

# ASSIGNMENT-4

TEAM ID	PNT2022TMID41651
PROJECT NAME	CUSTOMER CARE REGISTRY
NAME	DHINESH KUMAR M

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 Windows  
Go to Settings to activate Windows.

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 dockerfile for the job portal application and deploy it in Docker desktop application.

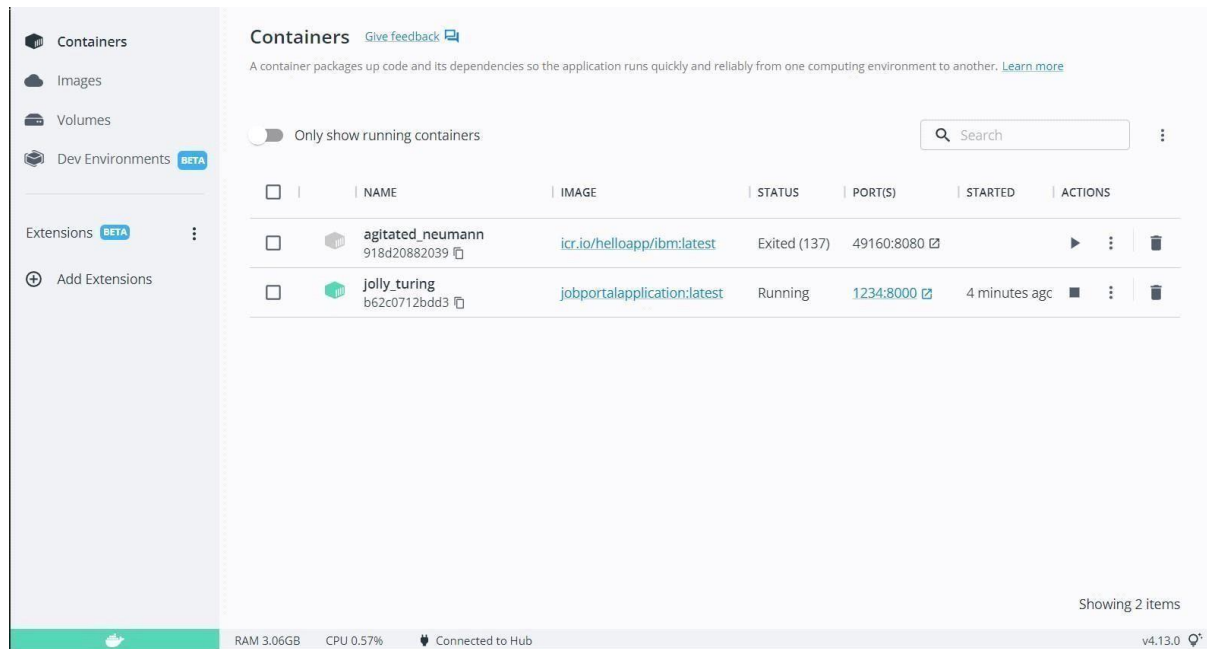
DOCKERFILE:

```

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:

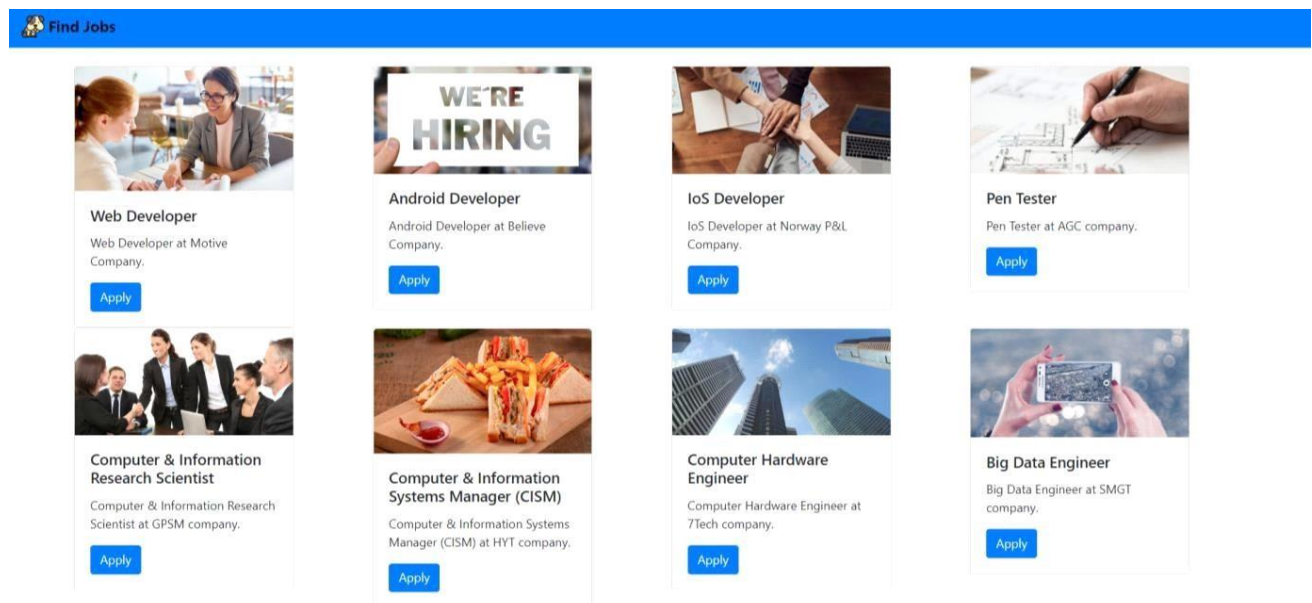


The screenshot shows the Docker Desktop interface. On the left is a sidebar with navigation options: Containers (selected), Images, Volumes, Dev Environments (with a BETA badge), Extensions (with a BETA badge), and Add Extensions. The main area is titled 'Containers' and includes a toggle for 'Only show running containers' and a search bar. Below this is a table of containers:

	NAME	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
<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	4 minutes ago	

At the bottom right of the main area, it says 'Showing 2 items'. The bottom status bar shows 'RAM 3.06GB', 'CPU 0.57%', 'Connected to Hub', and 'v4.13.0'.

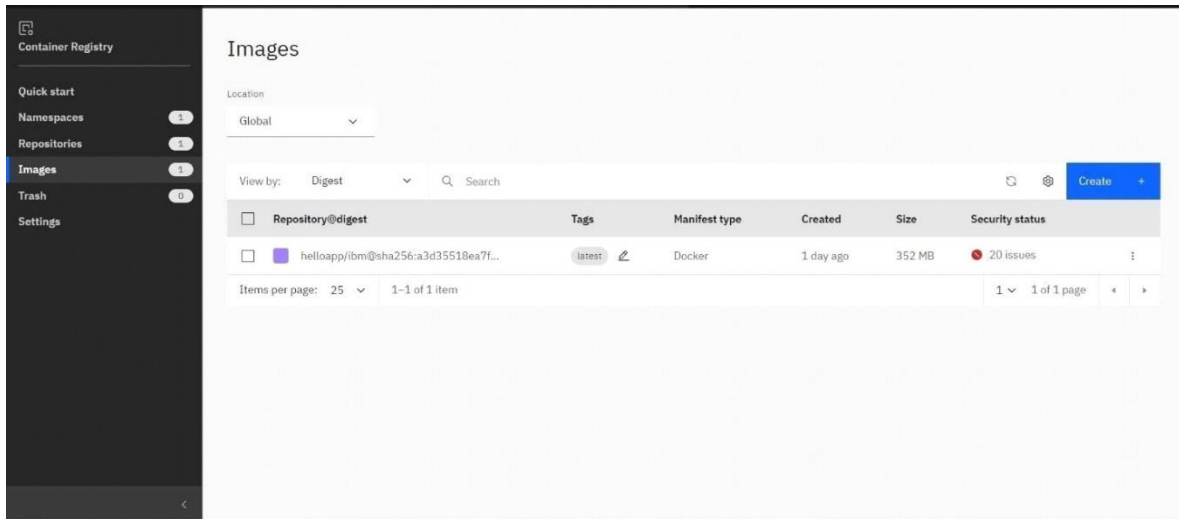
## OUTPUT:



The screenshot shows a job portal website with a blue header bar that says 'Find Jobs'. Below the header, there are eight job listings arranged in a 2x4 grid. Each listing includes a header image, a job title, a brief description, and an 'Apply' button.

- Web Developer**: Web Developer at Motive Company.
- Android Developer**: Android Developer at Believe Company.
- IoT Developer**: IoT Developer at Norway P&L Company.
- Pen Tester**: Pen Tester at AGC company.
- Computer & Information Research Scientist**: Computer & Information Research Scientist at GPSM company.
