

## Assignment - 4

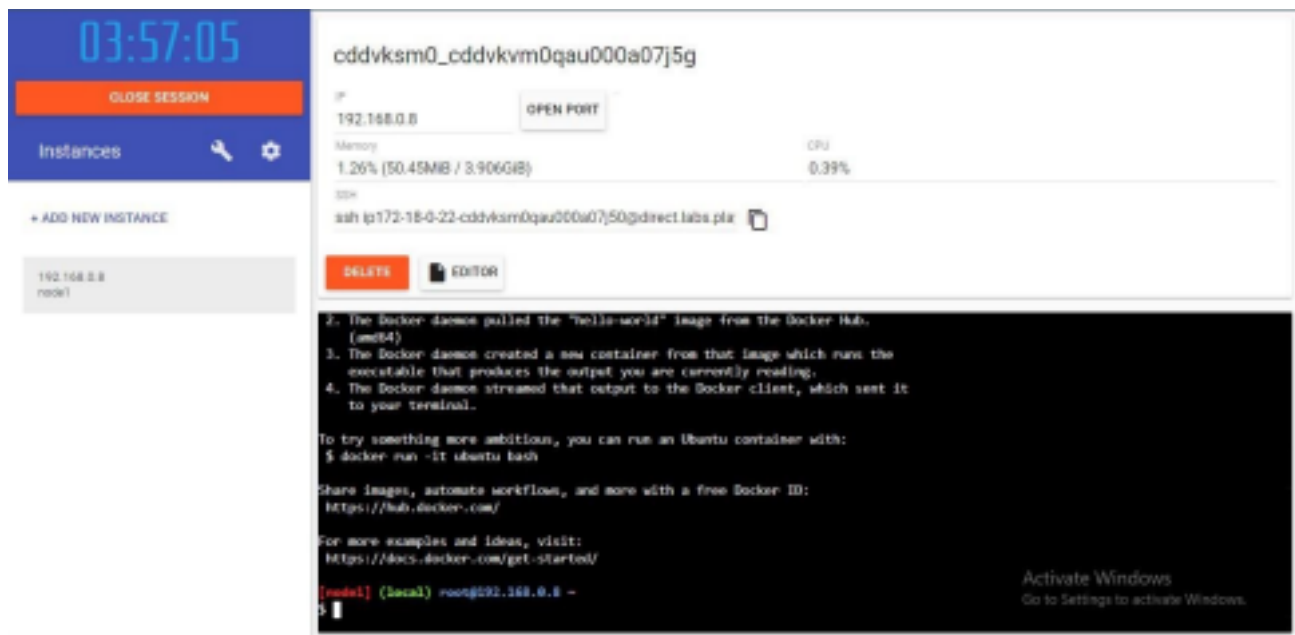
Assignment Date	7 NOVEMBER 2022
Student Name	VIMALESHWARAN P
TEAM ID	PNT2022TMID20737
Project	Personal Expense Tracker

Question 1:

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

The screenshot displays the Docker Playground interface. On the left, a sidebar shows a timer at 03:57:32, a 'CLOSE SESSION' button, and a list of instances with one instance named '192.168.0.8' in a 'DOWN' state. The main area shows the instance details for 'cddvkism0\_cddvkvm0qau000a07j5g', including its IP (192.168.0.8), memory usage (1.24%), CPU usage (0.31%), and a terminal window. The terminal shows a warning message, followed by the command 'docker pull hello-world' being executed, which successfully pulls the latest image from Docker Hub. The final command shown is 'docker run hello-world', which is about to be executed. An 'Activate Windows' watermark is visible in the bottom right corner of the terminal area.

```
WARNING!!!!
# This is a sandbox environment. Using personal credentials
# is HIGHLY discouraged. Any consequences of doing so are
# completely the user's responsibilities.
#
# The PMD team.
=====
[root@192.168.0.8 ~]#
$ docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
20b29710123e: Pull complete
Digest: sha256:c38fba777aefabed47a671ab1ec3ee05414477c951ab1a6f352a86034245fe7
Status: Downloaded newer image for hello-world:latest
[root@192.168.0.8 ~]#
$ docker run hello-world
```



Question 2:

Create a docker file for the job portal application and deploy it in Docker

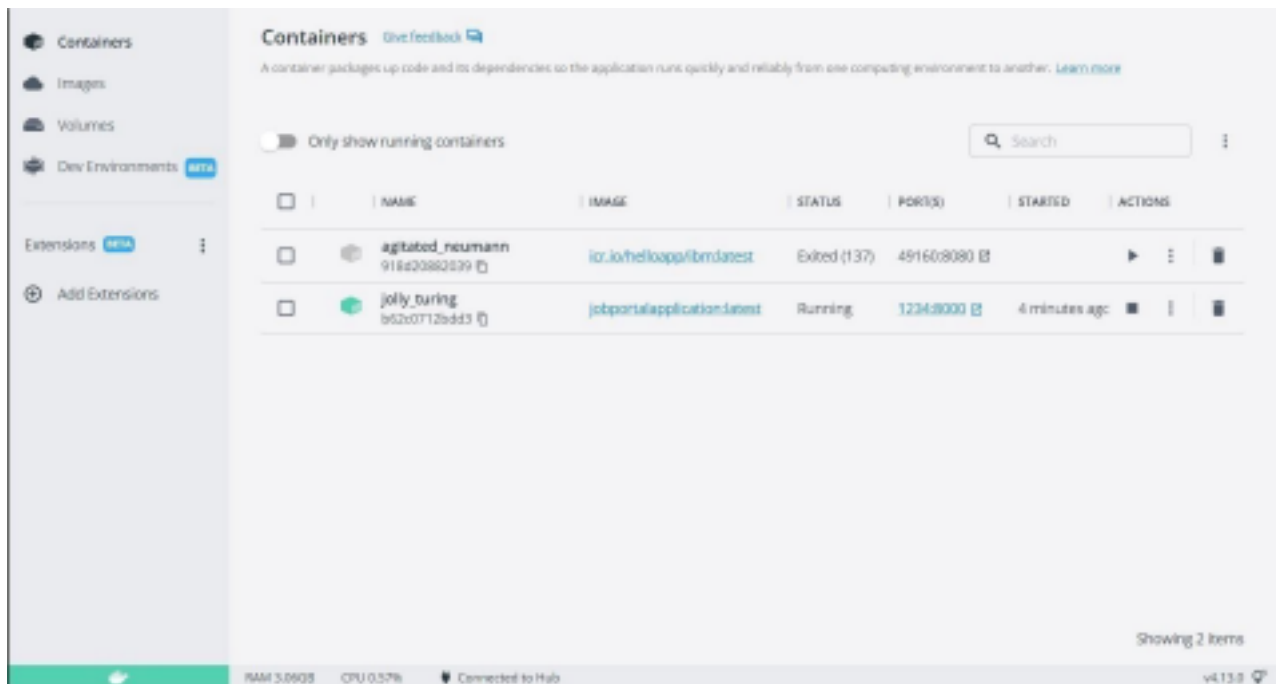
desktopapplication. DOCKER FILE:

```

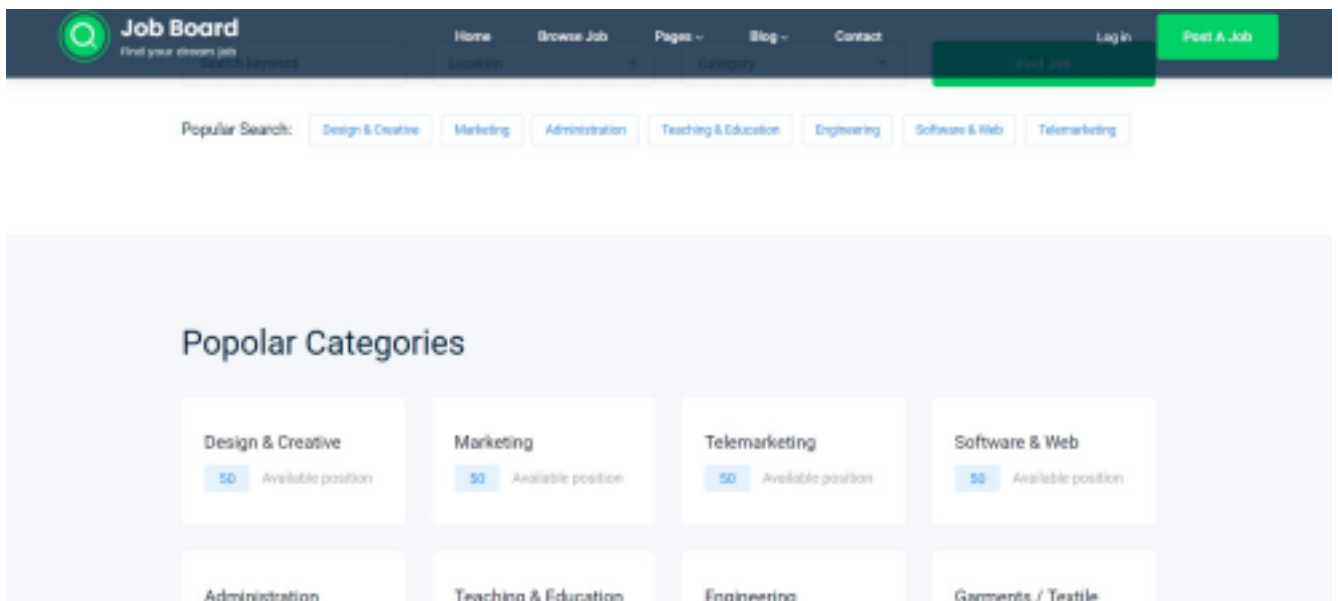
1 FROM python:3.8-buster
2
3 WORKDIR /app
4
5 COPY requirements.txt /app/
6
7 RUN pip install -r requirements.txt
8
9 COPY . /app/
10
11 RUN cp .env.dev.sample .env
12
13 EXPOSE 8000
14
15 RUN chmod +x entrypoint.sh
16
17 CMD ["sh", "entrypoint.sh"]

