# ASSIGNMENT 4

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## QUESTION 1:

Pull an Image from docker hub and run it in docker playground.
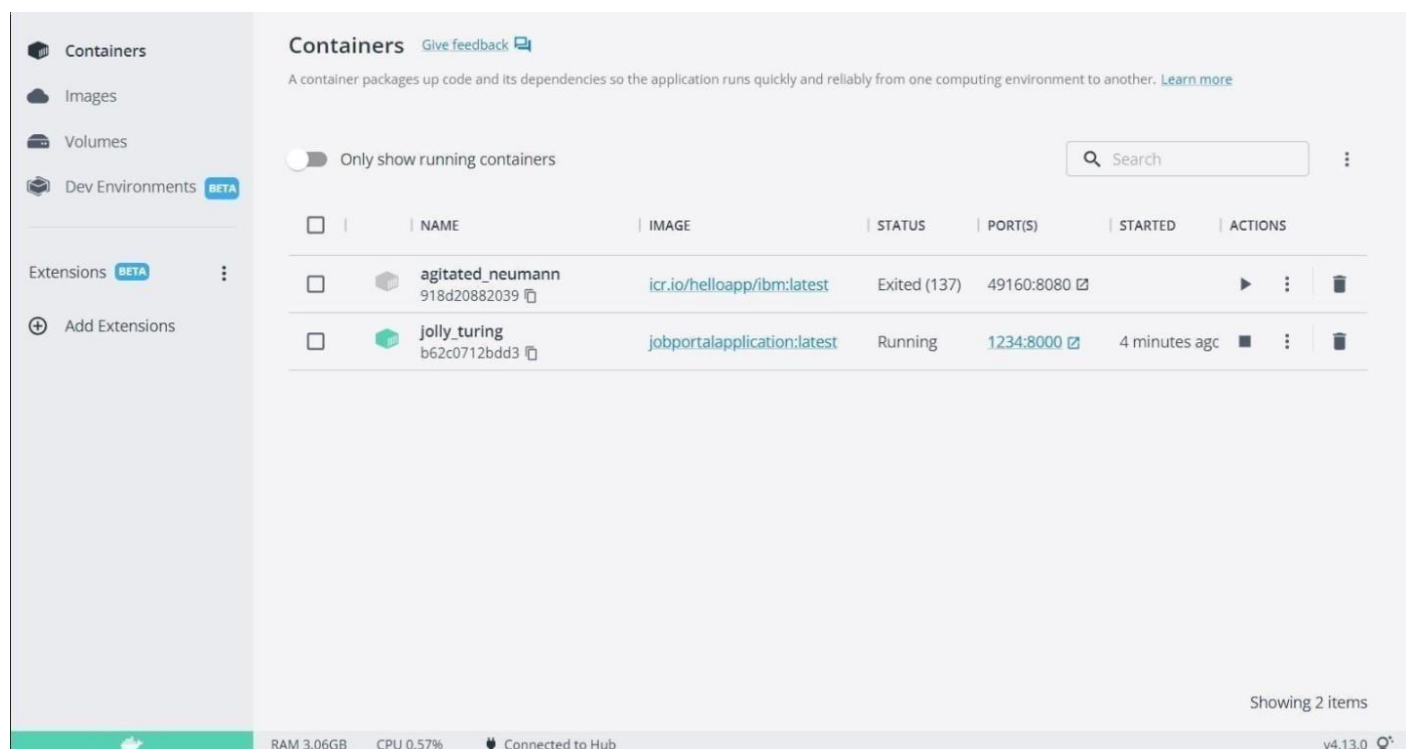
# QUESTION 2:

Create a docker file for the jobportal 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"]
```
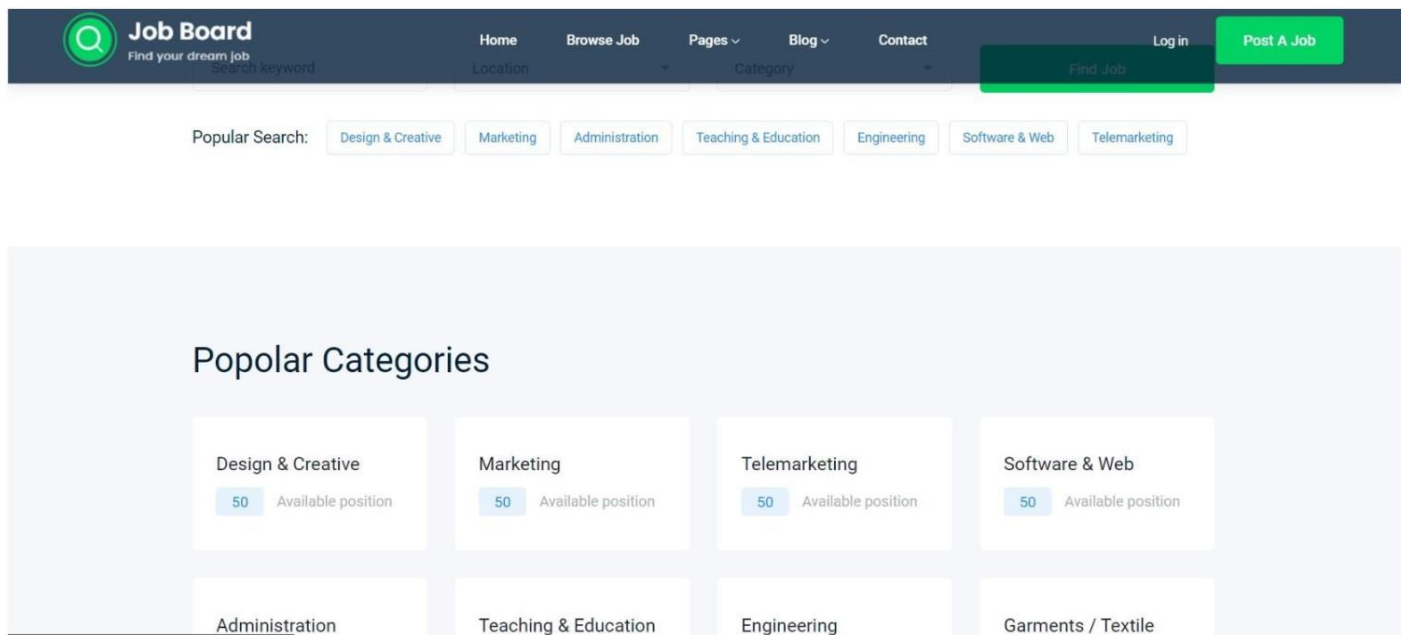
