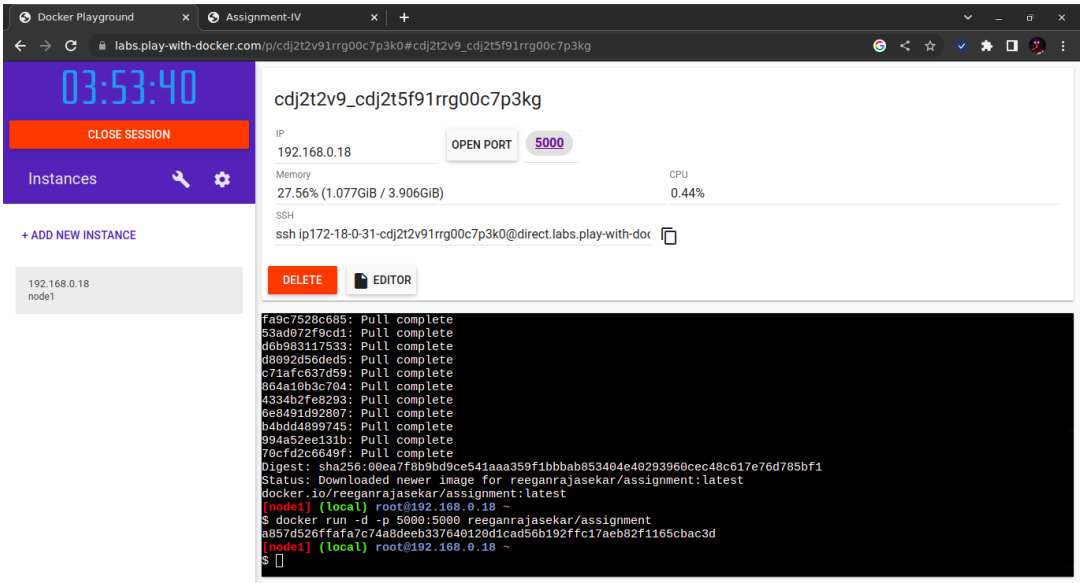
Assignment -4

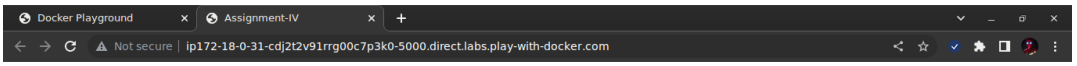
IBM Cloud - Docker - Kubernets

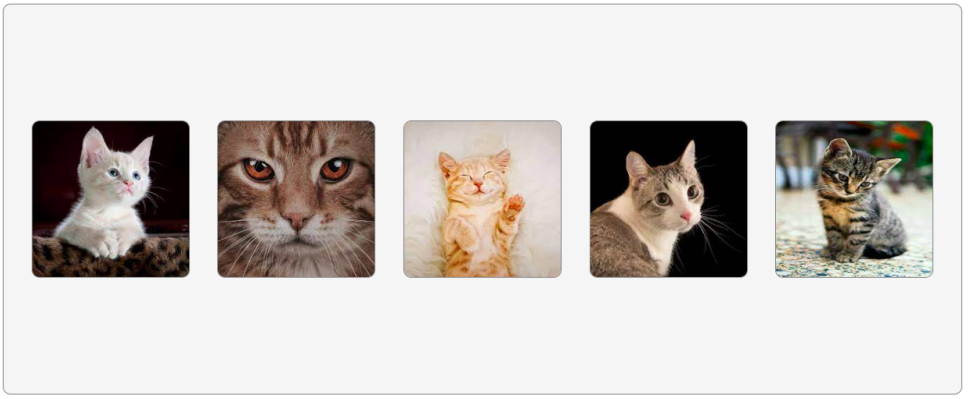
Assignment Date	21 October 2022
Student Name	Mr.A.Reegan Rajasekar
Student Roll Number	821919104022
Maximum Marks	2 Marks

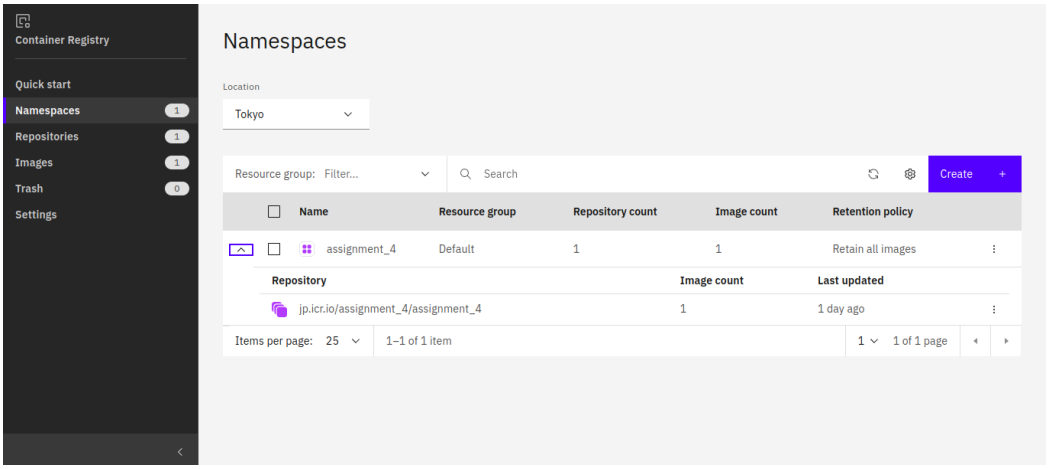
Question:

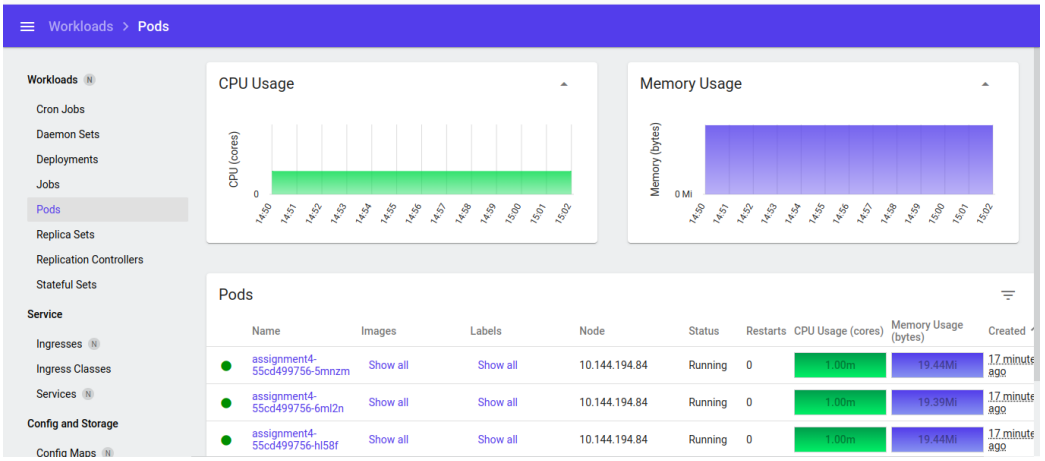
1. Pull an Image from docker hub and run it in docker playground.
2. Create a dockerfile for the job portal / flask application and deploy it in Docker desktop application.
3. Create a IBM container registry and push docker image of flask application or job portal app.
4. Create a Kubernetes cluster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

