

Assignment - 5



Assignment Date	05 November 2022
Student Name	Srikanth B
Team ID	PNT2022TMID29967
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 

Memory
1.24% (49.52MiB / 3.906GiB)

CPU
0.31%

SSH
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 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

cddvkasm0_cddvkvm0qau000a07j5g

IP

192.168.0.8

OPEN PORT

Memory

1.26% (50.45MiB / 3.906GiB)

CPU

0.39%

SSH

ssh ip172-18-0-22-cddvkasm0qau000a07j50@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 jobportal application and deploy it in Docker desktop application.

DOCKERFILE:

```
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:

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

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

OUTPUT:

Job Board

Find your dream job

Home

Browse Job

Pages

Blog

Contact

Log in

Post A Job

Popular Search:

Design & Creative

Marketing

Administration

Teaching & Education

Engineering

Software & Web

Telemarketing

Popular Categories

Design & Creative

50 Available position

Marketing

50 Available position

Telemarketing

50 Available position

Software & Web

50 Available position

Administration

Teaching & Education

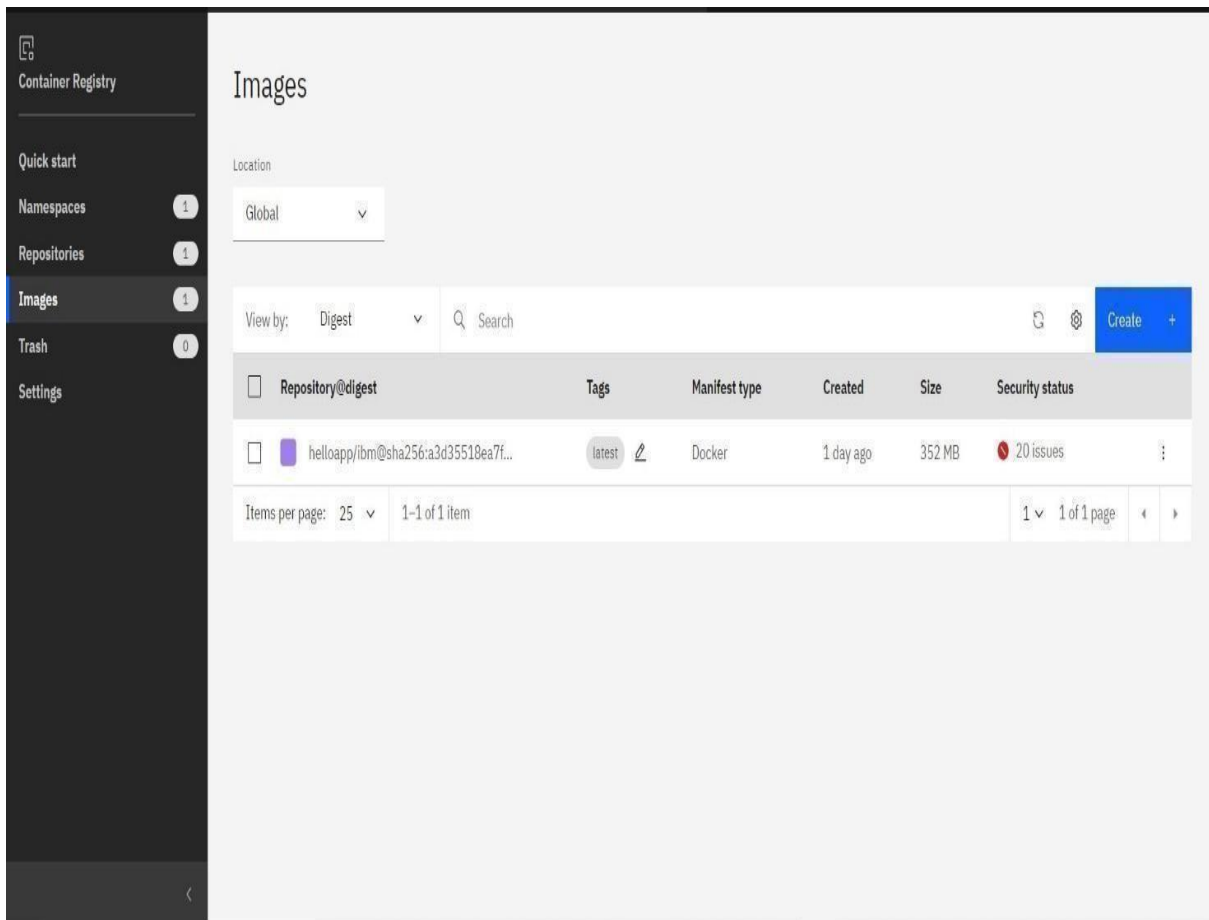
Engineering

Garments / Textile

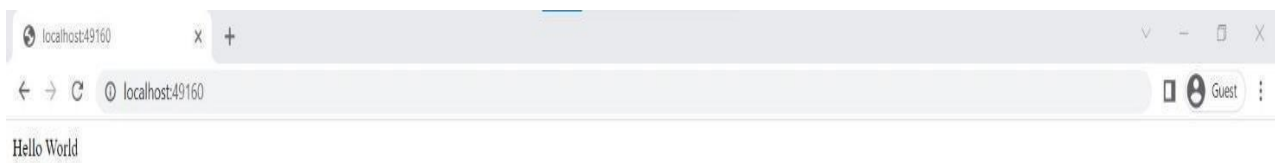
Question 3:

Create a IBM container registry and deploy helloworld app or jobportapp.

IBM CONTAINER REGISTRY DEPLOYMENT:



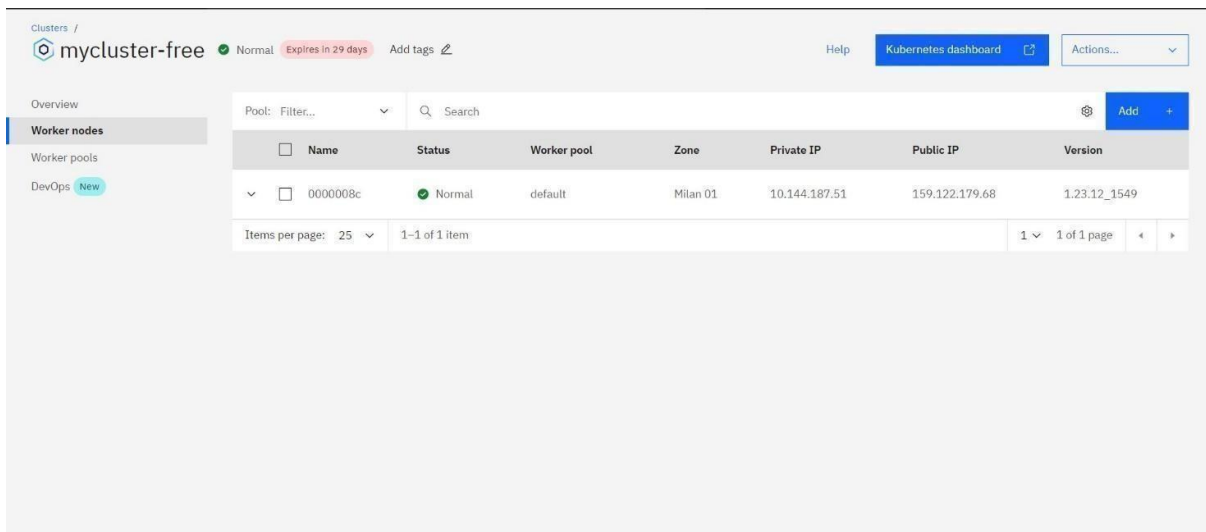
OUTPUT:



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.

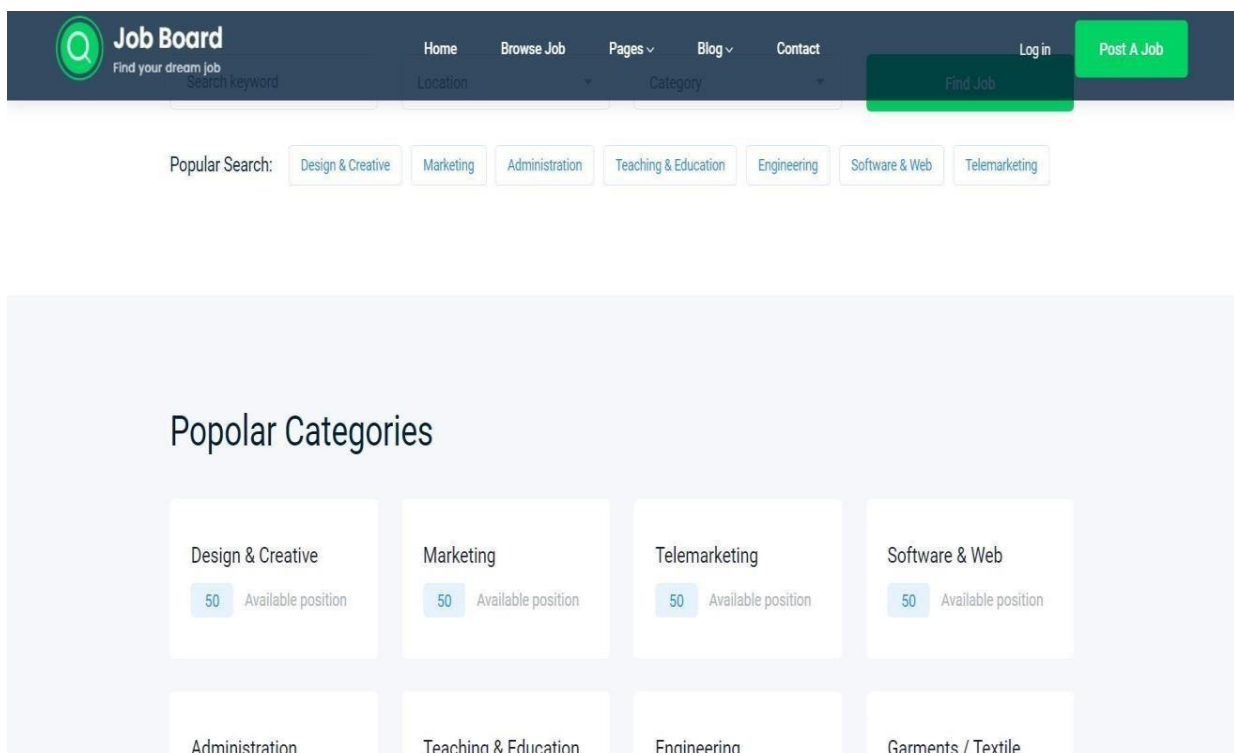
Creating kubernetes cluster in IBM cloud and exposing nodeport:



The screenshot shows the IBM Cloud Kubernetes Service dashboard. At the top, there's a header with 'Clusters / mycluster-free' and a status 'Normal' with a green checkmark. A red banner indicates 'Expires in 29 days'. There are links for 'Help', 'Kubernetes dashboard', and 'Actions...'. On the left sidebar, there are tabs for 'Overview', 'Worker nodes', 'Worker pools', and 'DevOps' (marked as 'New'). The main content area shows a table of worker nodes. The table has columns: Name, Status, Worker pool, Zone, Private IP, Public IP, and Version. One node is listed with Name '0000008c', Status 'Normal' (green checkmark), Worker pool 'default', Zone 'Milan 01', Private IP '10.144.187.51', Public IP '159.122.179.68', and Version '1.23.12_1549'. Below the table, it says 'Items per page: 25' and '1-1 of 1 item'.

Name	Status	Worker pool	Zone	Private IP	Public IP	Version
0000008c	Normal	default	Milan 01	10.144.187.51	159.122.179.68	1.23.12_1549

OUTPUT:



The screenshot shows the Job Board application interface. At the top, there's a dark blue header with the 'Job Board' logo and navigation links: 'Home', 'Browse Job', 'Pages', 'Blog', and 'Contact'. There are also links for 'Log in' and 'Post A Job'. Below the header, there's a search bar with 'Search keyword', 'Location', and 'Category' dropdowns, and a 'Find Job' button. Below the search bar, there's a 'Popular Search:' section with buttons for 'Design & Creative', 'Marketing', 'Administration', 'Teaching & Education', 'Engineering', 'Software & Web', and 'Telemarketing'. Below this, there's a 'Poplar Categories' section with eight category cards: 'Design & Creative' (50 Available position), 'Marketing' (50 Available position), 'Telemarketing' (50 Available position), 'Software & Web' (50 Available position), 'Administration', 'Teaching & Education', 'Engineering', and 'Garments / Textile'.

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

Poplar 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