

Assignment - 4

Assignment Date	05 November 2022
Student Name	M.VIDHYA SRI
Maximum Marks	2 Marks
Team Name	DareDevils
Team ID	PNT2022TMID25938

Question 1:

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

The screenshot shows the Docker Playground interface. On the left, there's a sidebar with a clock showing 03:58:30, a 'CLOSE SESSION' button, and a list of instances. The main area displays the instance details for 'cdmgksm3_cdmgkuu3tccg009qde6g', including its IP (192.168.0.8), memory usage (1.21%), CPU usage (0.30%), and an SSH command. Below this, there's a terminal window showing the following commands and output:

```
#####  
# WARNING!!!!  
# This is a sandbox environment. Using personal credentials  
# is HIGHLY! discouraged. Any consequences of doing so are  
# completely the user's responsibilities.  
#  
# The FWD 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:faa03e786c97f07ef34423fccceec2398ec8a5759259f94d99078f264e9d7af  
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  
  
Hello from Docker!  
This message shows that your installation appears to be working correctly.  
To generate this message, Docker took the following steps:
```

The screenshot shows the 'labs.play-with-docker.com' interface. On the left, there's a sidebar with a clock showing '03:58:19', a 'CLOSE SESSION' button, and a list of instances including '192.168.0.8 node1'. The main panel displays details for the container 'cdmgksm3_cdmgkuu3tccg009qde6g', including its IP (192.168.0.8), memory usage (1.21%), CPU usage (0.61%), and an SSH command. Below this, a terminal window shows the 'Hello from Docker!' message and instructions for running containers.

cdmgksm3_cdmgkuu3tccg009qde6g

IP: 192.168.0.8 OPEN PORT

Memory: 1.21% (48.59MiB / 3.906GiB) CPU: 0.61%

SSH: ssh ip172-18-0-32-cdmgksm3tccg009qde60@direct.labs.pli

DELETE EDITOR

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:

1. The Docker client contacted the Docker daemon.
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 Job portal 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

<input type="checkbox"/>	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:**

Job Board

Find your dream job

Home

Browse Job

Pages

Blog

Contact

Log in

Post A Job

Search keyword

Location

Category

Find Job

Popular Search:

Design & Creative

Marketing

Administration

Teaching & Education

Engineering

Software & Web

Telemarketing

Popular Categories

Design & Creative

50 Available position

Marketing

50 Available position

Telemarketing

50 Available position

Software & Web

50 Available position

Administration

Teaching & Education

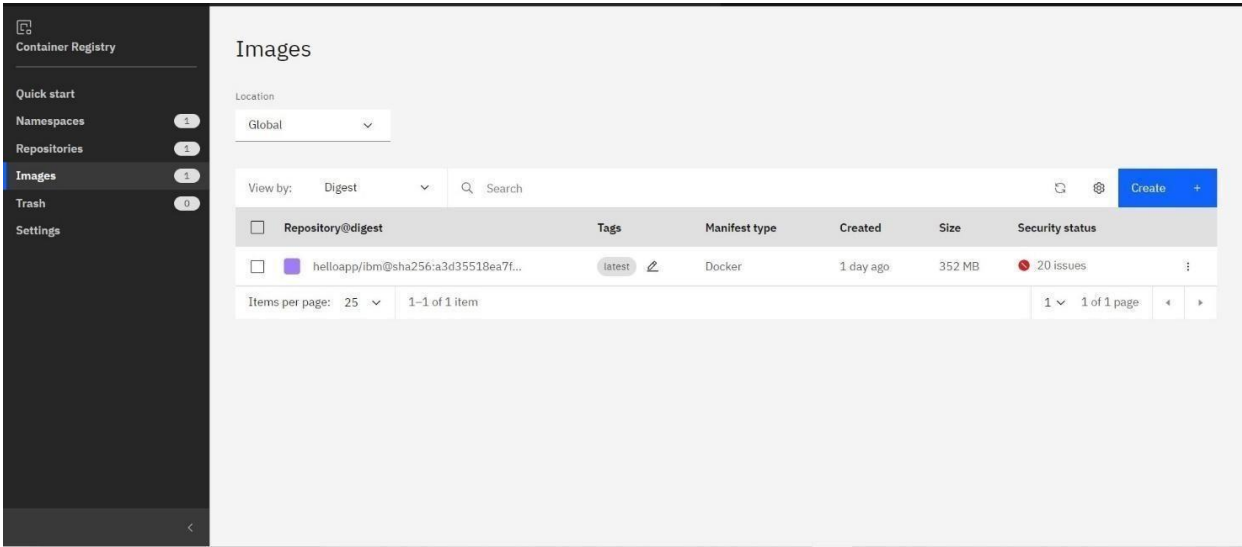
Engineering

Garments / Textile

Question 3:

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

- Registry Deployment:**



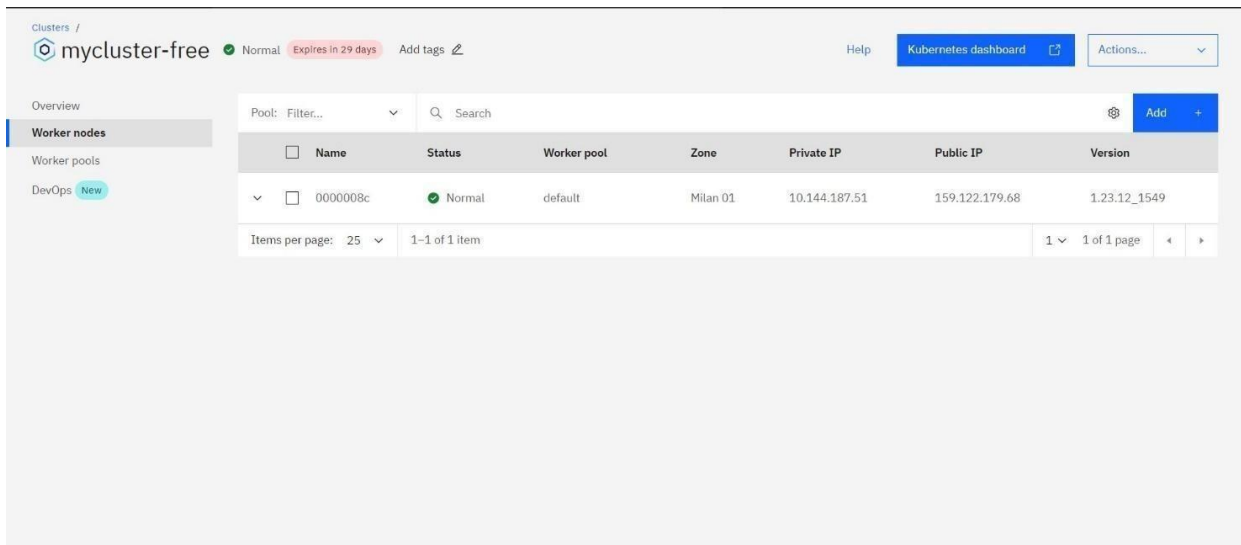
- Output:**



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:**