**DEPLOYMENT OF JOB PORTAL APPLICATION:**

| | NAME | IMAGE | STATUS | PORT(S) | STARTED | ACTIONS |
|---|---|---|---|---|---|---|
| | agitated_neumann 918d20882039 | icr.io/helloapp/ibm:latest | Exited (137) | 49160:8080 | | ▶ ⋮ 🗑 |
| | jolly_turing b62c0712bdd3 | jobportalapplication:latest | Running | 1234:8000 | 4 minutes ago | ■ ⋮ 🗑 |

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

Showing 2 items

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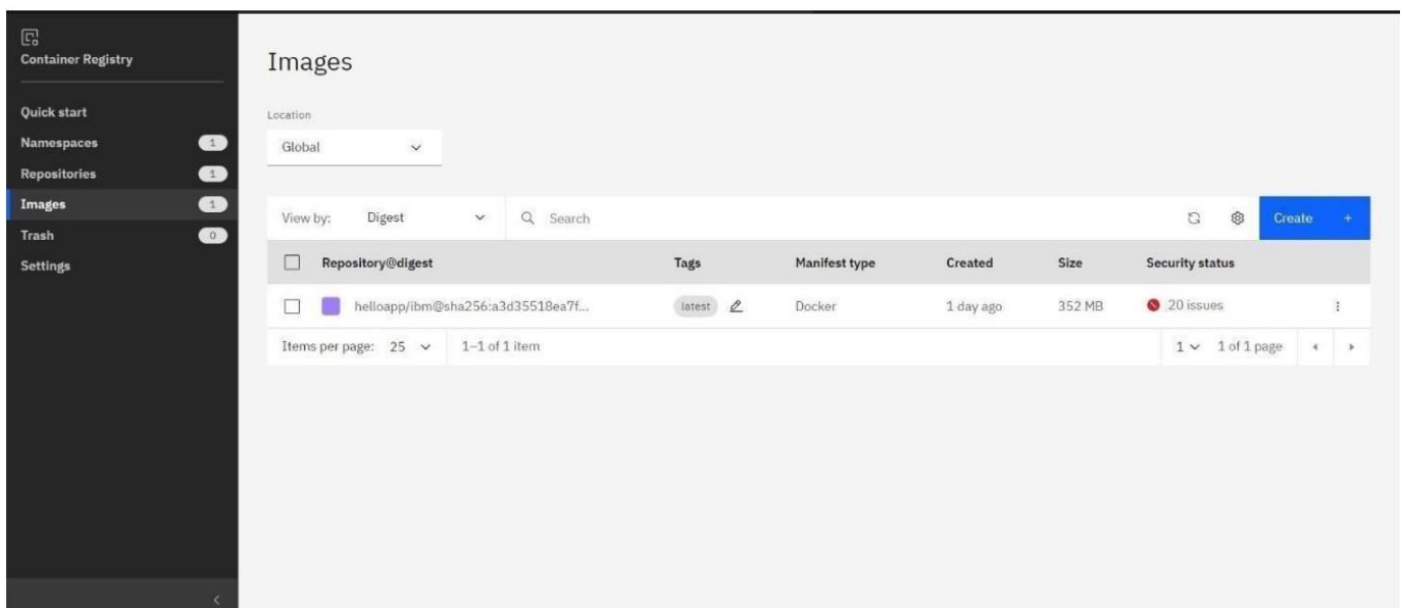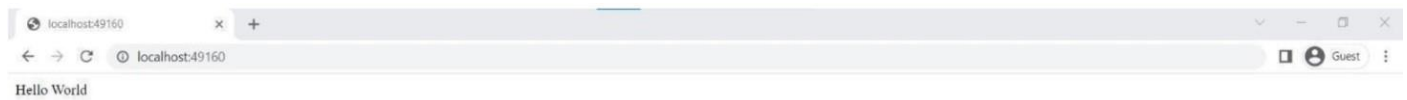
**OUTPUT:**



# QUESTION 3:

Create a IBM container registry and deploy helloworld app or jobportalapp.
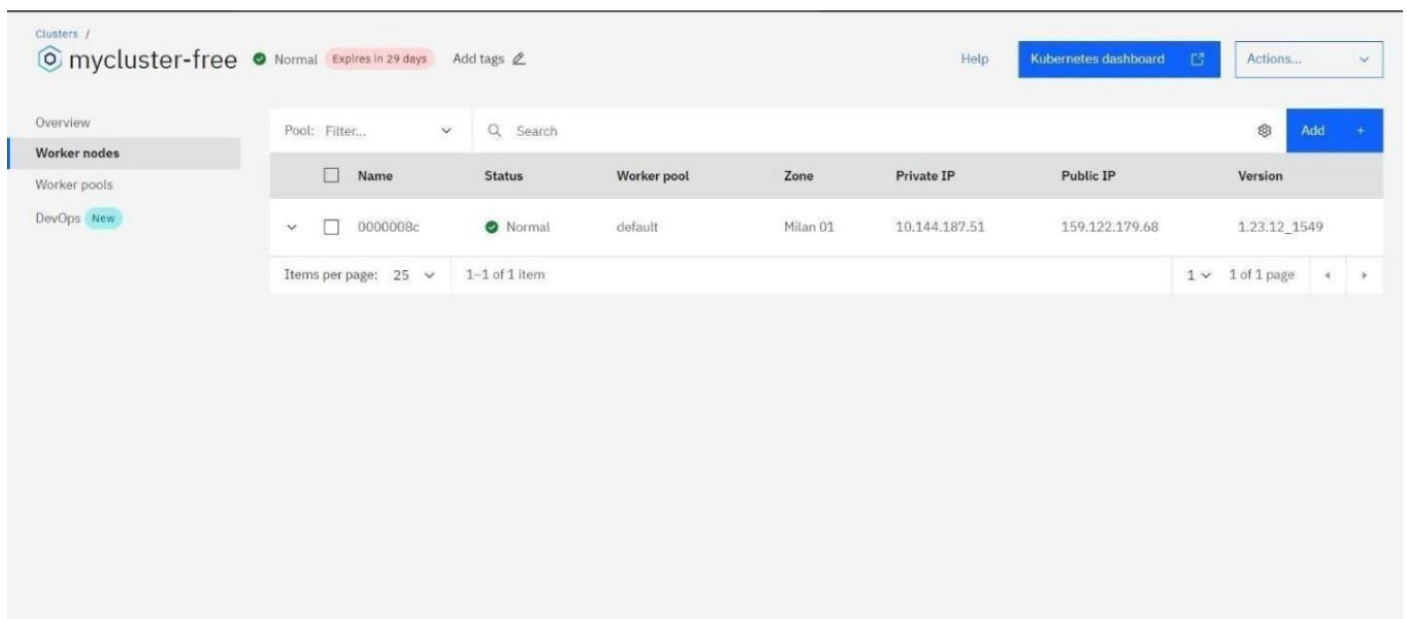
**CONTAINER REGISTER DEPLOYMENT:**

**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 NODE PORT:**



**OUTPUT:**