```

DEPLOYMENT OF JOBPORTAL APPLICATION:



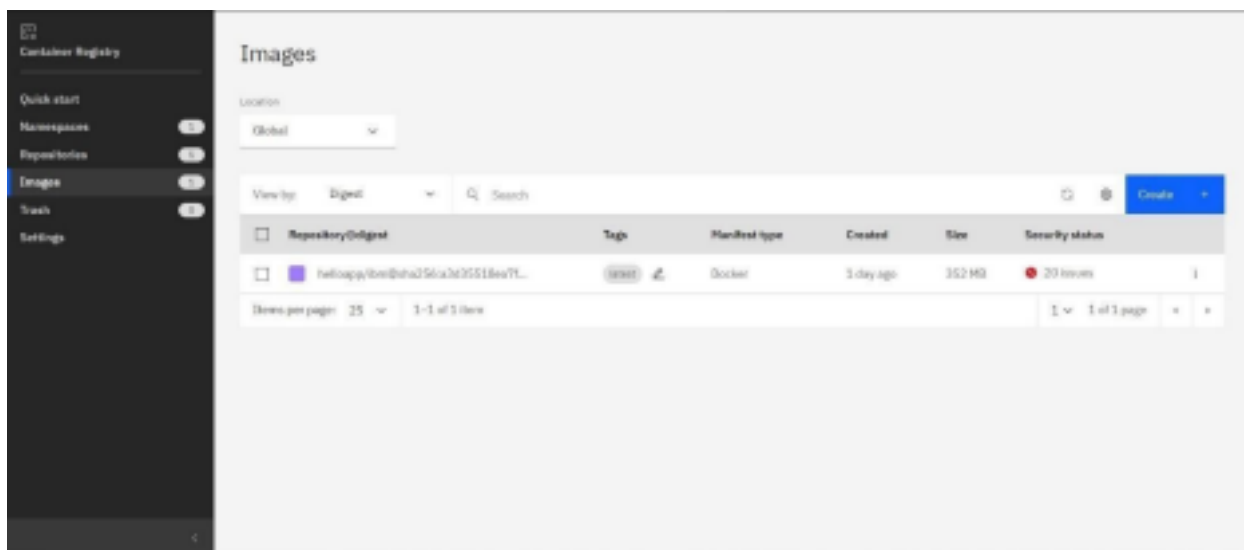
OUTPUT:



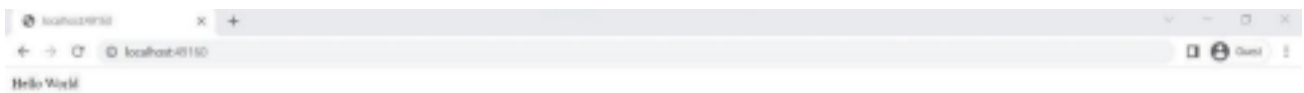
Question 3:

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:

Overview / mycluster-free Normal Expires in 24 days Add tags Help Kubernetes dashboard Actions...

Overview

Worker nodes

Worker pools

DevOps View

Find: Filter... Search + Add

<input type="checkbox"/>	Name	Status	Worker pool	Zone	Private IP	Public IP	Version
<input checked="" type="checkbox"/>	000000b	<span>Normal</span>	default	Milux 01	10.184.187.61	159.122.179.68	1.28.12_1409

Items per page: 25 1-1 of 1 items 1 of 1 page

Output:

```

11 <div class="header-brand">Hello Page</div>
12 </div>
13
14 <div>
15   <div class="blockquote text-center">
16     <p class="m-0">Find your dream job by using this job portal.</p>
17     <div class="blockquote-footer">online listed jobs are suited for your career.</div>
18   </div>
19   <div class="row">
20     <div class="col-sm-12">
21       <div class="card">
22         <div class="card-body">
23           <div class="card-title">Software Engineer</div>
24           <p class="card-text">Iterate full software development life cycle (SDLC).
25             Develop flowcharts, layouts and documentation to identify requirements and select
26             <a href="#url_for('register')">Submit</a>
27           </div>
28         </div>
29       </div>
30     </div>
31     <div class="col-sm-12">
32       <div class="card">
33         <div class="card-body">
34           <div class="card-title">Front-end Developer</div>
35           <p class="card-text">Optimizing the user experience,
36             Using HTML, JavaScript and CSS to bring concepts to life.
37           </p>
38           <a href="#url_for('register')">Submit</a>
39         </div>
40       </div>
41     </div>
42   </div>
43 </div>
44
45 <div class="row">
46   <div class="col-sm-12">
47     <div class="card">
48       <div class="card-body">
49         <div class="card-title">Backend Developer</div>
50         <p class="card-text">Developing server-side logic and databases.
51           <a href="#url_for('register')">Submit</a>
52         </p>
53       </div>
54     </div>
55   </div>
56   <div class="col-sm-12">
57     <div class="card">
58       <div class="card-body">
59         <div class="card-title">Full-stack Developer</div>
60         <p class="card-text">Combining front-end and back-end development skills.
61           <a href="#url_for('register')">Submit</a>
62         </p>
63       </div>
64     </div>
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70 <div class="row">
71   <div class="col-sm-12">
72     <div class="card">
73       <div class="card-body">
74         <div class="card-title">Product Manager</div>
75         <p class="card-text">Managing product development process and ensuring user satisfaction.
76           <a href="#url_for('register')">Submit</a>
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