Assignment – 4

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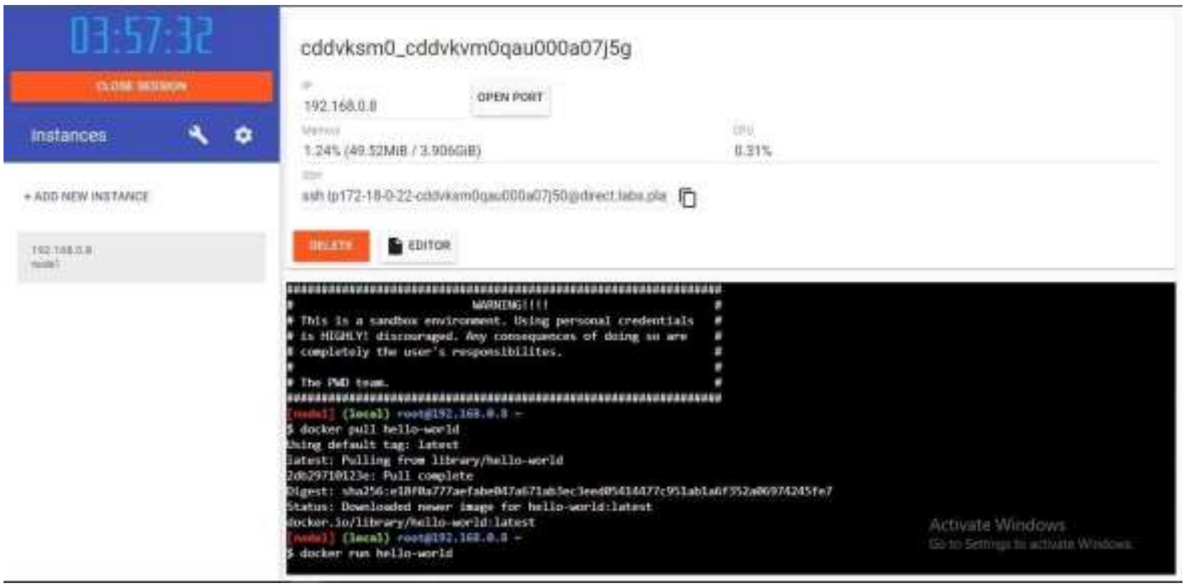
Student Roll Number	211419104103
Maximum Marks	2 Marks

Question 1:

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



cddvksm0_cddvkvm0qau000a07j5g

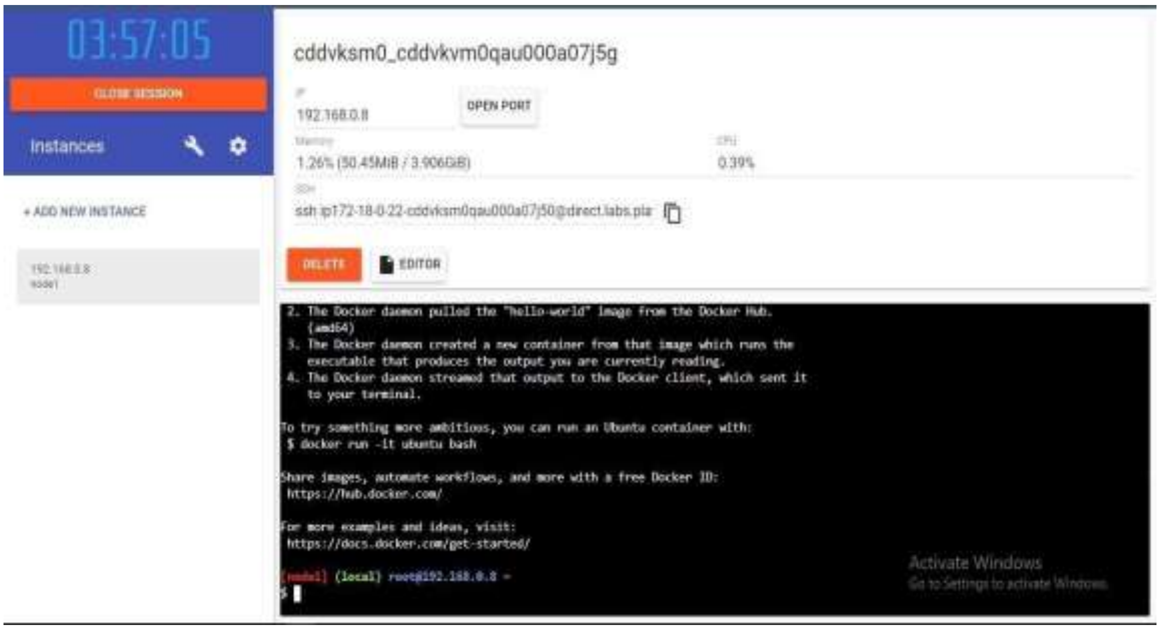
192.168.0.8

1.24% (49.52MiB / 3.906GiB)

