

Assignment - 4



Assignment Date	17 November 2022
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Student Roll Number	422119104021
Maximum Marks	2 Marks

Question 1:

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

03:57:32

CLOSE SESSION

Instances  


+ ADD NEW INSTANCE

192.168.0.8
node1

cddvksm0_cddvkvm0qau000a07j5g

IP: 192.168.0.8 OPEN PORT

Memory: 1.24% (49.52MiB / 3.906GiB) CPU: 0.31%

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

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: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
```

Activate Windows
Go to Settings to activate Windows.

03:57:05

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

cddvksm0_cddvkvm0qau000a07j5g

IP
192.168.0.8
OPEN PORT

Memory
1.26% (50.45MiB / 3.906GiB)

CPU
0.39%

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

DELETE

EDITOR

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 ~
\$

Activate Windows
Go to Settings to activate Windows.

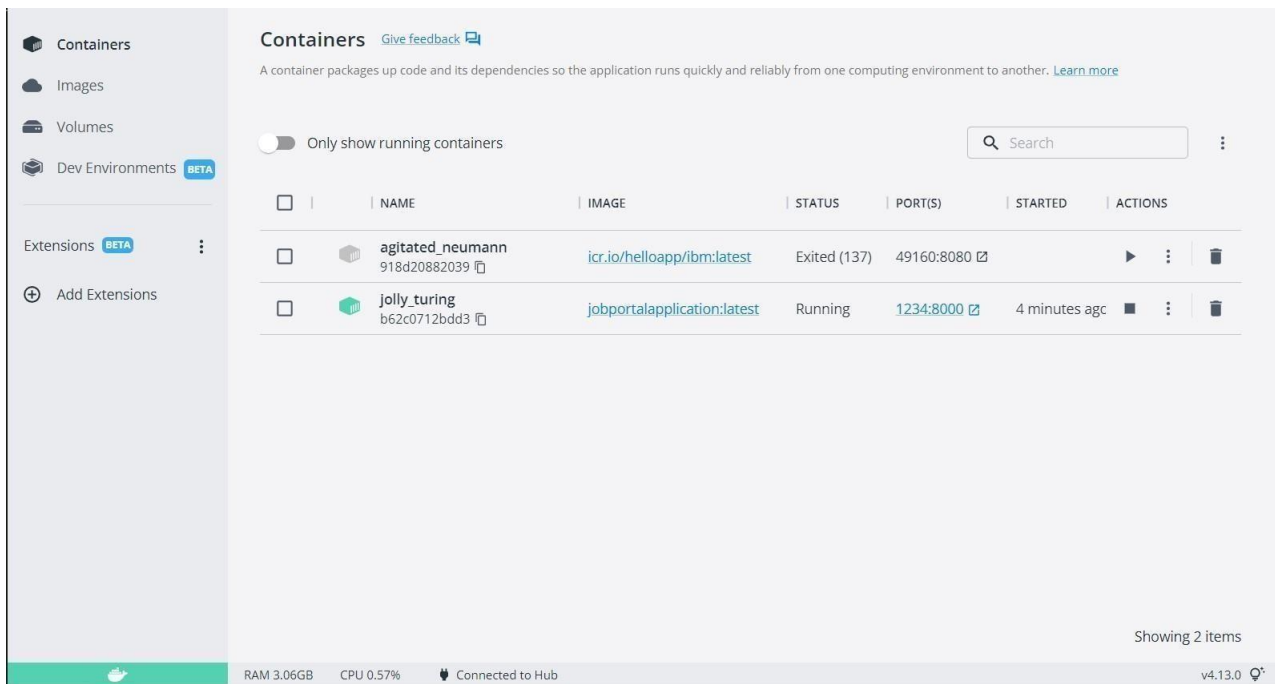
Question 2:

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 JOBPORTAL APPLICATION:

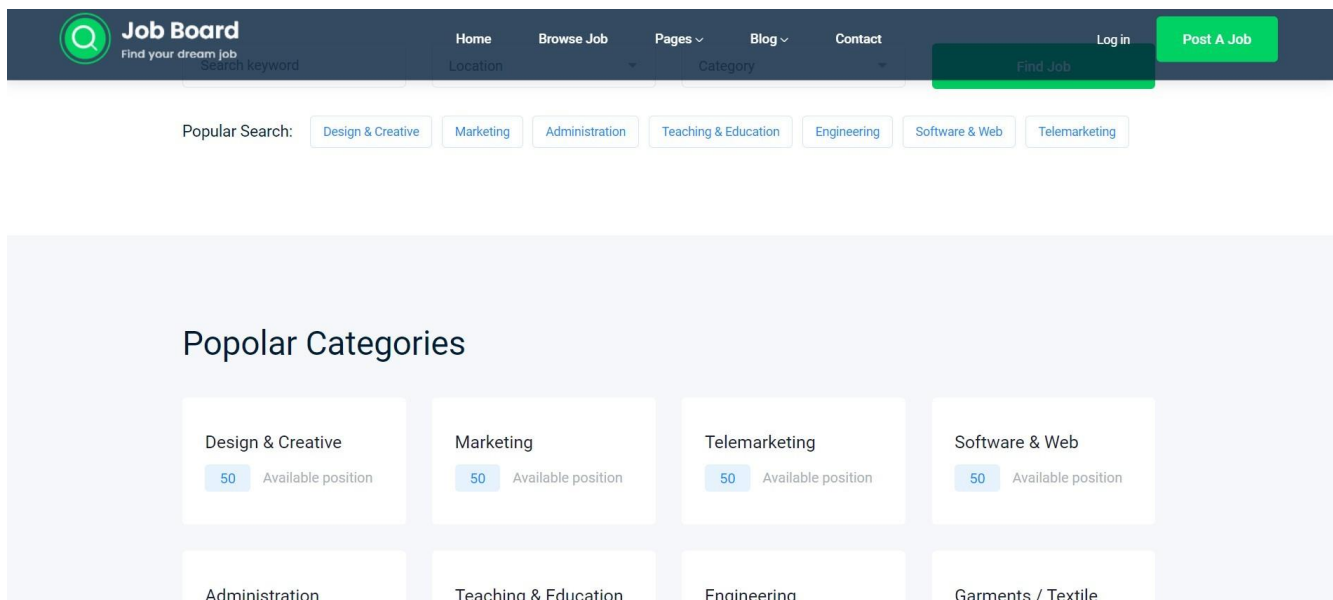


The screenshot shows the Docker Desktop interface. On the left is a sidebar with navigation options: Containers, Images, Volumes, Dev Environments (marked BETA), Extensions (marked BETA), and Add Extensions. The main area is titled 'Containers' and includes a toggle for 'Only show running containers' and a search bar. Below this is a table of containers:

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

At the bottom right, it says 'Showing 2 items'. The bottom status bar shows system metrics: RAM 3.06GB, CPU 0.57%, Connected to Hub, and version v4.13.0.

OUTPUT:

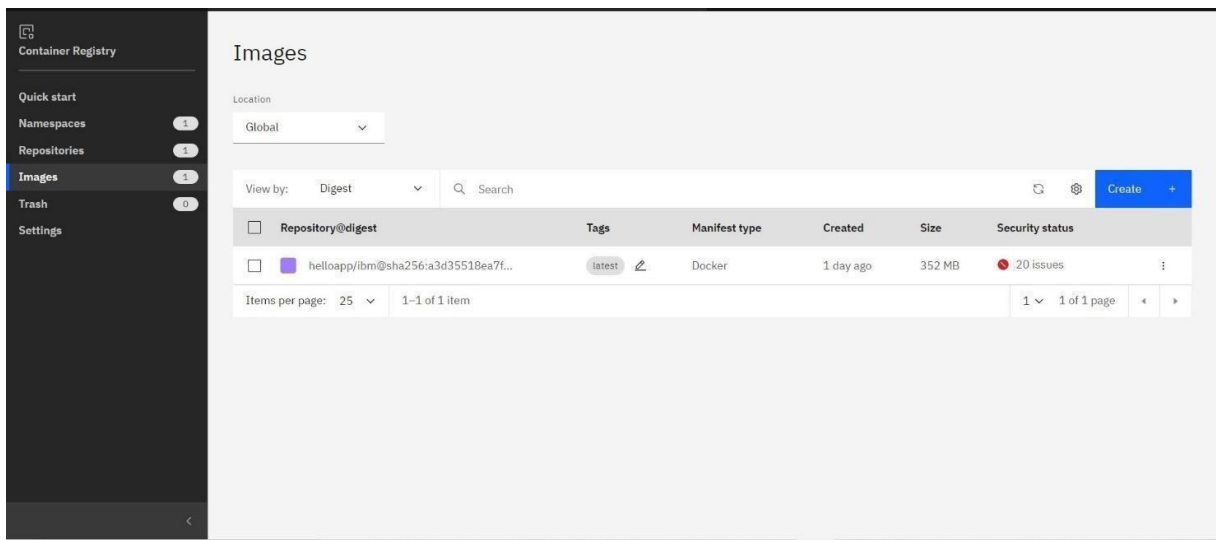


The screenshot displays the 'Job Board' application interface. The top navigation bar includes links for Home, Browse Job, Pages, Blog, and Contact, along