Assignment -4

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Maximum Marks	2 Marks

Question-1:

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

```
❯ docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
Digest: sha256:faa03e786c97f07ef34423fccceeec2398ec8a5759259f94d99078f264e9d7af
Status: Image is up to date for hello-world:latest
docker.io/library/hello-world:latest
❯ docker run hello-world

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
    (arm64v8)
 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/
```

Question-2:

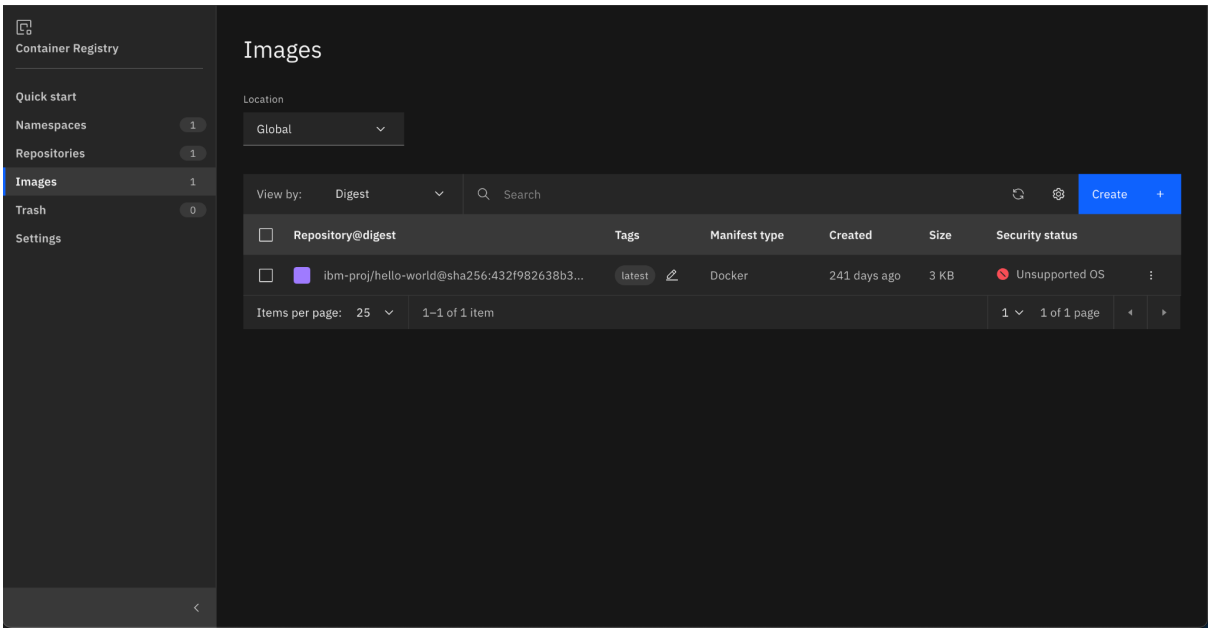
Create a docker file for the job portal application and deploy it in docker desktop

```
1  FROM python:3.8
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 8080
14
15 RUN chmod +x entrypoint.sh
16
17 CMD ["sh", "entrypoint.sh"]
```

```
❯ docker images
REPOSITORY                    TAG       IMAGE ID       CREATED          SIZE
jenkins/jenkins               alpine    945a0cfe1c07   2 months ago     262MB
ubuntu                        latest    21735dab04ba   2 months ago     69.2MB
hello-world                   latest    46331d942d63   8 months ago     9.14kB
icr.io/ibm-proj/hello-world   latest    46331d942d63   8 months ago     9.14kB
jobportal                     latest    281099761321   8 months ago     9.14kB
gcr.io/k8s-minikube/kicbase   v0.0.26   f155e4723c40   14 months ago    976MB
```

Question-3:

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



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.