0.31%

ssh ip172-18-0-22-cddvksm0qau000a07j50@direct.labs.pla

```
###############################################################
#                          WARNING!!!!                        #
# This is a sandbox environment. Using personal credentials   #
# is HIGHLY! discouraged. Any consequences of doing so are    #
# completely the user's responsibilites.                      #
#                                                             #
# 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:e18f0a777aefabe047a671ab3ec3eed05414477c951ab1a6f352a06974245fe7
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
```



cddvksm0_cddvkvm0qau000a07j5g

192.168.0.8

1.26% (50.45MiB / 3.906GiB)

0.39%

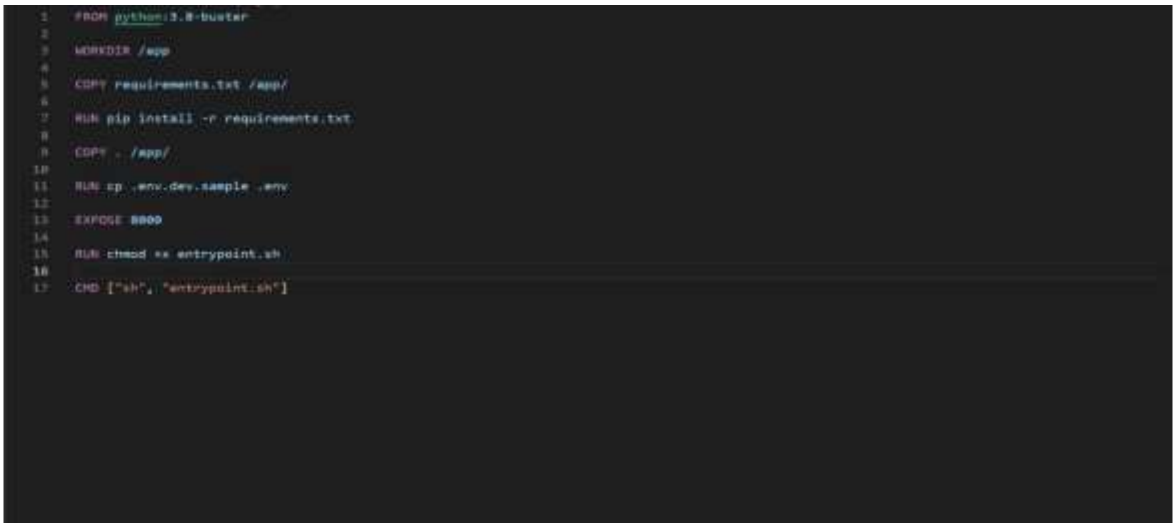
ssh ip172-18-0-22-cddvksm0qau000a07j50@direct.labs.pla

```
 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:

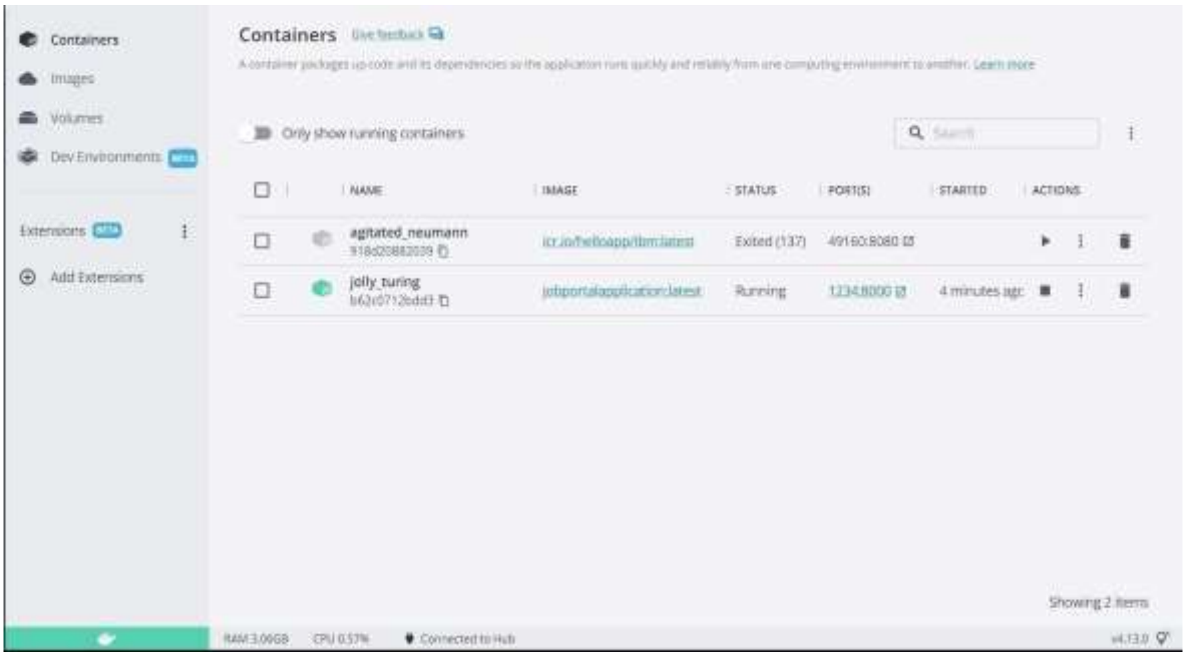
Createadockerfileforthejobportalapplicationanddeployitin Dockerdesktopapplication.

DOCKER FILE:



```
FROM python:3.8-buster

WORKDIR /app

COPY requirements.txt /app/

RUN pip install -r requirements.txt

COPY . /app/

RUN cp .env.dev.sample .env

EXPOSE 8000

RUN chmod +x entrypoint.sh

CMD ["sh", "entrypoint.sh"]
```

DEPLOYMENT OF JOBPORTAL APPLICATION:



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

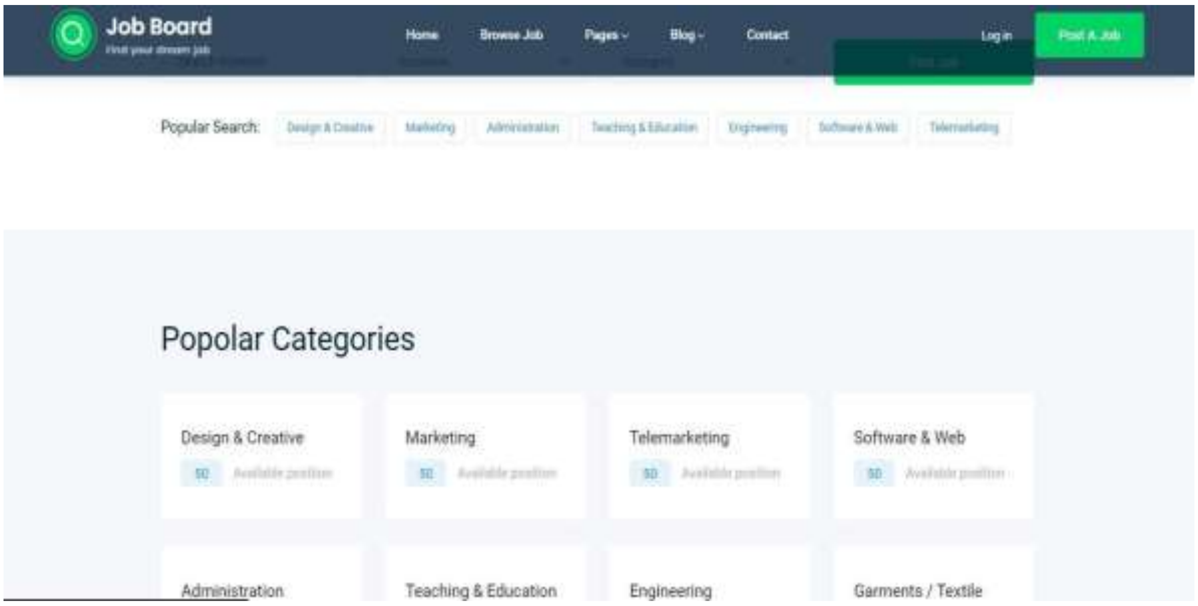
Only show running containers

NAME	IMAGE	STATUS	PORT(S)	STARTED
agitated_neumann 918d20882039	icr.io/helloapp/ibm:latest	Exited (137)	49160:8080	
jolly_turing b62c0712bdd3	jobportalapplication:latest	Running	1234:8000	4 minutes ago

Showing 2 items

RAM 3.00GB CPU 0.57% Connected to Hub v4.13.0

OUTPUT:



Popular Search: Design & Creative Marketing Administration Teaching & Education Engineering Software & Web Telemarketing

