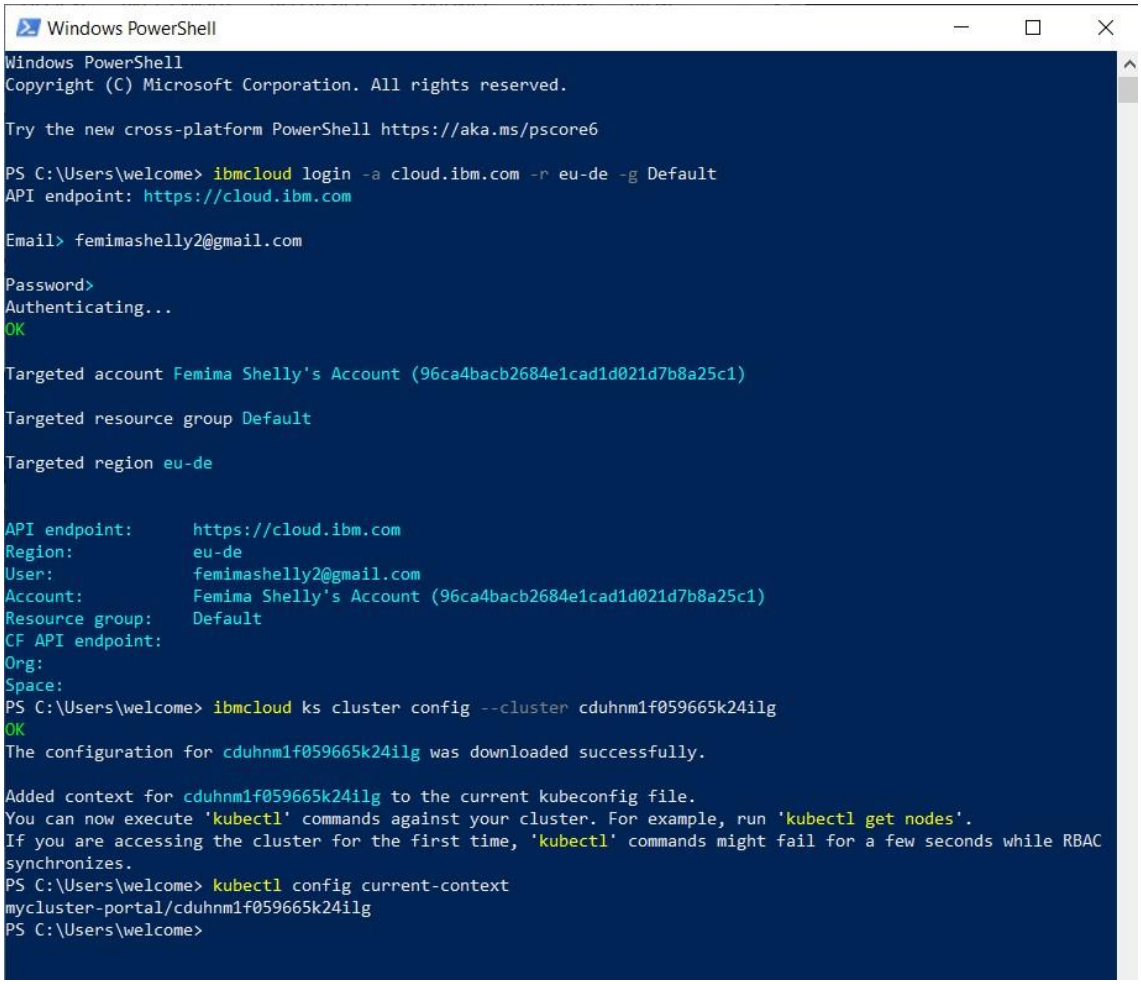


4) Create a kuberentes cluster in IBM cloud and deploy helloworld image or jobportal image and expose the same app to run in node port


Musica celta irlandesa relaja
Docker Playground
Docker Hub
IBM
Create a Cluster - IBM Cloud
cloud.ibm.com/kubernetes/catalog/create
IBM Cloud
Search resources and products...
Catalog
Manage
Femima Shelly's Account
Kubernetes cluster
Author: IBM • Docs • API docs
Create
About
Deliver your apps quicker across clouds with Red Hat OpenShift
Plan details
Learn more about the differences between plans in our docs.
Pricing plan
Free
You have already created your one free cluster
Ready to create more clusters? Choose the Standard cluster type.
Summary
Brazil
Kubernetes cluster
1 Worker node
Free
Free - 2 vCPUs 4GB RAM
Virtual - shared
Ubuntu 18
Total estimated cost
Free/mo
Additional charges for networking and bandwidth might apply.
Actual monthly total will vary with tiered pricing.
Estimate does not include costs for integrations.
Create
Add to estimate
Type here to search
26°C
ENG
03:13 AM
26-11-2022


