

Assignment- 4

Assignment Date	1 st November 2022
Student Name	Keerthana Petchimuthu
Student Roll Number	211519205076
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

cddvkasm0_cddvkvm0qau000a07j5g

IP: 192.168.0.8 OPEN PORT

Memory 1.24% (49.52MiB / 3.906GiB) CPU 0.31%

SSH ssh ip172-18-0-22-cddvkasm0qau000a07j50@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 PMD team.
#####
[node3] (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
[node3] (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-cddvksm0qau000a07j5g@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 desktop application.

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. [Learn more](#)

☐ Only show running containers

	NAME	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
<input type="checkbox"/>	<div>agitated_neumann</div> <div>918d20882039</div>	icr.io/helloapp/ibm:latest	Exited (137)	49160:8080		<div></div> <div></div> <div></div>
<input type="checkbox"/>	<div>jolly_turing</div> <div>b62c0712bdd3</div>	jobportalapplication:latest	Running	1234:8000	4 minutes ago	<div></div> <div></div> <div></div>

Showing 2 items

RAM 3.06GB

CPU 0.57%

Connected to Hub

v4.13.0

OUTPUT:

Find Jobs

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

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

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

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

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

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

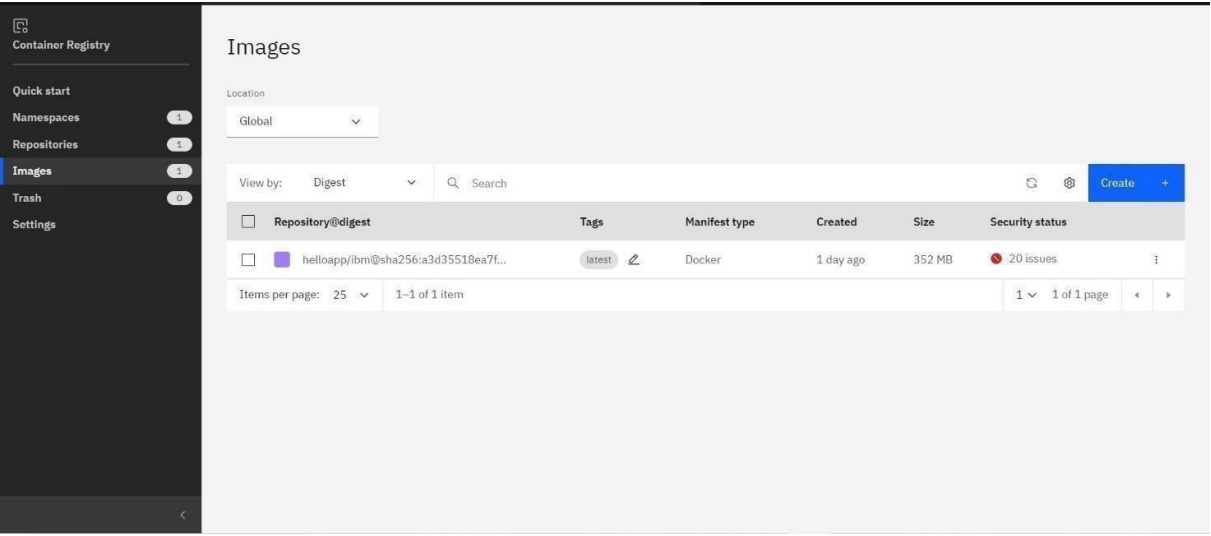
Pen Tester
Pen Tester at AGC company.
[Apply](#)

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

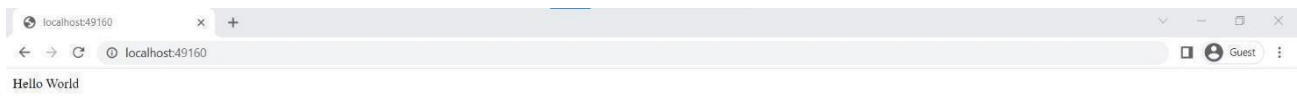
Question 3:

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

CONTAINER REGISTRY DEPLOYMENT:



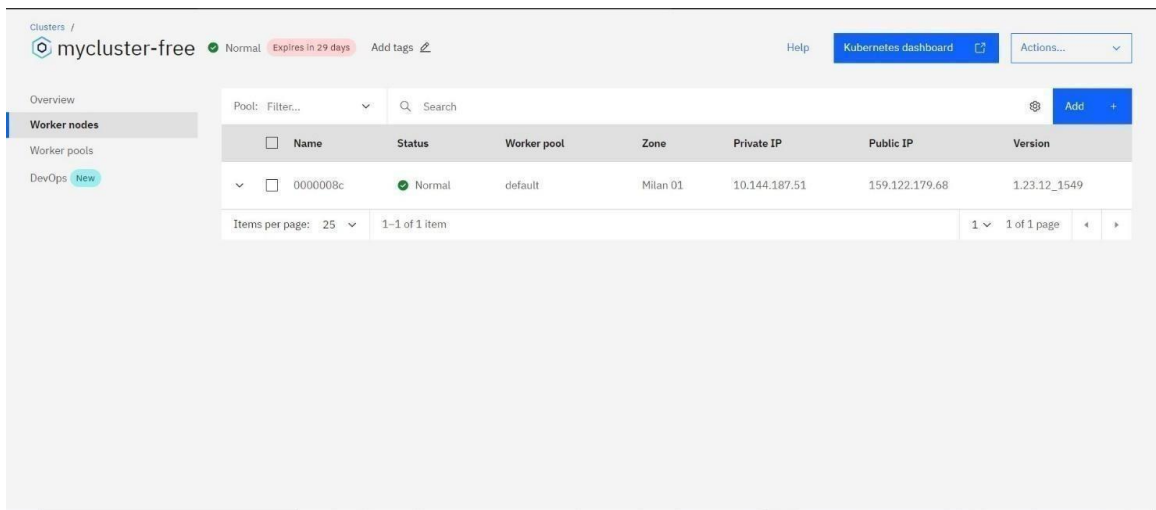
OUTPUT:




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:




Output:


 Find Jobs



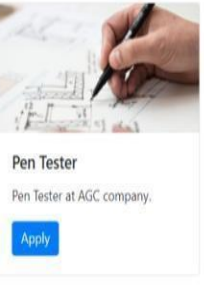
Web Developer
Web Developer at Motive Company.
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WE'RE HIRING
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[Apply](#)



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Computer & Information Systems Manager (CISM) at HYT company.
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Computer Hardware Engineer
Computer Hardware Engineer at 7Tech company.
[Apply](#)



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