- Computer & Information Systems Manager (CISM)**: Computer & Information Systems Manager (CISM) at HYT company.
- Computer Hardware Engineer**: Computer Hardware Engineer at 7Tech company.
- Big Data Engineer**: Big Data Engineer at SMGT company.

Question 3:

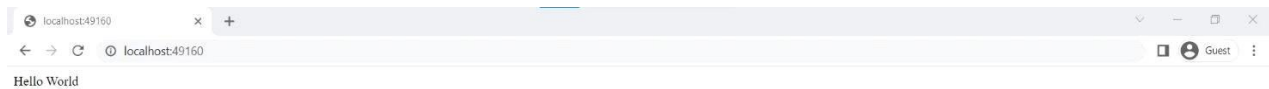


Create a IBM container registry and deploy helloworld app

or jobportapp. IBM CONTAINER REGISTRY

DEPLOYMENT:

OUTPUT:



Question 4:

Create a Kubernetes cluster in IBM cloud and deploy helloworld image or jobportal image and also expose the same app to run in nodeport.

## CREATING KUBERNETES CLUSTER IN IBM CLOUD AND EXPOSING NODEPORT:

Clusters / mycluster-free Normal Expires in 29 days Add tags Help Kubernetes dashboard Actions...

Overview

**Worker nodes**

Worker pools

DevOps new


Pool: Filter... Search

<input type="checkbox"/>	Name	Status	Worker pool	Zone	Private IP	Public IP	Version
<input type="checkbox"/>	0000008c	<span>Normal</span>	default	Milan 01	10.144.187.51	159.122.179.68	1.23.12_1549


Items per page: 25 1-1 of 1 item 1 1 of 1 page

## OUTPUT:


**Find Jobs**




**Web Developer**  
Web Developer at Motive Company.  
[Apply](#)




**Android Developer**  
Android Developer at Believe Company.  
[Apply](#)




**IoT Developer**  
IoT Developer at Norway P&L Company.  
[Apply](#)




**Pen Tester**  
Pen Tester at AGC company.  
[Apply](#)




**Computer & Information Research Scientist**  
Computer & Information Research Scientist at GPSC company.  
[Apply](#)



**Computer & Information Systems Manager (CISM)**  
Computer & Information Systems Manager (CISM) at HVT company.  
[Apply](#)



**Computer Hardware Engineer**  
Computer Hardware Engineer at 7Tech company.  
[Apply](#)



**Big Data Engineer**  
Big Data Engineer at SMGT company.  
[Apply](#)