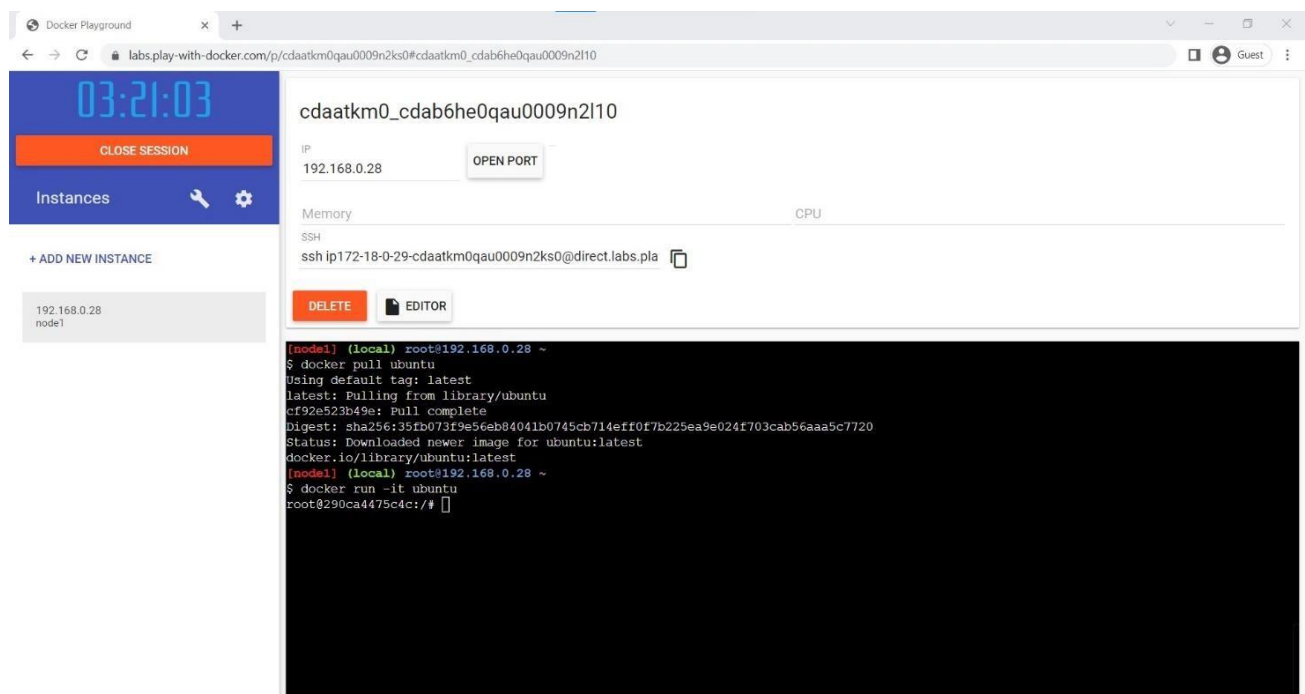


## Assignment - 4

Assignment Date	24 October 2022
Student Name	Nithya Shree V
Student Roll Number	111719205030
Maximum Marks	2 Marks

### Question 1:

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



The screenshot shows the Docker Playground web interface. On the left, there's a sidebar with a clock showing 03:21:03, a 'CLOSE SESSION' button, and an 'Instances' section with a '+ ADD NEW INSTANCE' button. Below that, a list of instances shows '192.168.0.28' and 'node1'. The main area displays the details of a selected instance named 'cdaatk0\_cdab6he0qau0009n2l10'. It shows the IP '192.168.0.28' and an 'OPEN PORT' button. Below this, there are fields for 'Memory' and 'CPU'. An 'SSH' section shows the command 'ssh ip172-18-0-29-cdaatk0qau0009n2ks0@direct.labs.pla'. At the bottom, there are 'DELETE' and 'EDITOR' buttons. A terminal window at the bottom shows the following commands and output:

```
[node1] (local) root@192.168.0.28 ~
$ docker pull ubuntu
Using default tag: latest
latest: Pulling from library/ubuntu
cf92e523b49e: Pull complete
Digest: sha256:35fb073f9e56eb84041b0745cb714eff0f7b225ea9e024f703cab56aaa5c7720
Status: Downloaded newer image for ubuntu:latest
docker.io/library/ubuntu:latest
[node1] (local) root@192.168.0.28 ~
$ docker run -it ubuntu
root@290ca4475c4c:/#
```

### Question 2:

Create a docker file for the jobportal 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:

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>	<a href="#">icr.io/helloapp/ibm:latest</a>	Exited (137)	49160:8080		<div><div></div><div></div><div></div></div>
<input type="checkbox"/>	<div>jolly_turing</div> <div>b62c0712bdd3</div>	<a href="#">jobportalapplication:latest</a>	Running	<a href="#">1234:8000</a>	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:

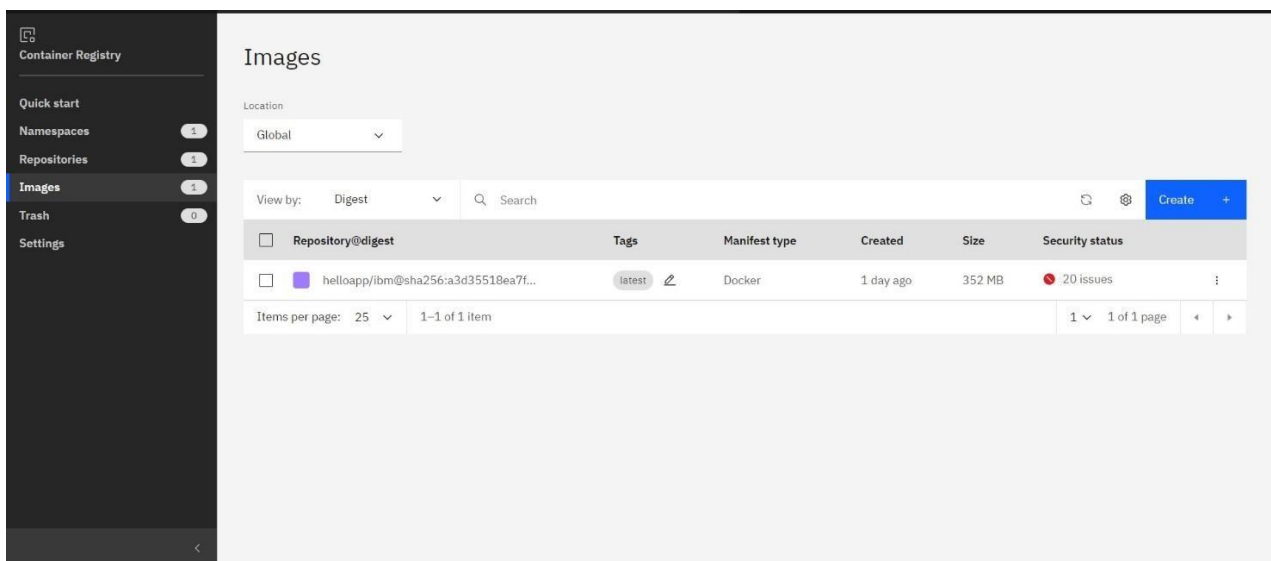
The screenshot shows a web browser window with the URL `localhost:1234/en/search/?position=&location=Bangladesh`. The website has a blue header with a logo and navigation links: HOME, JOBS, CREATE RESUME CV, ABOUT US, REGISTER, LOGIN, and LANGUAGE. Below the header, there's a section titled "FIND A JOB YOU WILL LOVE" with two input fields: "POSITION" (containing "Position you are looking for") and "LOCATION" (containing "Any particular location?"). A search button with a magnifying glass icon is to the right. Below this, a section titled "WE HAVE FOUND 10 JOBS" displays two job listings:

Job Title	Company	Location	Posted
LEARN LARAVEL WITH VUE2	ggnhfh	Dhaka, Bangladesh	Posted 3 years, 6 months
SOFTWARE ENGINEER	Reve System	Dhaka, Bangladesh	Posted 3 years, 6 months

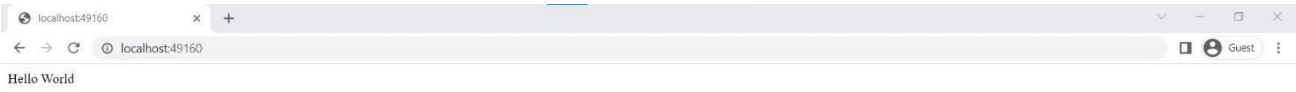
## Question 3:

Create a IBM container registry and deploy helloworld app or jobportapp.

## IBM CONTAINER REGISTRY DEPLOYMENT:



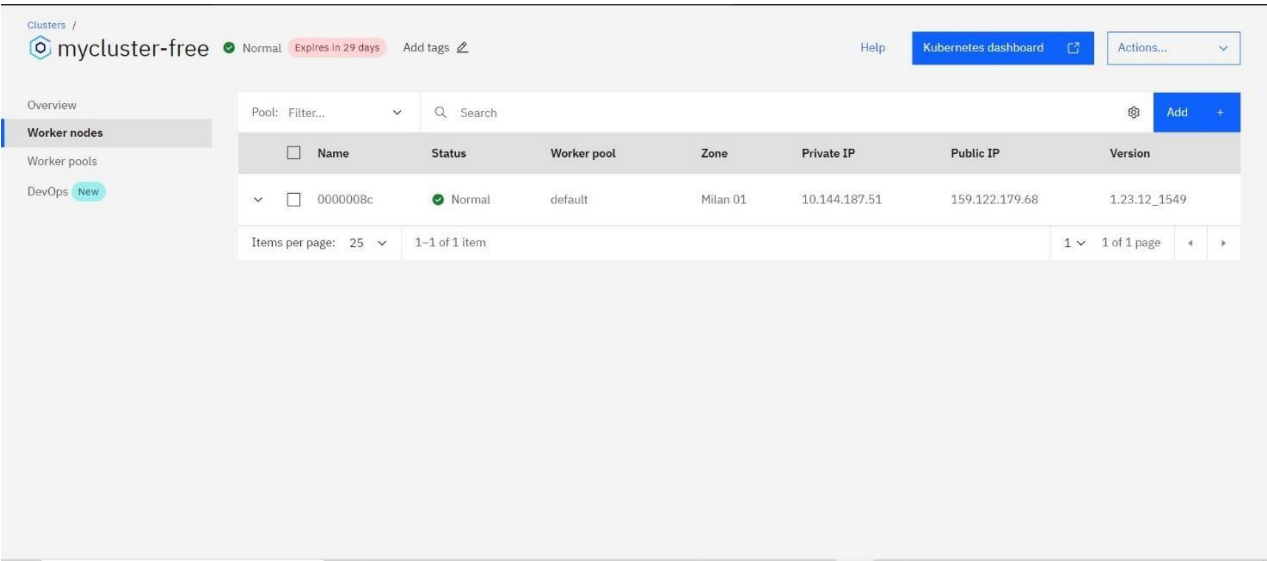
**OUTPUT:**



**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:**



## Output:

