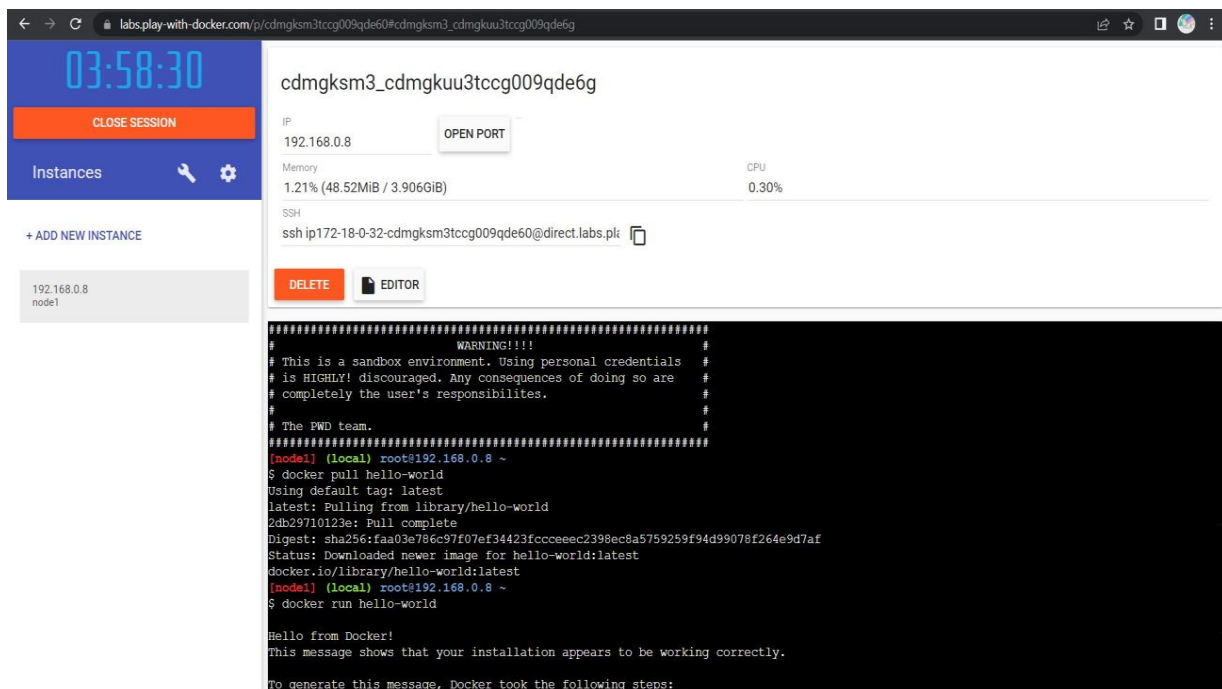


Assignment - 4

Assignment Date	05 November 2022
Student Name	NALLA NAGARAJULU
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 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 are 'DELETE' and 'EDITOR' buttons. The terminal window shows a warning message, followed by the execution of 'docker pull hello-world' and 'docker run hello-world', resulting in the 'Hello from Docker!' message.