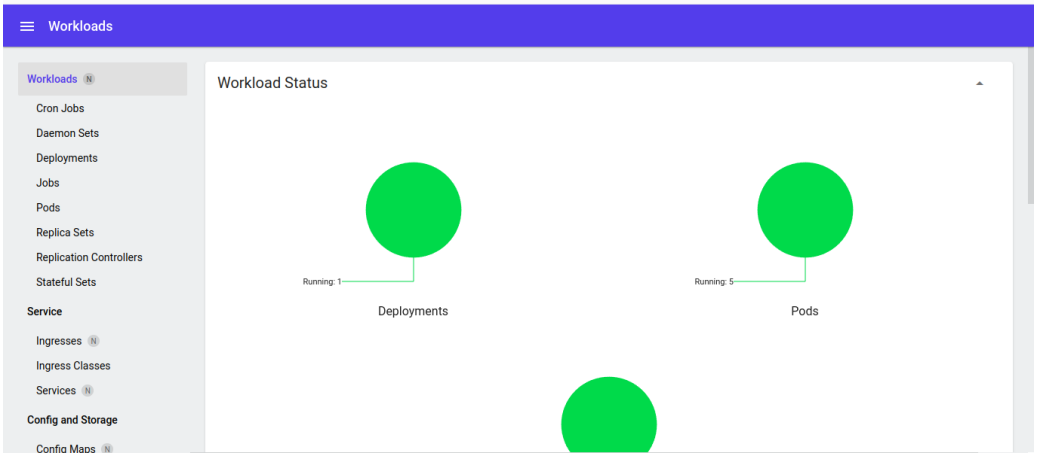


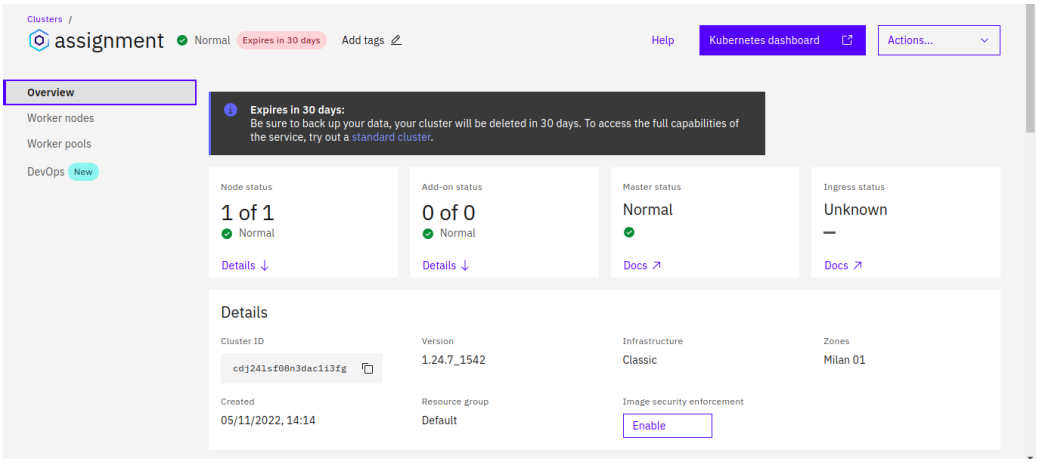





Container Registry
Quick start
Namespaces 1
Repositories 1
Images 1
Trash 0
Settings
Namespaces
Location
Tokyo
Resource group: Filter...
Search
Create
Name
Resource group
Repository count
Image count
Retention policy
assignment_4
Default
1
1
Retain all images
Repository
Image count
Last updated
jp.icr.io/assignment_4/assignment_4
1
1 day ago
Items per page: 25
1–1 of 1 item
1 of 1 page


Workloads > Pods
Workloads
Cron Jobs
Daemon Sets
Deployments
Jobs
Pods
Replica Sets
Replication Controllers
Stateful Sets
Service
Ingresses
Ingress Classes
Services
Config and Storage
Config Maps
CPU Usage
CPU (cores)
Memory Usage
Memory (bytes)
Pods
Name
Images
Labels
Node
Status
Restarts
CPU Usage (cores)
Memory Usage (bytes)
Created
assignment4-55cd499756-5mnzm
assignment4-55cd499756-6ml2n
assignment4-55cd499756-hl58f
Show all
10.144.194.84
Running
1.00m
19.44Mi
17 minutes ago


Workloads
Workloads
Cron Jobs
Daemon Sets
Deployments
Jobs
Pods
Replica Sets
Replication Controllers
Stateful Sets
Service
Ingresses
Ingress Classes
Services
Config and Storage
Config Maps
Workload Status
Running: 1
Deployments
Running: 5
Pods


Clusters /
assignment
Normal
Expires in 30 days
Add tags
Help
Kubernetes dashboard
Actions...
Overview
Worker nodes
Worker pools
DevOps
New
Expires in 30 days:
Be sure to back up your data, your cluster will be deleted in 30 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
Unknown
—
Docs
Details
Cluster ID
cdj24lsf08n3dac1i3fg
Version
1.24.7_1542
Infrastructure
Classic
Zones
Milan 01
Created
05/11/2022, 14:14
Resource group
Default
Image security enforcement
Enable