cloud.ibm.com/kubernetes/clusters/cduhnm1f059665k24ilg/overview
IBM Cloud
Catalog
Manage
Femima Shelly's Account
Clusters /
mycluster-portal
Normal
Expires in 27 days
Add tags
Help
Kubernetes dashboard
Actions...
Overview
Worker nodes
Worker pools
DevOps
New
Expires in 27 days:
Be sure to back up your data, your cluster will be deleted in 27 days. To access the full capabilities of the service, try out a standard cluster.
Node status
1 of 1
Normal
Details
Add-on status
0 of 0
Normal
Details
Master status
Normal
Docs
Ingress status
Healthy
Docs
Details
Cluster ID
cduhnm1f059665k24
Version
1.24.8_1544
Infrastructure
Classic
Zones
Milan 01
Created
11/23/2022, 12:28 AM
Resource group
Default
Image security enforcement
Enable


cloud.ibm.com/kubernetes/clusters/cduhnm1f059665k24ilg/overview
IBM Cloud
Catalog
Manage
Femima Shelly's Account
Clusters /
mycluster-p
Normal
Expires in 27 day
Overview
Worker nodes
Worker pools
DevOps
New
Actions...
Connect via CLI
Cluster status: Normal
If this is your first time connecting to an IBM Cloud cluster, see the full setup directions.
1. Log in to your IBM Cloud account. Include the --sso option if using a federated ID.
ibmcloud login -a cloud.ibm.com -r eu-de -g Default
2. Set the Kubernetes context to your cluster for this terminal session. For more information about this command, see the docs.
ibmcloud ks cluster config --cluster cduhnm1f059665k24ilg
3. Verify that you can connect to your cluster.
kubectl config current-context
Now, you can run kubectl commands to manage your cluster workloads in IBM Cloud! For a full list of commands, see the Kubernetes docs.
Ingress status
Healthy
Docs
Zones
Milan 01


