Assignment - 4

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Question 1:

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

```
03:57:05
CLOSE SESSION

Instances        🔧  ⚙

+ ADD NEW INSTANCE

192.168.0.8
node1
```

cddvksm0_cddvkvm0qau000a07j5g

IP
192.168.0.8   OPEN PORT

Memory   CPU
1.26% (50.45MiB / 3.906GiB)   0.39%

SSH
ssh ip172-18-0-22-cddvksm0qau000a07j50@direct.labs.pla [copy icon]

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.

```
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.
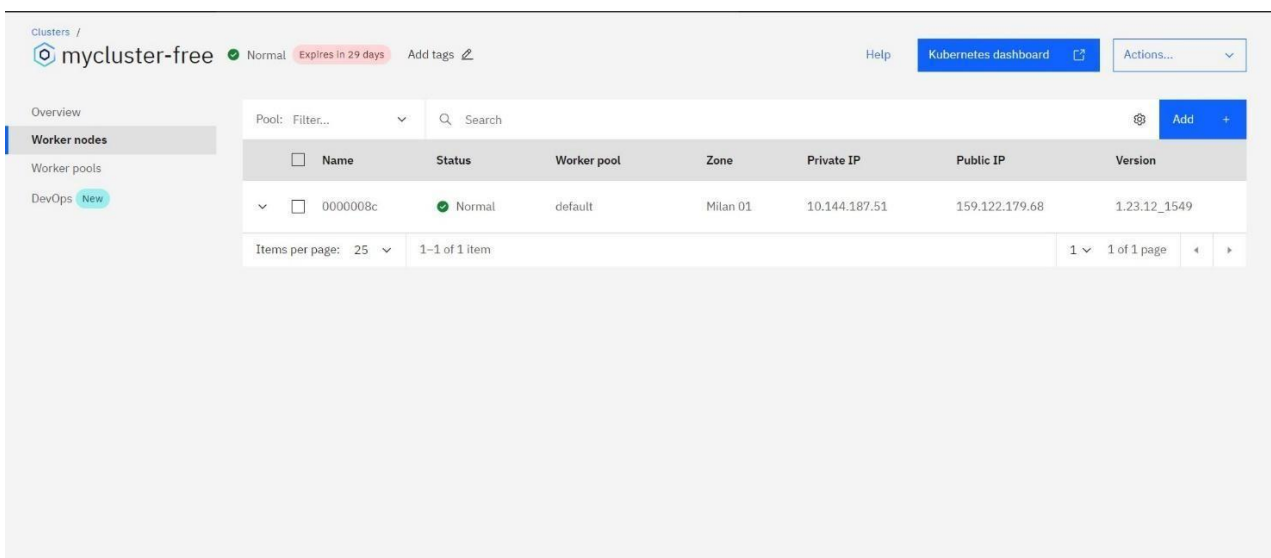
IBM CONTAINER REGISTRY DEPLOYMENT:
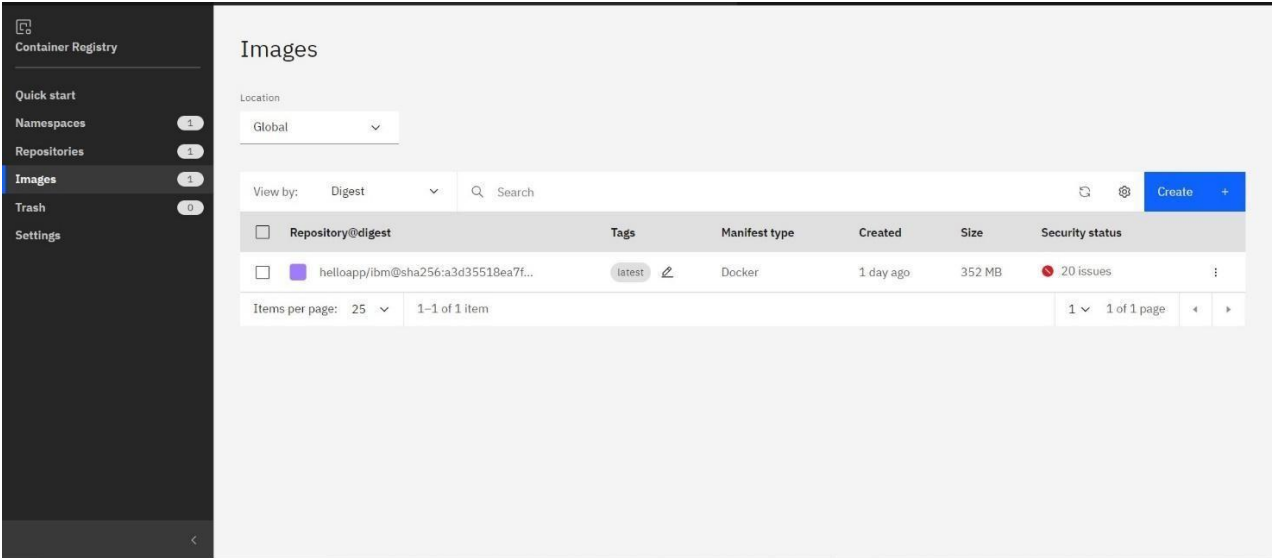
OUTPUT:

Question 4:

Create a Kubernetes cluster in IBM cloud and deploy helloworld image or jobportal imageand also expose the same app to run in nodeport.

Creating kubernetes cluster in IBM cloud and exposing nodeport:

Output: