

## Assignment -4

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Student Roll Number	737819ECR106
Maximum Marks	2 Marks

### Question-1:

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

03:58:21

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.28  
node1

cdjq86f9\_cdjq87v91rrg00fv70og

IP  
192.168.0.28

OPEN PORT

Memory  
1.23% (49.16MiB / 3.906GiB)

CPU  
0.57%

SSH  
ssh ip172-18-0-38-cdj86f91rrg00fv70o0@direct.labs.play-v

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 FWD team.
#####

[models] (local) root@192.168.0.28 ~
$ docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
[models] (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
[models] (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:
```

Containers

Images

Volumes

Dev Environments

Extensions

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

Search

	NAME	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
<input type="checkbox"/>	<b>bold_shtern</b> 3111c34b95db	<a href="#">docker/getting-started:latest</a>	Running	<a href="#">80:80</a>	35 minutes ago	
<input type="checkbox"/>	<b>stole_wozniak</b> dc36997d169e	<a href="#">&lt;none&gt;&lt;none&gt;</a>	Running	<a href="#">3000:3000</a>	34 minutes ago	
<input type="checkbox"/>	<b>quizzical_visvesvaraya</b> 275b013f9069	<a href="#">test-boot:latest</a>	Running	<a href="#">5000:80</a>	51 seconds ago	

Showing 3 items

RAM 2.15GB CPU 0.11% Connected to Hub 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](#)

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☐ 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>
<input type="checkbox"/>	<div>jolly_turing</div> <div>b62c0712bdd3</div>	<a href="#">jobportalapplication:latest</a>	Running	1234:8000	4 minutes ago	<div></div> <div></div> <div></div>

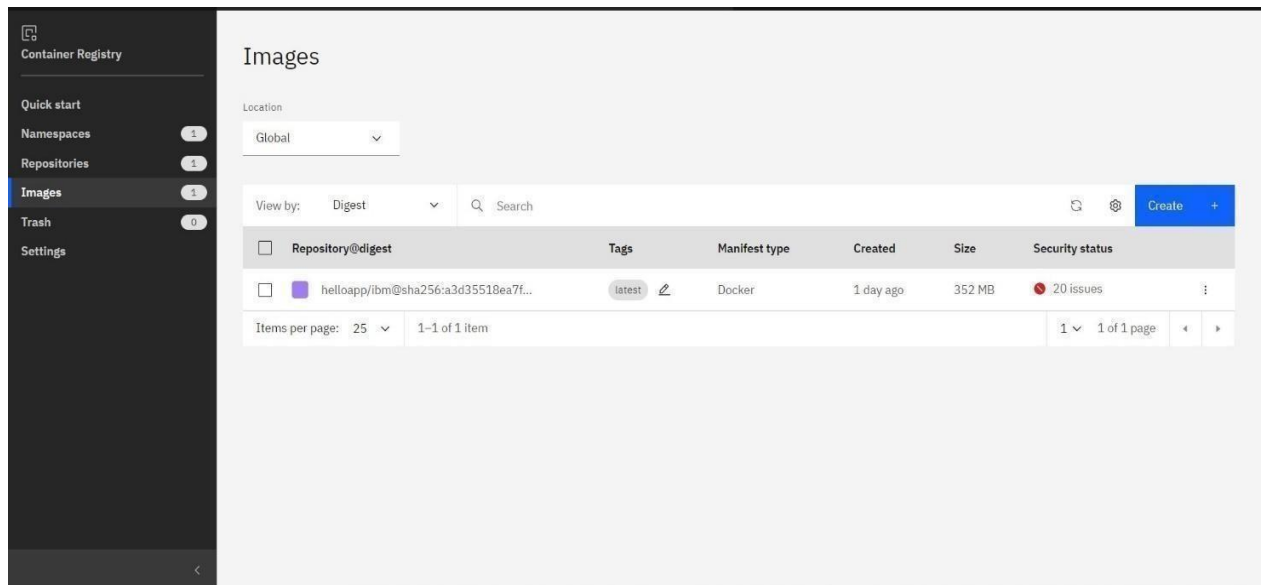
Showing 2 items

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

<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

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[Add](#)