

Assignment- 4



Assignment Date	30 October 2022
Student Name	Kiranbabu AR
Student Roll Number	311019104038
Maximum Marks	2 Marks

Question 1:

Pull an image from docker hub and run it in docker playground.

03:57:32

CLOSE SESSION

Instances  

+ ADD NEW INSTANCE


192.168.0.8
node1


cddvksm0_cddvkvm0qau000a07j5g

IP
192.168.0.8 OPEN PORT

Memory
1.24% (49.52MiB / 3.906GiB)

CPU
0.31%

SSH
ssh ip172-18-0-22-cddvksm0qau000a07j50@direct.labs.pla: 

DELETE  EDITOR

```
#####
#                               #
#   WARNING!!!!                 #
#   This is a sandbox environment. Using personal credentials   #
#   is HIGHLY! discouraged. Any consequences of doing so are   #
#   completely the user's responsibilities.                       #
#   #                                                             #
#   The PWD team.                                                 #
#####
[node1] (local) root@192.168.0.8 ~
$ docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
2db29710123e: Pull complete
Digest: sha256:e18f0a777aefabe047a671ab3ec3eed05414477c951ab1a6f352a06974245fe7
Status: Downloaded newer image for hello-world:latest
docker.io/library/hello-world:latest
[node1] (local) root@192.168.0.8 ~
$ docker run hello-world
```

Activate V
Go to Setting

03:57:05

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

cddvksm0_cddvkvm0qau000a07j5g

IP
192.168.0.8

OPEN PORT

Memory
1.26% (50.45MiB / 3.906GiB)

CPU
0.39%

SSH
ssh ip172-18-0-22-cddvksm0qau000a07j50@direct.labs.pla

DELETE

EDITOR

2. The Docker daemon pulled the "hello-world" image from the Docker Hub. (amd64)

3. The Docker daemon created a new container from that image which runs the executable that produces the output you are currently reading.

4. The Docker daemon streamed that output to the Docker client, which sent it to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
\$ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
<https://hub.docker.com/>

For more examples and ideas, visit:
<https://docs.docker.com/get-started/>

[node1] (local) root@192.168.0.8 ~
\$


Question 2:


Create a docker file for the job portal application and deploy it in Docker desktopapplication.


DOCKER FILE:


```
1 FROM python:3.8-buster
2
3 WORKDIR /app
4
5 COPY requirements.txt /app/
6
7 RUN pip install -r requirements.txt
8
9 COPY . /app/
10
11 RUN cp .env.dev.sample .env
12
13 EXPOSE 8000
14
15 RUN chmod +x entrypoint.sh
16
17 CMD ["sh", "entrypoint.sh"]
```

DEPLOYMENT OF JOBPORTAL APPLICATION:


 Containers

 Images

 Volumes

 Dev Environments BETA







Extensions BETA ⋮



 Add Extensions

Containers [Give feedback](#)

A container packages up code and its dependencies so the application runs quickly and reliably from one computing environment to another.

☐ Only show running containers 🔍

<input type="checkbox"/>	NAME	IMAGE	STATUS	PORT(S)
<input type="checkbox"/>	 agitated_neumann 918d20882039 	icr.io/helloapp/ibm:latest	Exited (137)	49160:8080 
<input type="checkbox"/>	 jolly_turing b62c0712bdd3 	jobportalapplication:latest	Running	1234:8000 

 RAM 3.06GB CPU 0.57%  Connected to Hub

OUTPUT:

Popular Search:

[Design & Creative](#)[Marketing](#)[Administration](#)[Teaching & Education](#)[Engineering](#)[Software &](#)

