

ASSIGNMENT-4

ASSIGNMENT DATE	5 th NOVEMBER
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TEAM NAME	Syntax Squids
MARKS	2 marks

Question 1:

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

The screenshot shows the Docker Playground interface. On the left, there's a sidebar with a clock showing 03:51:49, a 'CLOSE SESSION' button, and a list of instances. The main area displays the details of a container named 'cdmh0v79_cdmh2c63tccg009qdfd0'. It shows the IP address 192.168.0.13, memory usage (1.24%), and CPU usage (0.19%). Below this, there's a terminal window with the following 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 FWD team. #
#####
(node1) (local) root@192.168.0.13 ~
$ docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
2db29710123e: Pull complete
Digest: sha256:faa03e786c97f07ef34423fcccceec2398ec8a5759259f94d99078f264e9d7af
Status: Downloaded newer image for hello-world:latest
docker.io/library/hello-world:latest
(node1) (local) root@192.168.0.13 ~
$ 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:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
```

The screenshot shows the labs.play-with-docker.com interface. On the left, there's a sidebar with a clock showing 03:49:20, a 'CLOSE SESSION' button, and an 'Instances' section with a '+ ADD NEW INSTANCE' button and a list of instances including '192.168.0.13 node1'. The main area displays details for a container named 'cdmh0v79_cdmh2c63tccg009qdfd0'. It shows the IP address '192.168.0.13', memory usage '1.22% (48.7MiB / 3.906GiB)', and CPU usage '0.13%'. Below this, there's an SSH command: 'ssh ip172-18-0-3-cdmh0v791rrg009jd2d0@direct.labs.play-w'. There are 'DELETE' and 'EDITOR' buttons. The terminal window shows the output of 'docker run hello-world', which includes a 'Hello from Docker!' message and a list of steps explaining how Docker works. The terminal prompt is '[node1] (local) root@192.168.0.13 ~'.

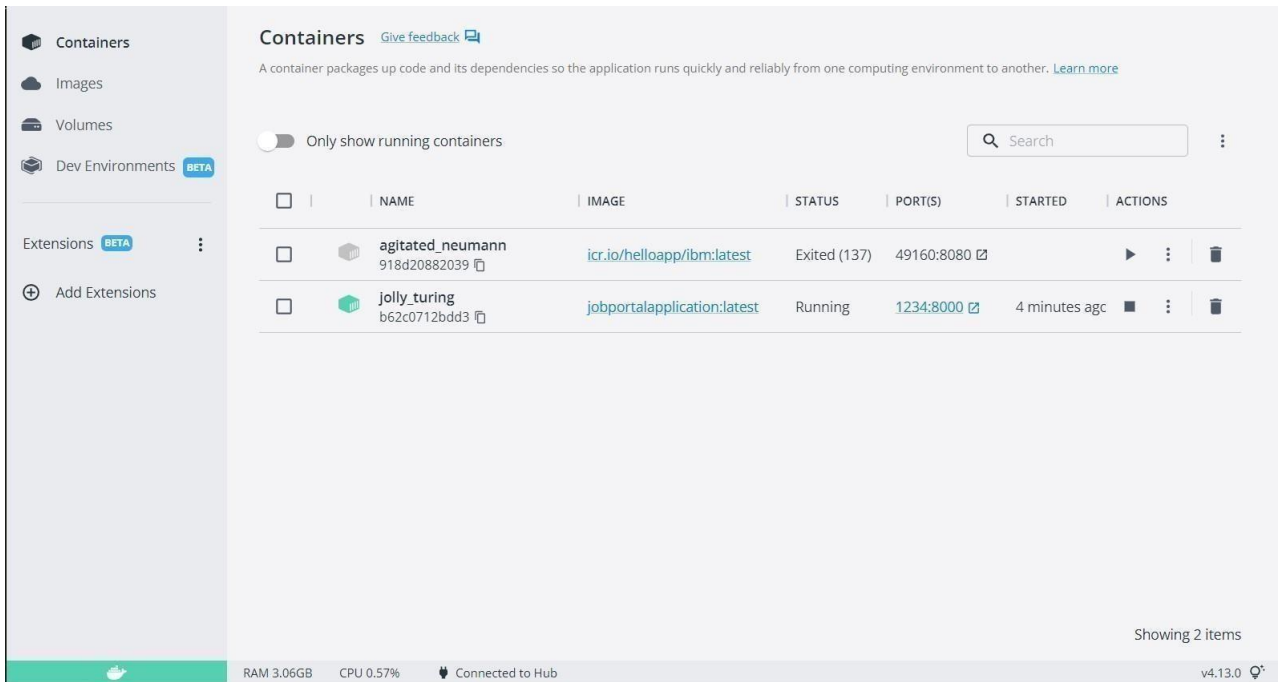
Question 2:

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:



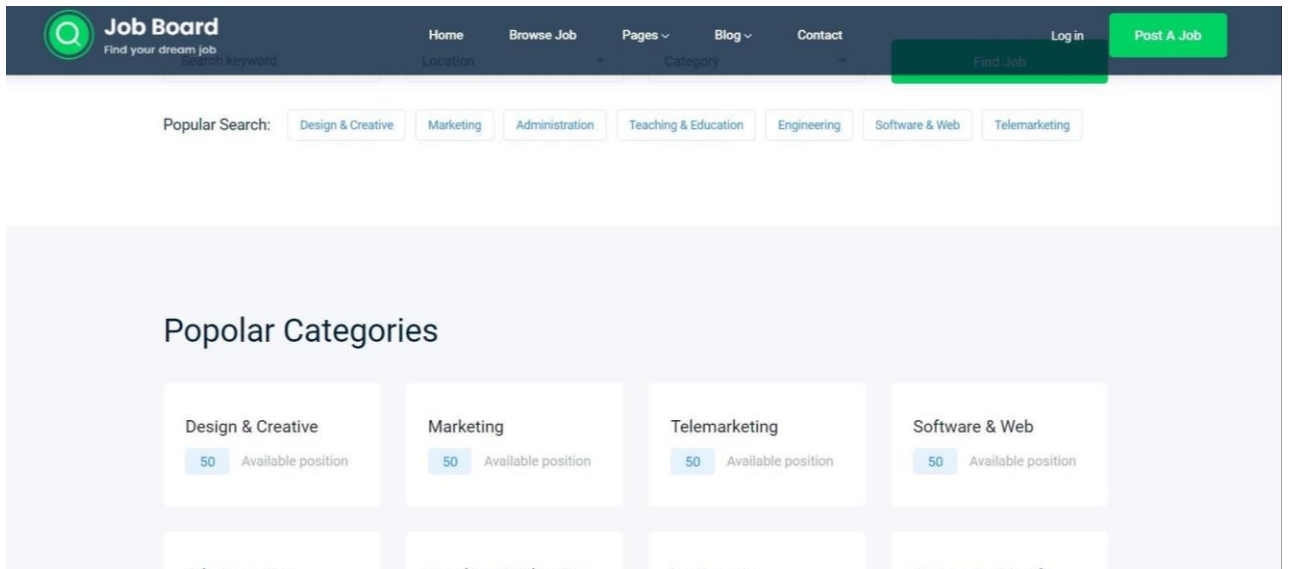
The screenshot shows the Docker Desktop interface. On the left sidebar, 'Containers' is selected. The main area displays a table of containers. A toggle switch for 'Only show running containers' is turned on. A search bar is present. The table lists two containers: 'agitated_neumann' (Exited) and 'jolly_turing' (Running). The 'jolly_turing' container is the one running the 'jobportalapplication:latest' image.

