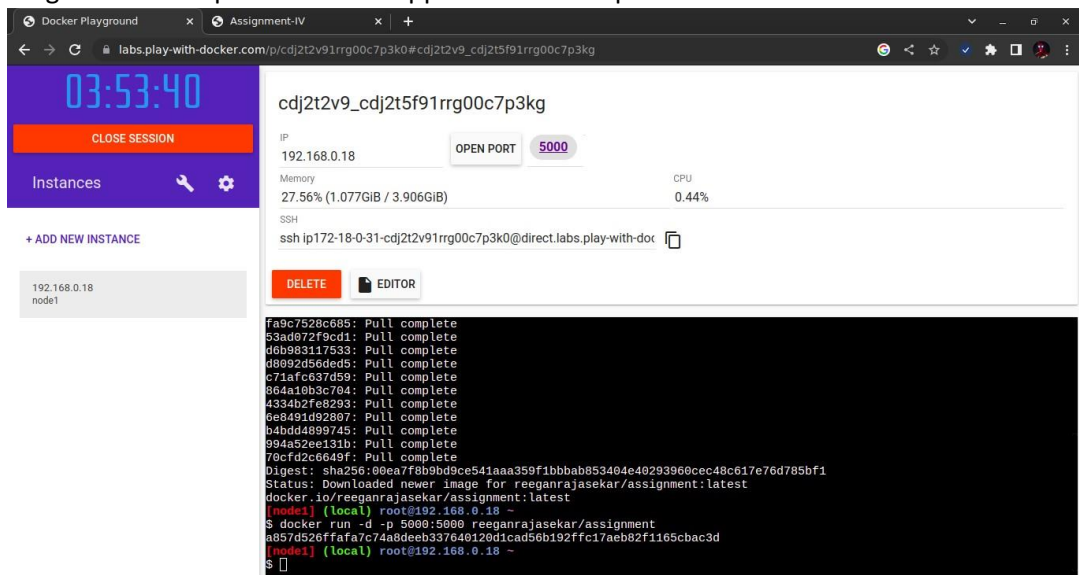


**Assignment -4 IBM Cloud -  
Docker - Kubernetes**

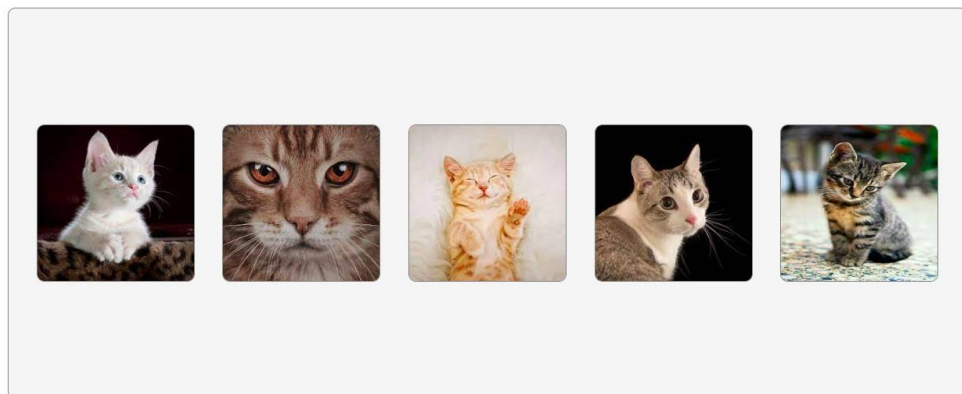
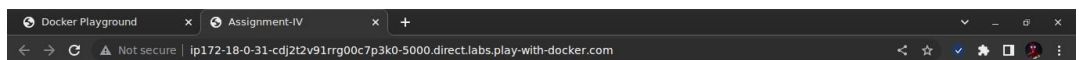
Assignment Date	21 October 2022
Student Name	K.C. Praveen Kumar
Student Roll Number	610519104302
Maximum Marks	2 Marks

**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.



```
fa9c7528c685: Pull complete
53ad972f9cd1: Pull complete
d6b983117533: Pull complete
d8892d56ded5: Pull complete
c71afc637d59: Pull complete
864a10b3c704: Pull complete
4334b2fe8293: Pull complete
6e8491d92807: Pull complete
b4bdd4899745: Pull complete
994a52ee131b: Pull complete
70cfd2c6649f: Pull complete
Digest: sha256:00ea7f8b9bd9ce541aaa359f1bbab853404e40293960cec48c617e76d785bf1
Status: Downloaded newer image for reeganrajasekar/assignment:latest
docker.io/reeganrajasekar/assignment:latest
(node1) (local) root@192.168.0.18 ~
$ docker run -d -p 5000:5000 reeganrajasekar/assignment
a857d526ffa7c74a8deeb337640120d1cad56b192ffc17aeb82f1165cbac3d
(node1) (local) root@192.168.0.18 ~
$
```



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	1.00m	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

Daemon Sets

Deployments

Jobs

Pods

Replica Sets

Replication Controllers

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
c-dj241sf08n3dac113fg	1.24.7_1542	Classic	Milan 01
Created	Resource group	Image security enforcement	
05/11/2022, 14:14	Default	Enable	