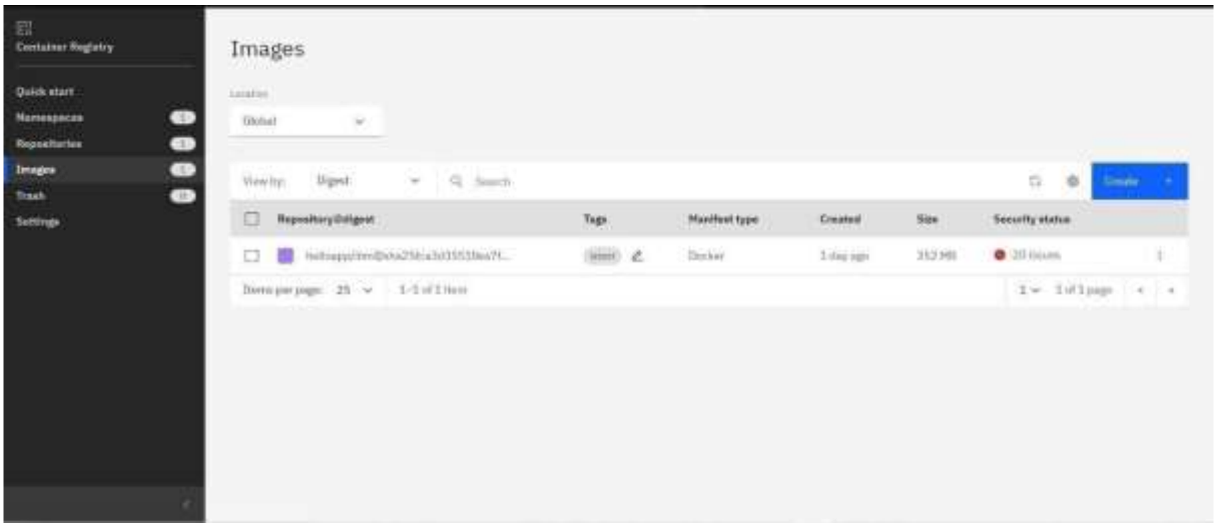
Popolar Categories

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.IBM

CONTAINER REGISTRY DEPLOYMENT:



Images

Location
Global

View by: Digest

	Repository@digest	Tags	Manifest type	Created	Size	Security status
☐	helloapp/[illegible]@sha256:a3d3553[illegible]...	latest	Docker	1 day ago	352 MB	● 20 issues

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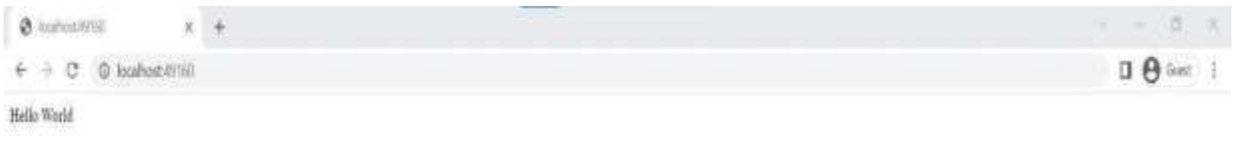
OUTPUT:

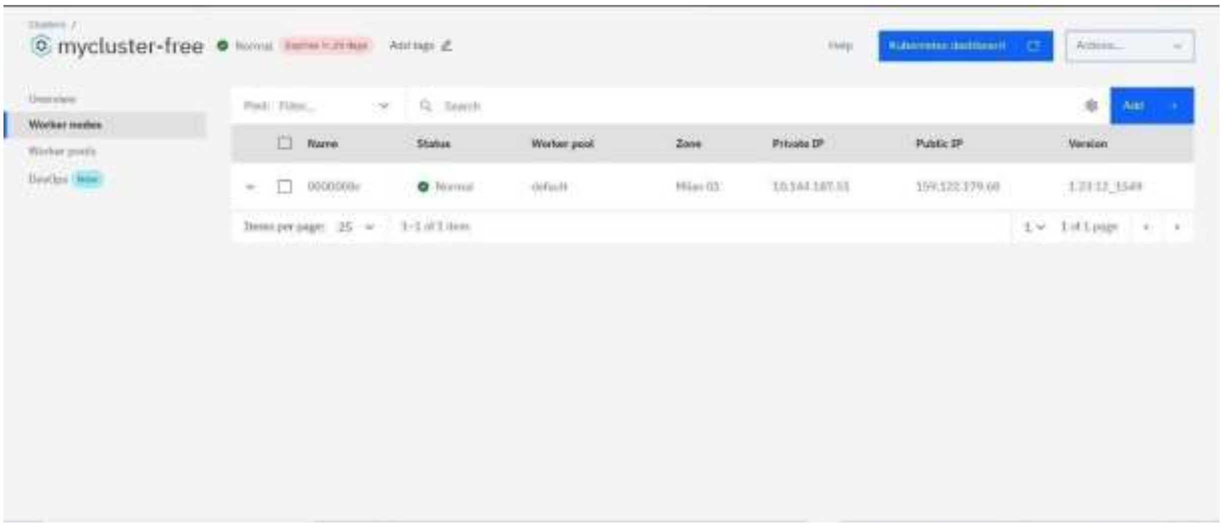


Hello World

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:



mycluster-free Normal

Name	Status	Worker pool	Zone	Private IP	Public IP	Version
0000000e	Normal	default	Milan 01	10.144.187.55	159.122.179.68	1.23.12_1549

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Output: