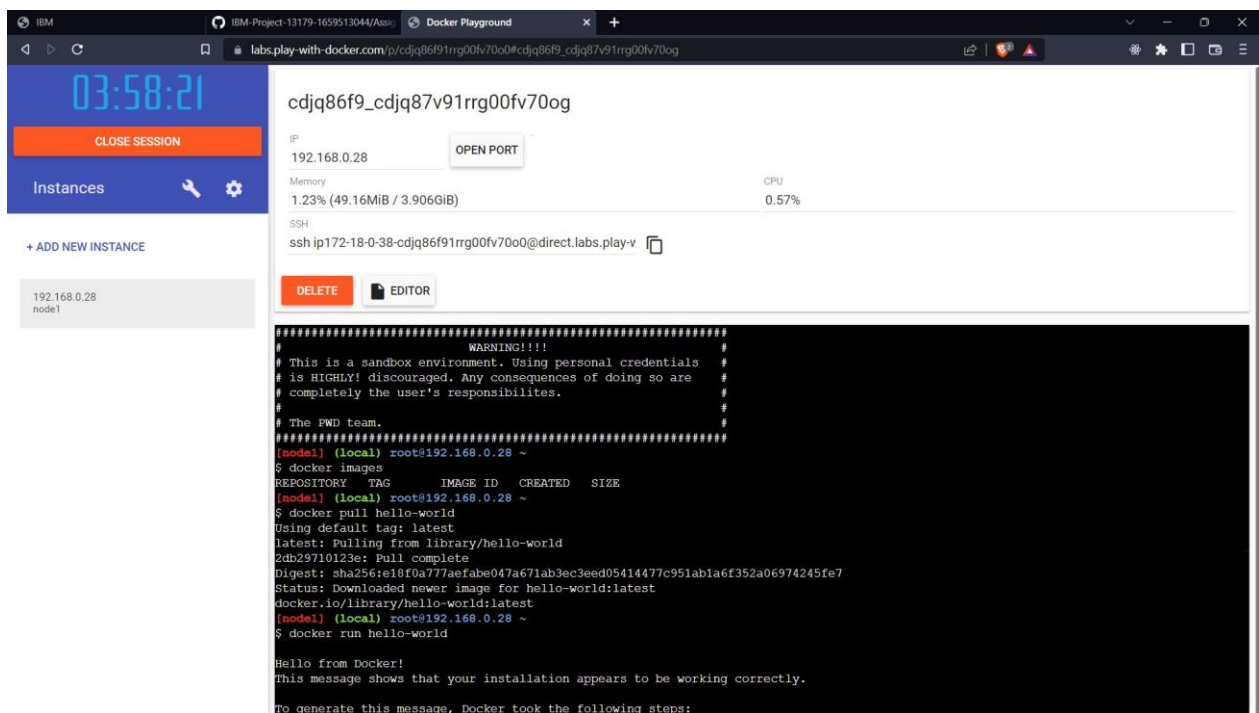


## Assignment -4

Student Name	Mohammed Kaif K
Student Roll Number	737819ECR106
Maximum Marks	2 Marks

### Question-1:

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

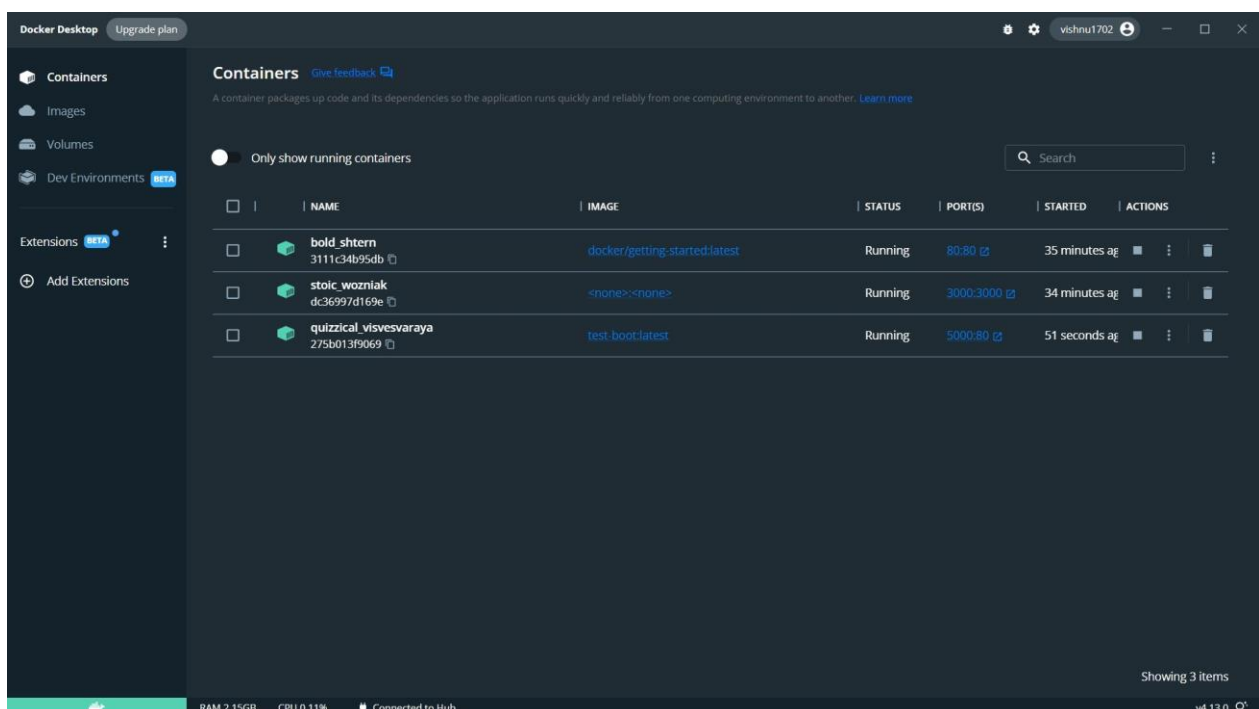


The screenshot shows the Docker Playground interface. On the left, there's a sidebar with a timer (03:58:21), a 'CLOSE SESSION' button, and a list of instances. The main area displays the details of a container named 'cdjq86f9\_cdjq87v91rrg00fv70og'. It shows the IP address (192.168.0.28), memory usage (1.23%), CPU usage (0.57%), 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 PWD team.
#####
(node1) (local) root@192.168.0.28 ~
$ docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
(node1) (local) root@192.168.0.28 ~
$ 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
(node1) (local) root@192.168.0.28 ~
$ 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 Docker Desktop interface. The left sidebar has a 'Containers' tab selected. The main area displays a list of running containers. The table has columns for NAME, IMAGE, STATUS, PORT(S), STARTED, and ACTIONS. The containers listed are:

NAME	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
bold_shtern 3111c34b95db	docker/getting-started:latest	Running	80:80	35 minutes ago	[Stop] [Restart] [Delete]
stoic_wozniak dc36997d169e	<none><none>	Running	3000:3000	34 minutes ago	[Stop] [Restart] [Delete]
quizzical_visvesvaraya 275b013f9069	test:boot:latest	Running	5000:80	51 seconds ago	[Stop] [Restart] [Delete]

At the bottom, it shows system resources: RAM 2.15GB, CPU 0.11%, and a status 'Connected to Hub'. The version is v4.13.0.

## Question-2:

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

```
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"]
```

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

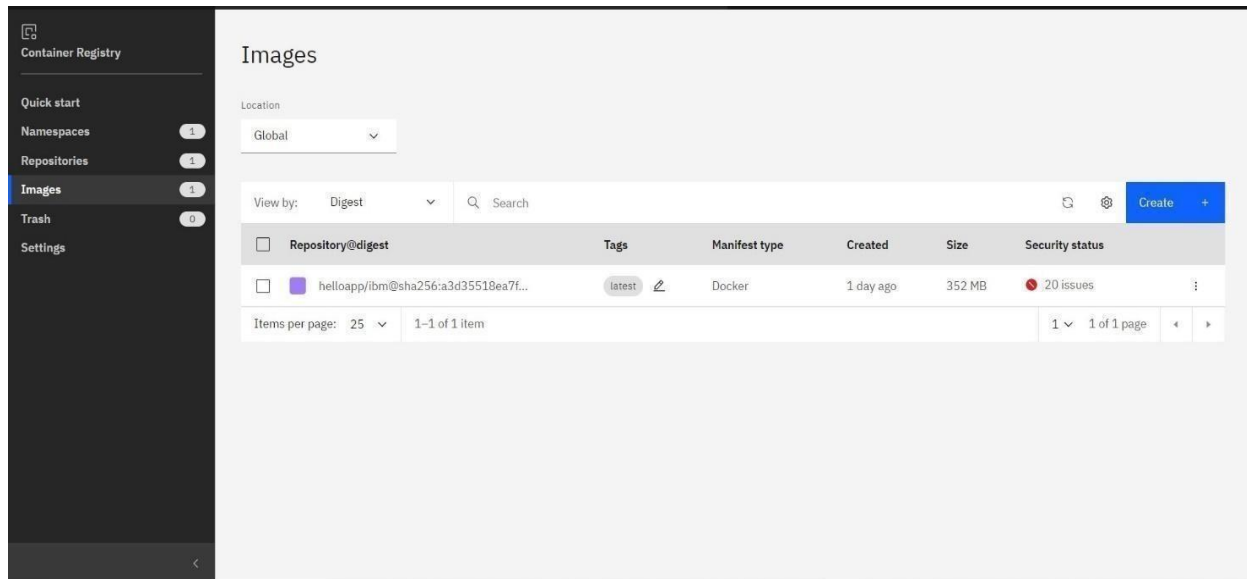
	NAME	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
<input type="checkbox"/>	 <b>agitated_neumann</b> 918d20882039	<a href="#">icr.io/helloapp/ibm:latest</a>	Exited (137)	49160:8080		  
<input type="checkbox"/>	 <b>jolly_turing</b> b62c0712bdd3	<a href="#">jobportalapplication:latest</a>	Running	1234:8000	4 minutes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

Showing 2 items

RAM 3.06GB CPU 0.57% Connected to Hub v4.13.0

### Question-3:


Create a IBM container registry and deploy hello world app or jobportalapp.



#### 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.

Clusters /

 mycluster-free Normal Expires in 29 days [Add tags](#)

Help

[Kubernetes dashboard](#)

Actions...

Overview

Worker nodes

Worker pools

DevOps New

Pool: Filter...

Search

Add

<input type="checkbox"/>	Name	Status	Worker pool	Zone	Private IP	Public IP	Version
<input checked="" type="checkbox"/>	0000008c	<span>Normal</span>	default	Milan 01	10.144.187.51	159.122.179.68	1.23.12_1549

Items per page: 25

1-1 of 1 item

1 1 of 1 page