	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	

Showing 2 items

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

OUTPUT:



The screenshot shows the output of the Job Board application. The header includes a 'Job Board' logo, navigation links (Home, Browse Job, Pages, Blog, Contact), and user actions (Log in, Post A Job). A search bar is also present. Below the header, there's a 'Popular Search' section with buttons for various categories. The main content area features 'Popular Categories' with cards for Design & Creative, Marketing, Telemarketing, and Software & Web, each showing 50 available positions.

Job Board
Find your dream job

Home Browse Job Pages Blog Contact Log in Post A Job

Find Job

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

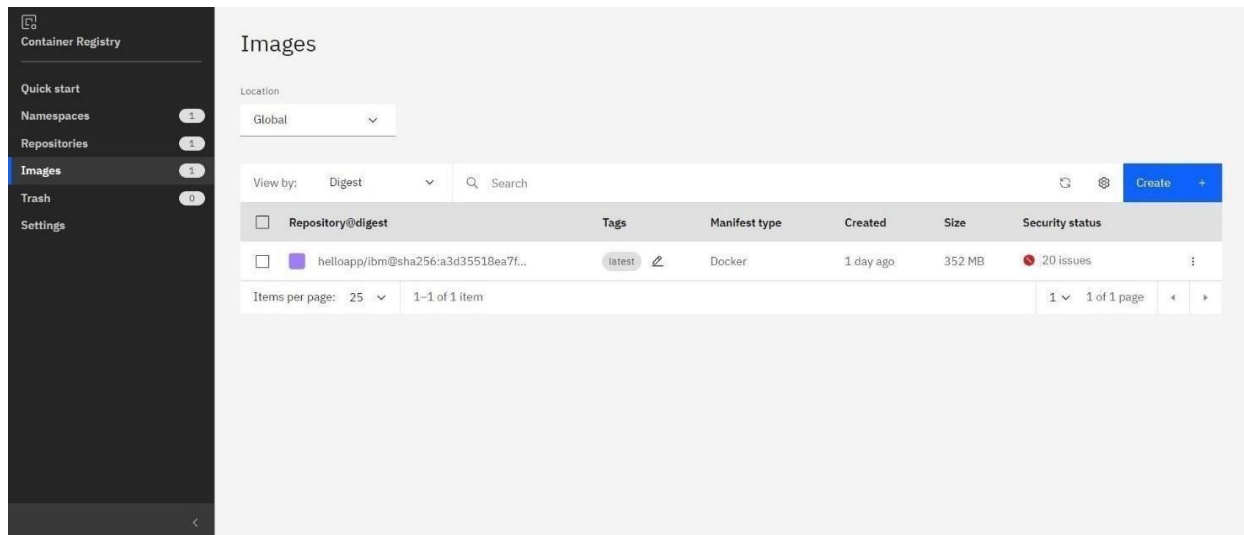
Popular Categories

Category	Available position
Design & Creative	50
Marketing	50
Telemarketing	50
Software & Web	50

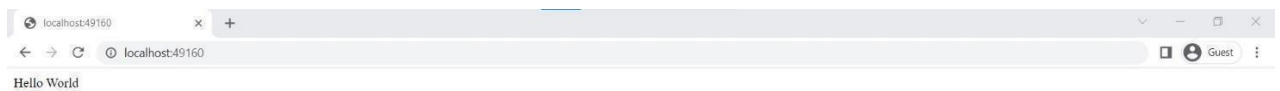
Question 3:

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

CONTAINER REGISTRY DEPLOYMENT:



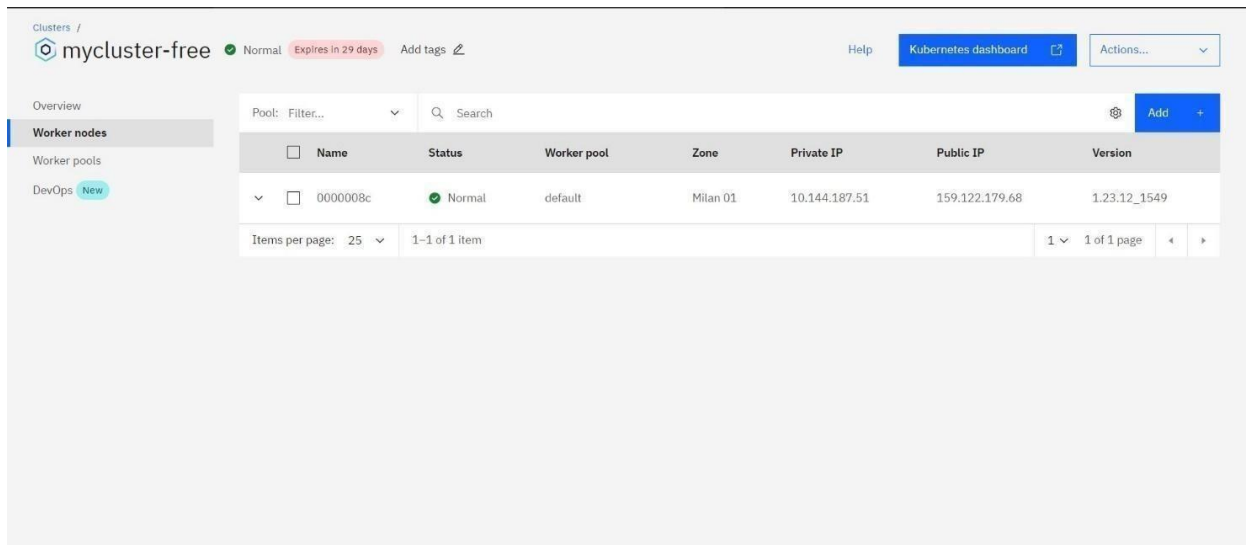
OUTPUT:



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:

