

## Assignment - 4

Assignment Date	10 November 2022
Student Name	Aswin.S
Student Roll Number	721419104007
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:

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
 

Search

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

Showing 2 items

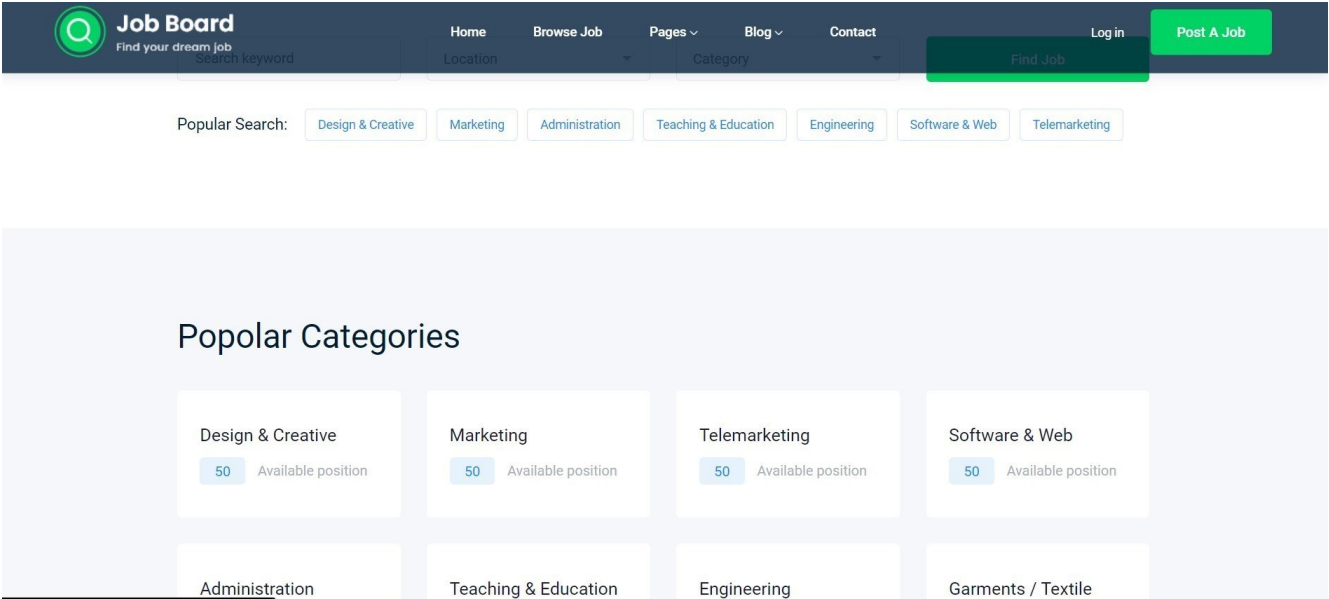
RAM 3.06GB

CPU 0.57%

Connected to Hub

v4.13.0

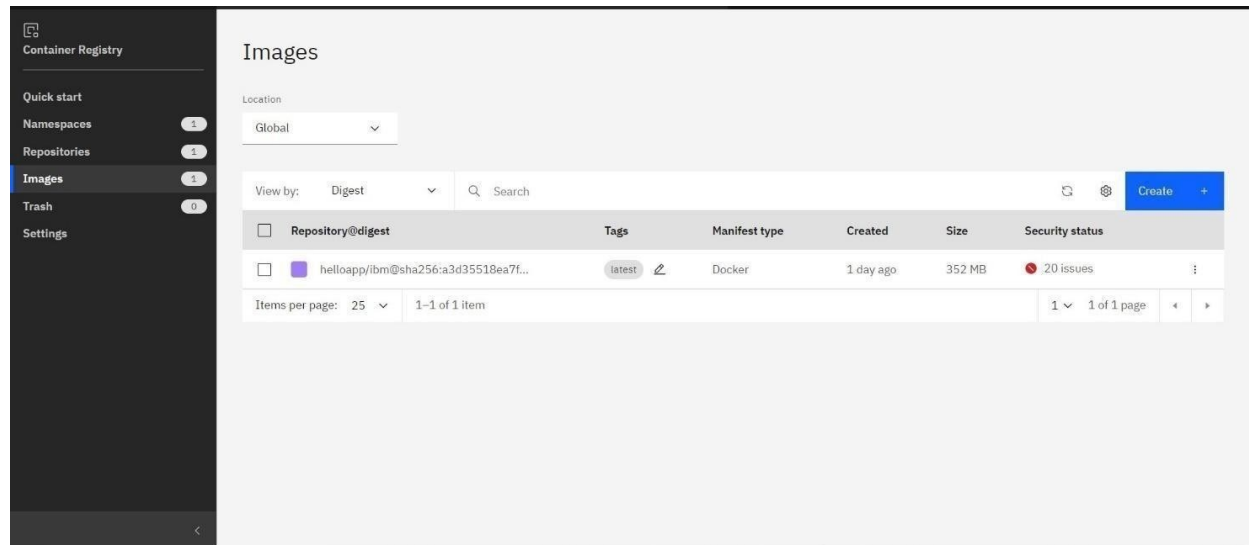
OUTPUT:



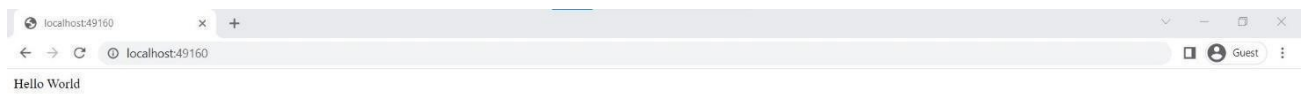
Question 3:

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:

Clusters /

mycluster-free

Normal

Expires in 29 days

Add tags

Help

Kubernetes dashboard

Actions...

Overview

Worker nodes

Worker pools

DevOps New

Pool: Filter...

Search

+

Add

<input type="checkbox"/>	Name	Status	Worker pool	Zone	Private IP	Public IP	Version
<input checked="" type="checkbox"/>	0000008c	Normal	default	Milan 01	10.144.187.51	159.122.179.68	1.23.12_1549

Items per page: 25

1~1 of 1 item

1

1 of 1 page

◀ ▶

Output:

File Edit Selection View Go Run ...

Assignment\_4

jobportal.html

register.html

register\_page.html

jobportal.html

jobportal.html

html

body

blockquote

blockquote

text

center

footer

blockquote

footer

cite

```

30 <div class="nav-bar" style="background-color: #f8d7da; padding: 5px; text-align: center;">
31 <a href="#" class="nav-link" style="color: #007bff; text-decoration: none;">Login Page</a>
32 </div>
33
34 <br>
35 <div class="text-center" style="border: 1px solid #ccc; padding: 10px; margin: 10px auto; width: 80%;">
36 <p>Find your dream job by using this job portal.</p>
37 <div class="text-center" style="border: 1px solid #ccc; padding: 5px; margin-top: 5px;">
38 <div class="text-center" style="border: 1px solid #ccc; padding: 5px; margin-top: 5px;">
39 <div class="row" style="display: flex; justify-content: space-around;">
40 <div class="col-sm-12" style="width: 100%;">
41 <div class="card" style="border: 1px solid #ccc; padding: 10px; margin-bottom: 10px;">
42 <div class="card-body" style="padding: 10px;">
43 <h5 class="card-title">Software Engineer</h5>
44 <p class="card-text">Execute full software development life cycle (SDLC).
45 Develop flowcharts, layouts and documentation to identify requirements and solutions.
46 <a href="{{url_for('register')}}" class="btn btn-primary">Submit</a>
47 </div>
48 </div>
49 </div>
50 <div class="col-sm-12" style="width: 100%;">
51 <div class="card" style="border: 1px solid #ccc; padding: 10px; margin-bottom: 10px;">
52 <div class="card-body" style="padding: 10px;">
53 <h5 class="card-title">Front-End Developer</h5>
54 <p class="card-text">Optimizing the user experience.
55 Using HTML, JavaScript and CSS to bring concepts to life.
56 </p>
57 <a href="{{url_for('register')}}" class="btn btn-primary">Submit</a>
58 </div>
59 </div>
60 </div>

```

PROBLEMS OUTPUT TERMINAL JUPYTER COMMENTS DEBUG CONSOLE

ItemCommand

PS D:\study\sem\_7\nallaya\_thiran\_works\Assignment\Team Lead\Assignment\_4>

Job P: x Register p Cards - B Typogra

Job: 0000008c

Find your dream job by using this job portal.

Below listed jobs are suited for your career

Software Engineer

Execute full software development life cycle (SDLC). Develop flowcharts, layouts and documentation to identify requirements and solutions.

Submit

Front-End Developer

Optimizing the user experience. Using HTML, JavaScript and CSS to bring concepts to life.

Submit

Special title treatment

A data analyst collects and stores data on sales numbers, market research, logistics, inquiries, or other behaviors.

Submit

Java Developer

A Java Developer is responsible for planning, designing, developing, and managing Java-based applications and software.

Submit

Business Analyst

Business analyst assess how organizations are performing and help them improve their processes and systems.

Submit

Python Developer

Python Developer is responsible for coding, designing, deploying, and debugging development projects.

Submit

Back-End Developer

Empire and analyze data, processes, and codes to troubleshoot problems and identify areas for improvement.

Submit

Product Manager

A product manager is the person who identifies the customer need and the larger business objectives that a product or feature will fulfill.

Submit

27°C Mostly cloudy

Ln 37, Col 85 Spaces: 2 UTF-8 CRLF HTML

ENG IN 09:47 PM 31-10-2022