```
cdmgksm3_cdmgkuu3tccg009qde6g

IP: 192.168.0.8 OPEN PORT

Memory 1.21% (48.52MiB / 3.906GiB) CPU 0.30%

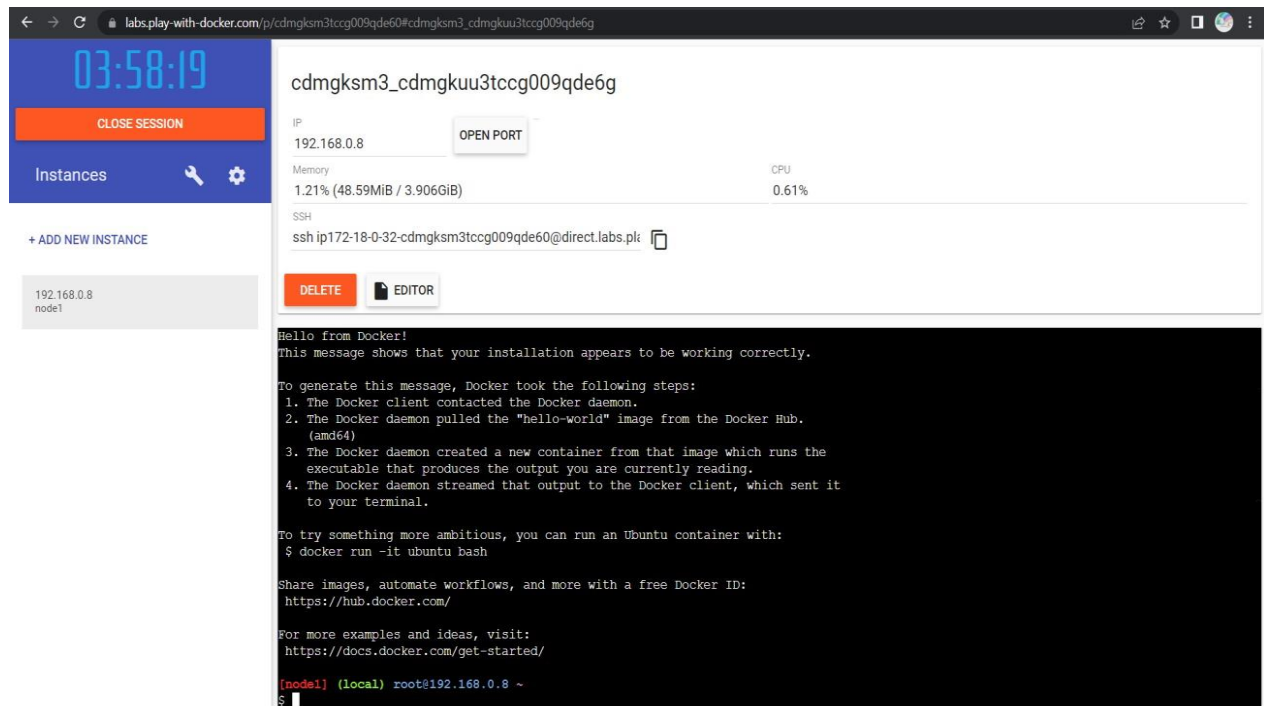
SSH ssh ip172-18-0-32-cdmgksm3tccg009qde60@direct.labs.plk

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:
```



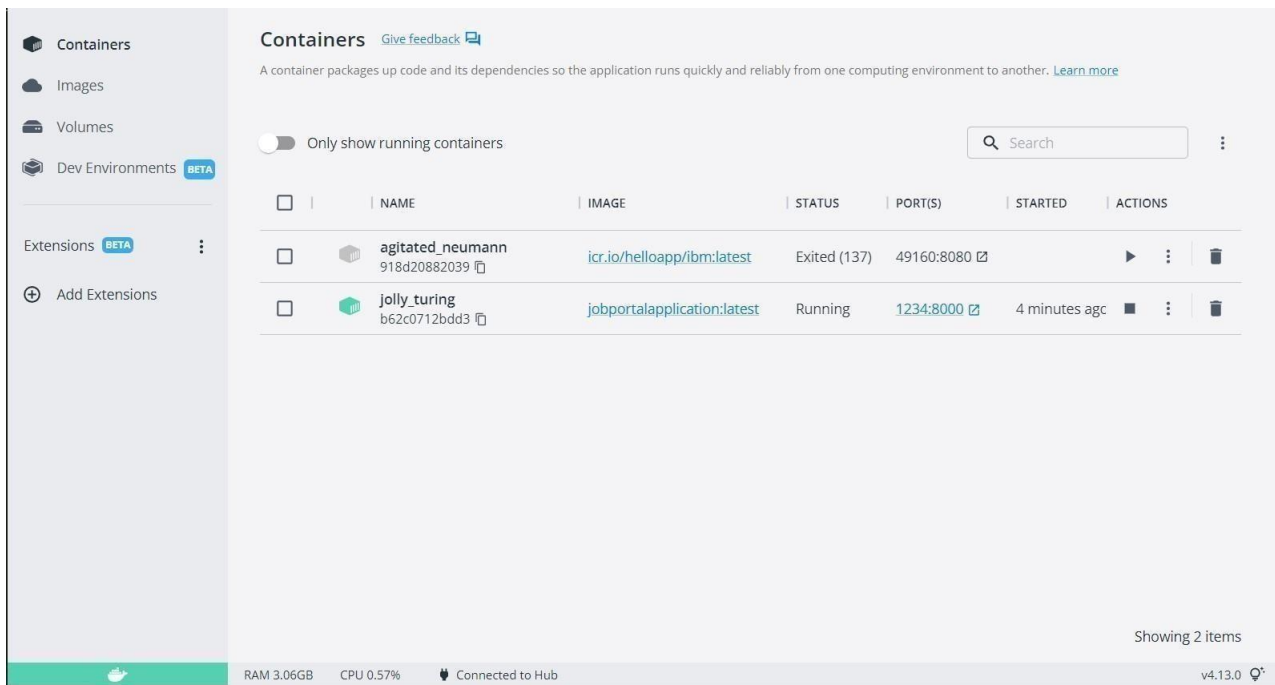
Question 2:

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

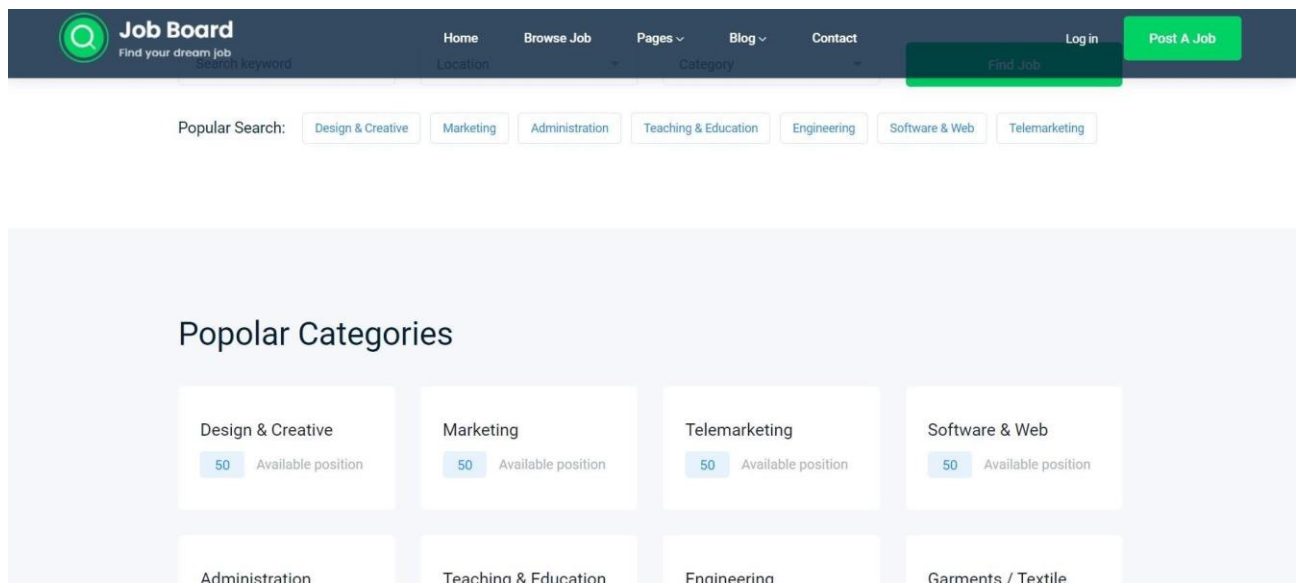
- **Docker file:**

```
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**



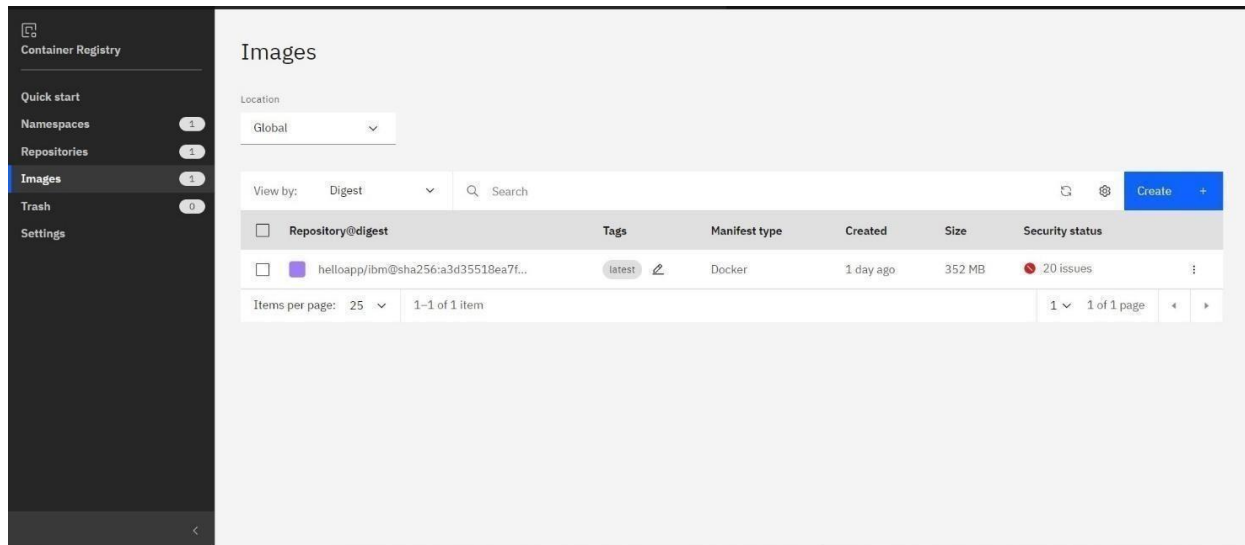
- **Output:**



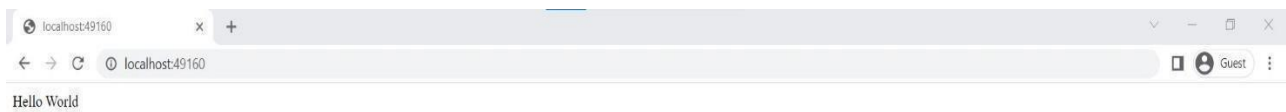
Question 3:

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

- **Registry Deployment:**



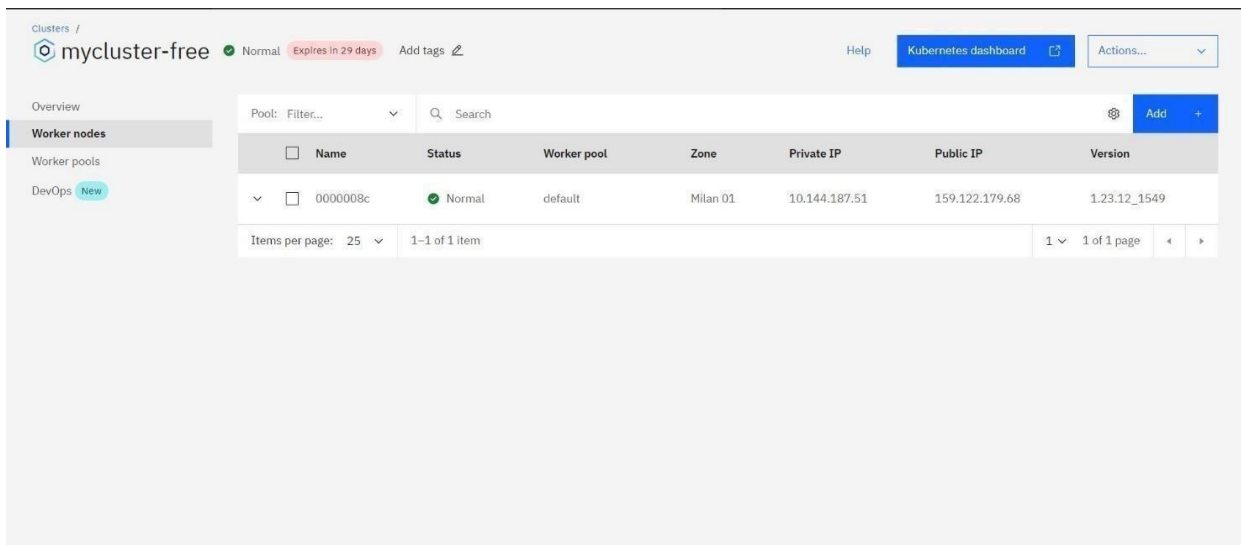
- **Output:**



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:**

