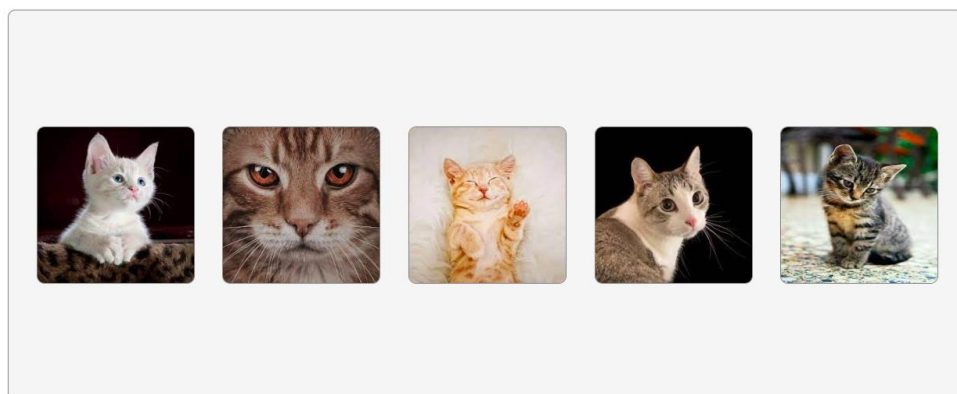
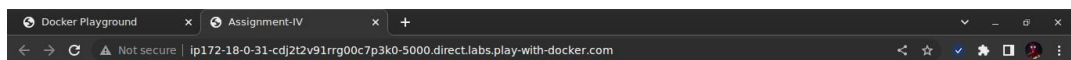
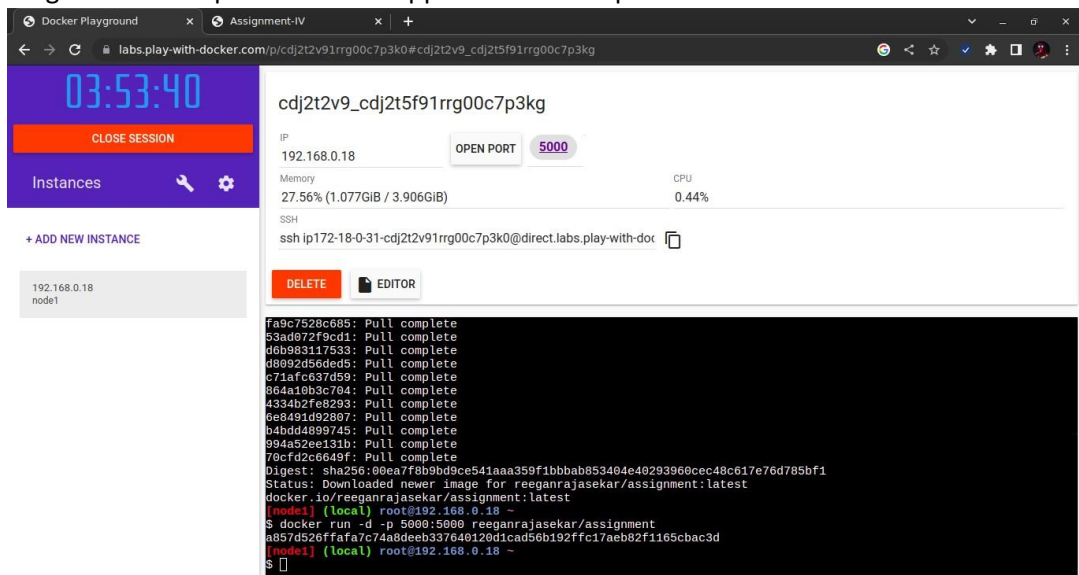


**Assignment -4 IBM Cloud -  
Docker - Kubernetes**

|                     |                 |
|---------------------|-----------------|
| Assignment Date     | 21 October 2022 |
| Student Name        | M. Boshapranesh |
| Student Roll Number | 610519104010    |
| 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

| <input type="checkbox"/>            | Name                                | Resource group | Repository count | Image count | Retention policy  |  |
|-------------------------------------|-------------------------------------|----------------|------------------|-------------|-------------------|--|
| <input checked="" type="checkbox"/> | 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 1 of 1 page

Workloads > Pods

Workloads 0

Cron Jobs

Daemon Sets

Deployments

Jobs

**Pods**

Replica Sets

Replication Controllers

Stateful Sets

Service

Ingresses 0

Ingress Classes

Services 0

Config and Storage

Config Maps 0

### CPU Usage

### Memory Usage

### Pods

| Name                         | Images   | Labels   | Node          | Status  | Restarts | CPU Usage (cores) | Memory Usage (bytes) | Created        |
|------------------------------|----------|----------|---------------|---------|----------|-------------------|----------------------|----------------|
| assignment4-55cd499756-5mnmz | Show all | Show all | 10.144.194.84 | Running | 0        | 1.30m             | 19.44Mi              | 17 minutes ago |
| assignment4-55cd499756-6ml2n | Show all | Show all | 10.144.194.84 | Running | 0        | 1.00m             | 19.39Mi              | 17 minutes ago |
| assignment4-55cd499756-hi58f | Show all | Show all | 10.144.194.84 | Running | 0        | 1.00m             | 19.44Mi              | 17 minutes ago |

Workloads

Workloads 0

Cron Jobs

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Stateful Sets

Service

Ingresses 0

Ingress Classes

Services 0

Config and Storage

Config Maps 0

### 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          | Version        | Infrastructure             | Zones    |
| cj241sf08n3dac113fg | 1.24.7_1542    | Classic                    | Milan 01 |
| Created             | Resource group | Image security enforcement |          |
| 05/11/2022, 14:14   | Default        | Enable                     |          |