Windows PowerShell
Windows PowerShell
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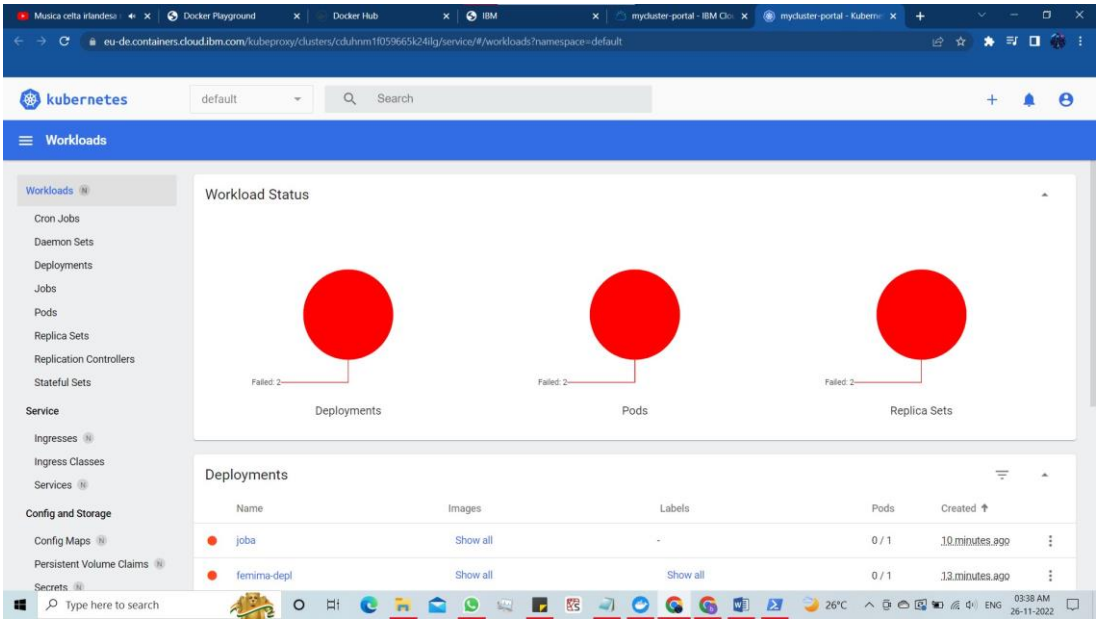
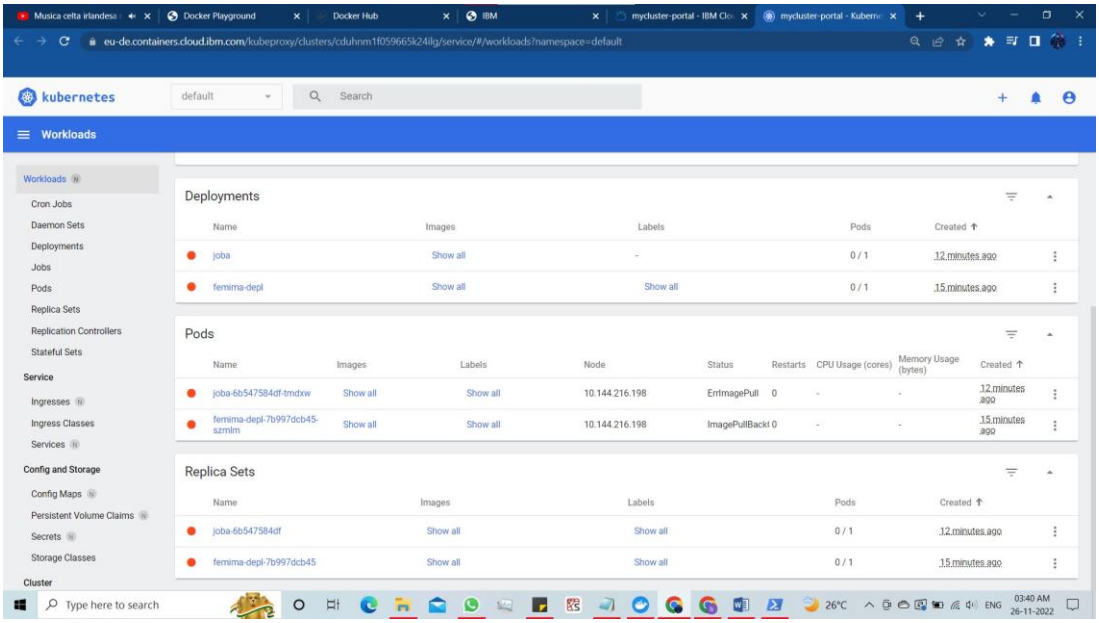
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS C:\Users\welcome> ibmcloud login -a cloud.ibm.com -r eu-de -g Default
API endpoint: https://cloud.ibm.com
Email> femimashelly2@gmail.com
Password>
Authenticating...
OK
Targeted account Femima Shelly's Account (96ca4bacb2684e1cad1d021d7b8a25c1)
Targeted resource group Default
Targeted region eu-de
API endpoint: https://cloud.ibm.com
Region: eu-de
User: femimashelly2@gmail.com
Account: Femima Shelly's Account (96ca4bacb2684e1cad1d021d7b8a25c1)
Resource group: Default
CF API endpoint:
Org:
Space:
PS C:\Users\welcome> ibmcloud ks cluster config --cluster cduhnm1f059665k24ilg
OK
The configuration for cduhnm1f059665k24ilg was downloaded successfully.
Added context for cduhnm1f059665k24ilg to the current kubeconfig file.
You can now execute 'kubectl' commands against your cluster. For example, run 'kubectl get nodes'.
If you are accessing the cluster for the first time, 'kubectl' commands might fail for a few seconds while RBAC synchronizes.
PS C:\Users\welcome> kubectl config current-context
mycluster-portal/cduhnm1f059665k24ilg
PS C:\Users\welcome>

```
Use "kubectl <command> --help" for more information about a given command.
Use "kubectl options" for a list of global command-line options (applies to all commands).
PS C:\Users\welcome> kubectl get nodes
NAME            STATUS   ROLES    AGE    VERSION
10.144.216.198   Ready    <none>   3d2h   v1.24.8+IKS
PS C:\Users\welcome> kubectl get pod
No resources found in default namespace.
PS C:\Users\welcome> kubectl get services
NAME         TYPE        CLUSTER-IP   EXTERNAL-IP   PORT(S)   AGE
kubernetes   ClusterIP   172.21.0.1   <none>        443/TCP   3d2h
PS C:\Users\welcome> kubectl create deployment femima-depl --image=femima
deployment.apps/femima-depl created
PS C:\Users\welcome> kubectl get replicaset
NAME                    DESIRED   CURRENT   READY   AGE
femima-depl-7b997dcb45   1         1         0       22s
PS C:\Users\welcome> kubectl get pods
NAME                          READY   STATUS         RESTARTS   AGE
femima-depl-7b997dcb45-szmlm   0/1     ErrImagePull   0          33s
PS C:\Users\welcome> kubectl get pods
NAME                          READY   STATUS         RESTARTS   AGE
femima-depl-7b997dcb45-szmlm   0/1     ErrImagePull   0          57s
PS C:\Users\welcome> kubectl proxy
Starting to serve on 127.0.0.1:8001
PS C:\Users\welcome> kubectl create -f deployment.yaml
error: the path "deployment.yaml" does not exist
```