with 'Log in' and a 'Post A Job' button. A search bar is present with the placeholder text 'Find your dream job'. Below the navigation bar, a 'Popular Search' section lists various job categories: Design & Creative, Marketing, Administration, Teaching & Education, Engineering, Software & Web, and Telemarketing. The main content area is titled 'Popolar Categories' (note the typo) and features a grid of category cards. Each card displays the category name, a count of '50' available positions, and the text 'Available position'. The categories shown are Design & Creative, Marketing, Telemarketing, Software & Web, Administration, Teaching & Education, Engineering, and Garments / Textile.

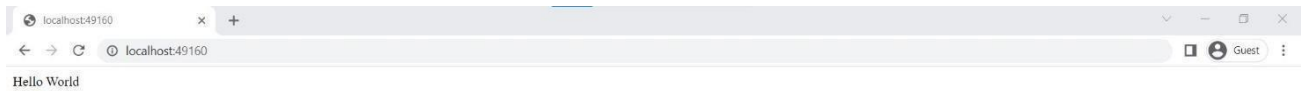
Question 3:

Create a IBM container registry and deploy hello-world app or job port app.IBM CONTAINER

REGISTRY DEPLOYMENT:



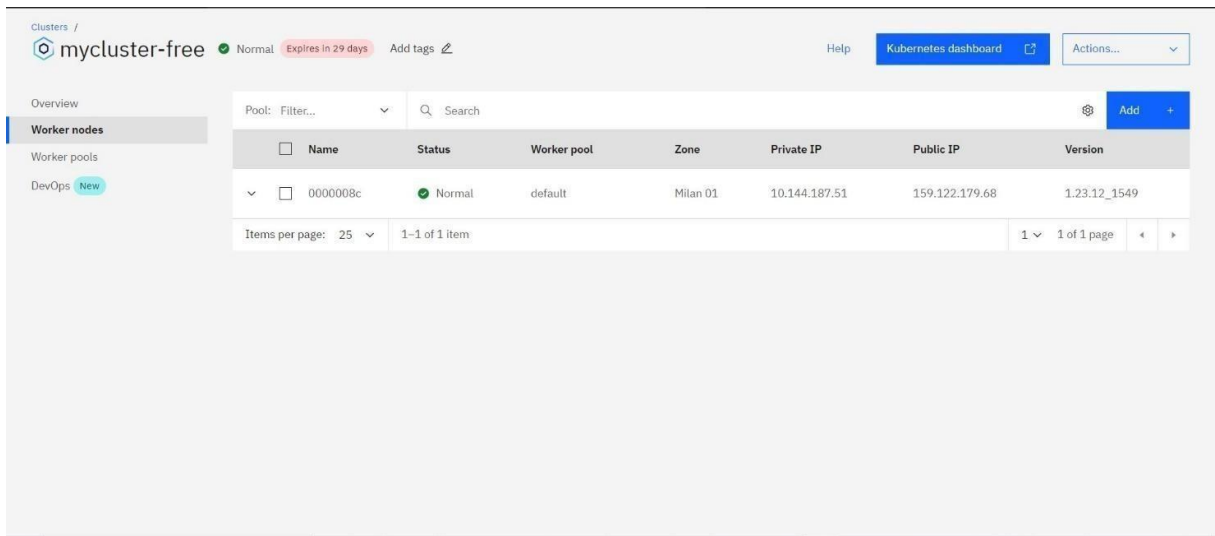
OUTPUT:



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:

