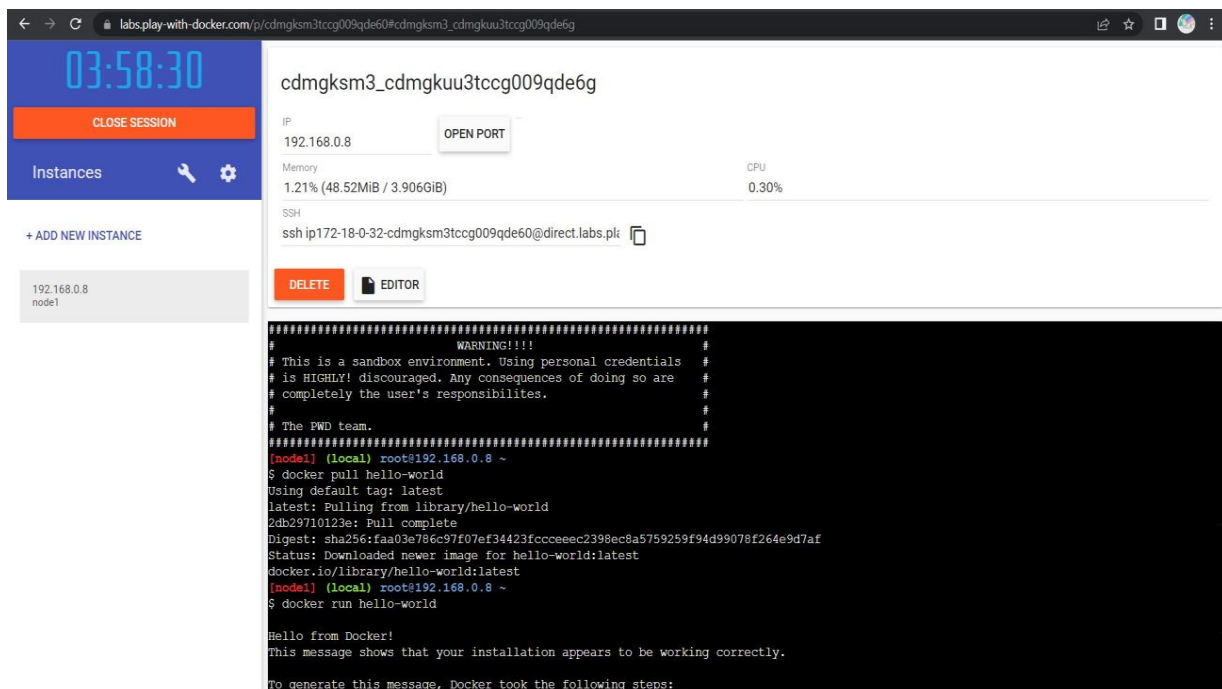


Assignment - 4

Assignment Date	05 November 2022
Student Name	T.Puneeth
Maximum Marks	2 Marks
Team Name	CODEBRICKS
Team ID	PNT2022TMID25850

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 an 'Instances' section with a '+ ADD NEW INSTANCE' button and a list of instances including '192.168.0.8 node1'. The main area displays the instance 'cdmgksm3_cdmgkuu3tccg009qde6g' with its IP '192.168.0.8', memory usage '1.21% (48.52MiB / 3.906GiB)', and CPU usage '0.30%'. Below this, there's an 'SSH' button and a terminal window. The terminal shows a warning message, followed by the command 'docker pull hello-world' which pulls the latest image from the library. Then, the command 'docker run hello-world' is executed, resulting in the output 'Hello from Docker!' and a confirmation message that the installation is working correctly.

```
cdmgksm3_cdmgkuu3tccg009qde6g
IP: 192.168.0.8
Memory: 1.21% (48.52MiB / 3.906GiB)
CPU: 0.30%
SSH: ssh ip172-18-0-32-cdmgksm3tccg009qde60@direct.labs.plk
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:faa03e786c97f07ef34423fcccceec2398ec8a5759259f94d99078f264e9d7af
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 Play with Docker web interface. On the left, there's a sidebar with a clock showing 03:58:19, a 'CLOSE SESSION' button, and a list of instances. One instance is listed: '192.168.0.8 node1'. The main area displays details for a container named 'cdmgksm3_cdmgkuu3tccg009qde6g'. It shows the IP address '192.168.0.8', memory usage '1.21% (48.59MiB / 3.906GiB)', and CPU usage '0.61%'. There's an 'OPEN PORT' button and an SSH command: 'ssh ip172-18-0-32-cdmgksm3tccg009qde60@direct.labs.plk'. Below this, there are 'DELETE' and 'EDITOR' buttons. The terminal output shows a 'Hello from Docker!' message, followed by a list of steps explaining how Docker works. It also provides instructions on how to run an Ubuntu container and share Docker images.

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></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></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

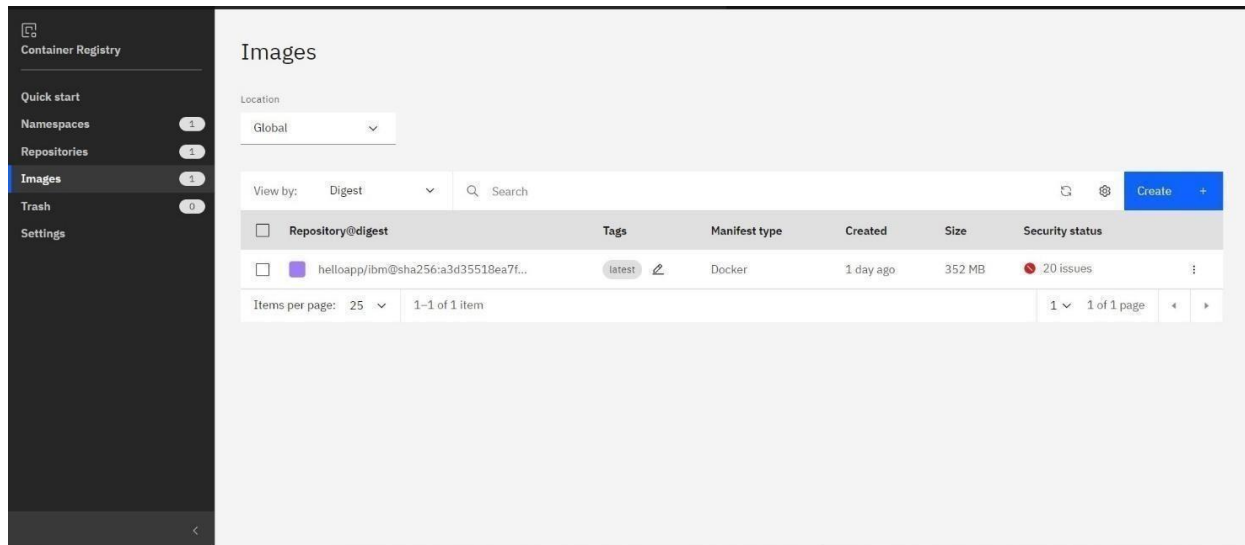
Engineering

Garments / Textile

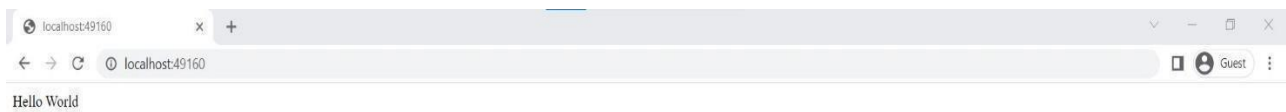
Question 3:

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

- **Registry Deployment:**



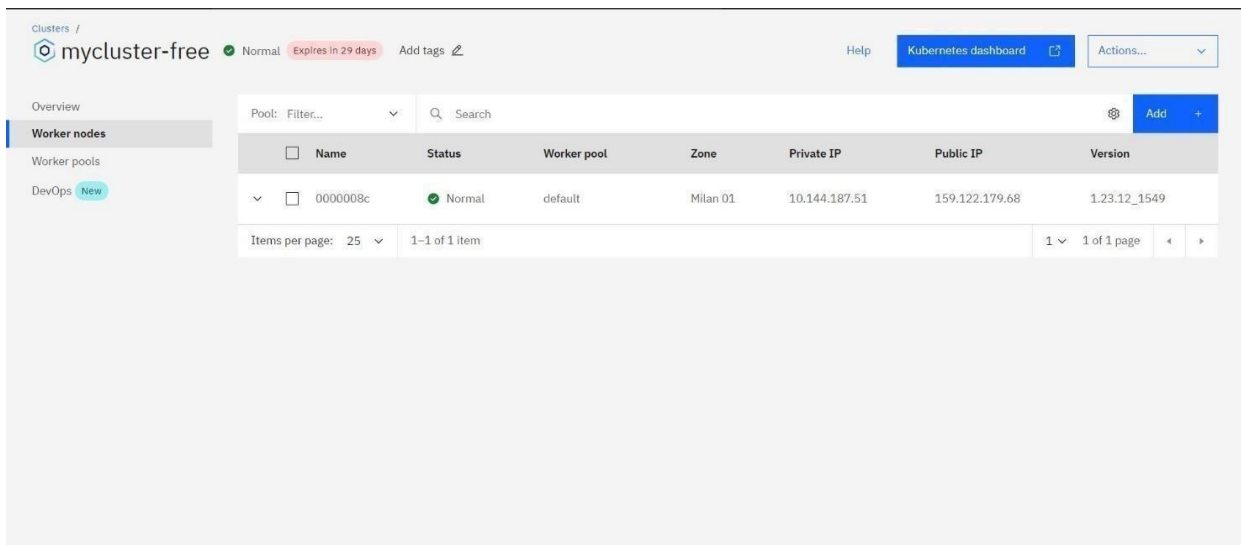
- **Output:**



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:**

