

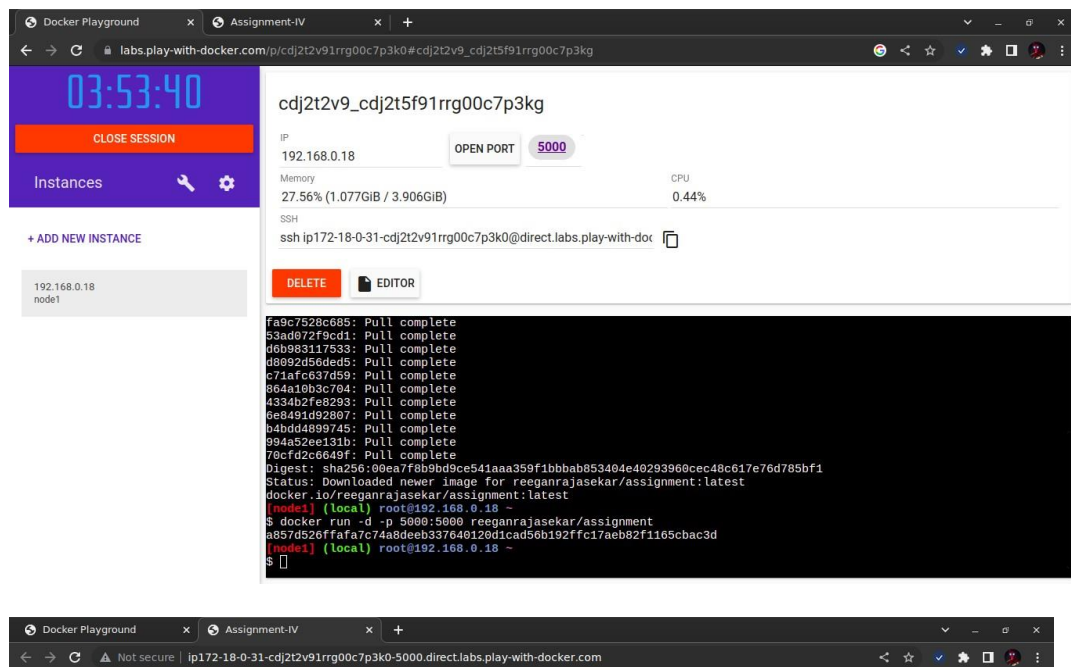
Assignment -4

IBM Cloud - Docker - Kubernetes

Assignment Date	04 November 2022
Student Name	M.Praveenkumar
Student Roll Number	610519104078
Maximum Marks	2 Marks

Question:

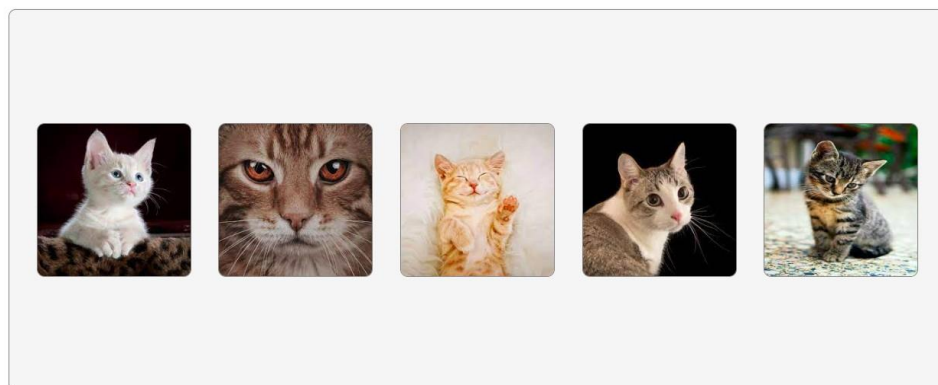
1. Pull an Image from docker hub and run it in docker playground.
2. Create a docker file for the job portal / flask application and deploy it in Docker desktop application.
3. Create an IBM container registry and push docker image of flask application or job portal app.
4. Create a Kubernetes cluster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



The screenshot displays the Docker Playground interface. On the left, a sidebar shows a timer at 03:53:40, a 'CLOSE SESSION' button, and a list of instances with one instance named 'node1' at IP 192.168.0.18. The main panel shows details for the container 'cdj2t2v9_cdj2t5f91rrg00c7p3kg', including its IP (192.168.0.18), memory usage (27.56%), CPU usage (0.44%), and an SSH command. Below this, a terminal window shows the following commands and output:

```
fa9c7528c685: Pull complete
53ad972f9cd1: Pull complete
d6b983117533: Pull complete
d9892d56ded5: Pull complete
c71afe637d59: Pull complete
864a10b3c704: Pull complete
4334b2fe8293: Pull complete
6e8491d92807: Pull complete
b4bdd4899745: Pull complete
994a52ee131b: Pull complete
78cfd2c6649f: Pull complete
Digest: sha256:08ea7f8b9bd9ce541aaa359f1bbbab853404e40293960cec48c617e76d785bf1
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
a857d526ffafa7c74a8deeb33764e120d1cad56b192ffc17aeb82f1165cbac3d
[node1] (local) root@192.168.0.18 ~
$
```

The bottom screenshot shows the browser address bar with the URL: `ip172-18-0-31-cdj2t2v91rrg00c7p3k0-5000.direct.labs.play-with-docker.com`.



Container Registry

Quick start

Namespaces1

Repositories1

Images1

Trash0

Settings

Namespaces

Location

Tokyo

Resource group: Filter...

Q 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	:

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Workloads > Pods

WorkloadsN

Cron Jobs

Daemon Sets

Deployments

Jobs

Pods

Replica Sets

Replication Controllers

Stateful Sets

Service

IngressesN

Ingress Classes

ServicesN

Config and Storage

Config MapsN

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
assignment4-55cd499756-6mi2n	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

WorkloadsN

Cron Jobs

Daemon Sets

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Pods

Replica Sets

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Stateful Sets

Service

IngressesN

Ingress Classes

ServicesN

Config and Storage

Config MapsN


Workload Status

Running: 1

Deployments

Running: 5

Pods

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Quick start

Namespaces1

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Trash0

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.lcr.io/assignment_4/assignment_4		1		1 day ago	

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