Popolar Categories

Design & Creative

50

Available position

Marketing

50

Available position

Telemarketing

50

Available position

Soft

50

Administration

Teaching & Education

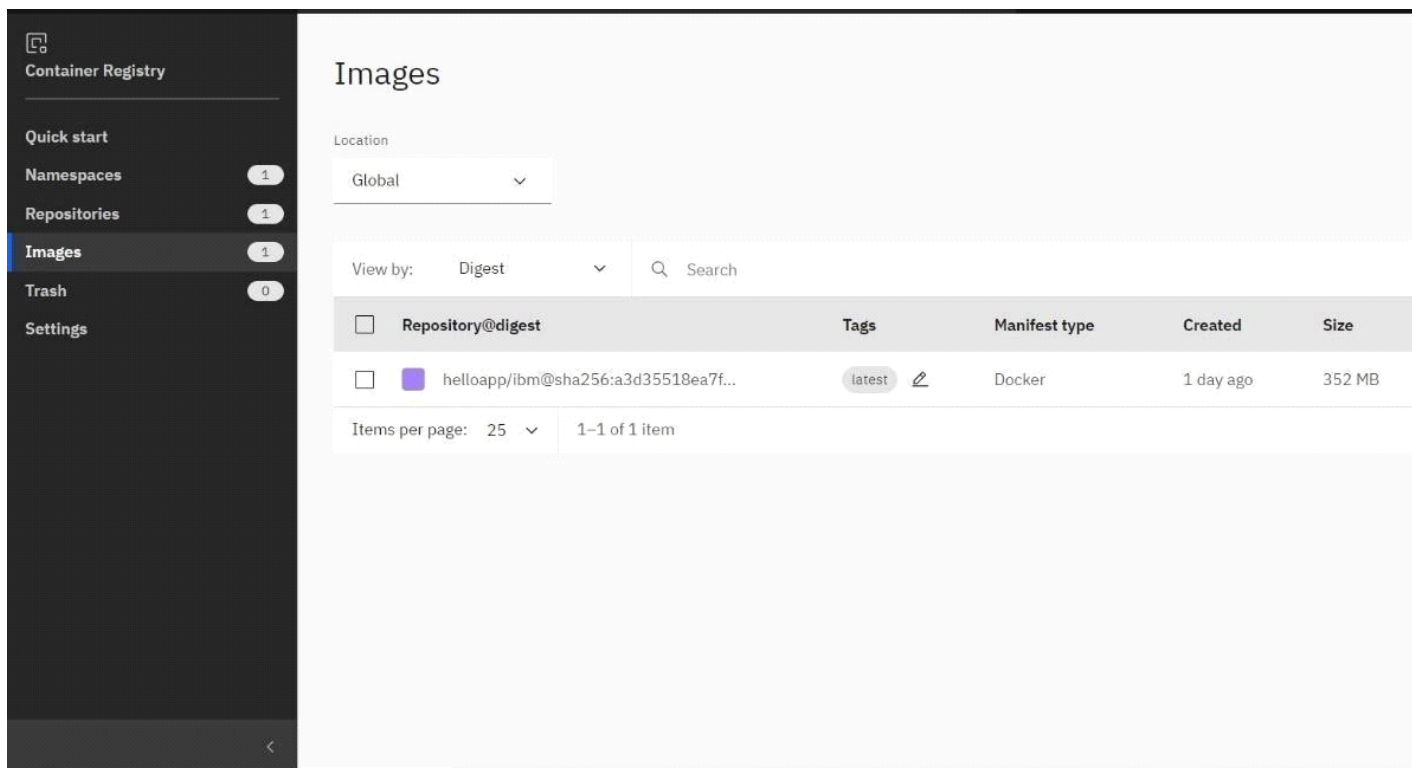
Engineering

Gar

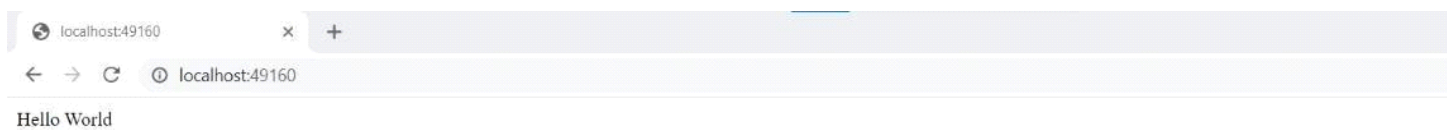
Question 3:

Create a IBM container registry and deploy hello-world app or job port

app.IBM CONTAINER REGISTRY DEPLOYMENT:



OUTPUT:



Question 4:

Create a Kubernetes cluster in IBM cloud and deploy hello world image or job portal image and also expose the same app to run in node port.

Creating Kubernetes cluster in IBM cloud and exposing node port:

The screenshot shows the IBM Cloud Kubernetes dashboard. At the top, the cluster is named 'mycluster-free' with a status of 'Normal' and an expiration notice 'Expires in 29 days'. A 'Kubernetes dashboard' button is visible in the top right. On the left sidebar, 'Worker nodes' is selected. The main area displays a table of worker nodes with the following data:

<input type="checkbox"/>	Name	Status	Worker pool	Zone	Private IP	Public IP
<input checked="" type="checkbox"/>	0000008c	Normal	default	Milan 01	10.144.187.51	159.122.179.68

At the bottom of the table, it shows 'Items per page: 25' and '1-1 of 1 item'.

Output:

