Assignment -4 Docker and kubernetes

Date	12 Nov 2022
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Roll No.	412519104160
Maximum Marks	2 Marks

1. Pull an image from docker hub:

```
centino@Centino:~/Downloads$ docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
2db29710123e: Pull complete
Digest: sha256:faa03e786c97f07ef34423fccceeec2398ec8a5759259f94d99078f264e9d7af
Status: Downloaded newer image for hello-world:latest
docker.io/library/hello-world:latest
centino@Centino:~/Downloads$ docker run hellor-world
Unable to find image 'hellor-world:latest' locally
docker: Error response from daemon: pull access denied for hellor-world, repository does not exist or may require 'docker login': denied: r
cess to the resource is denied.
See 'docker run --help'.
centino@Centino:~/Downloads$ 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.
    (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/
```
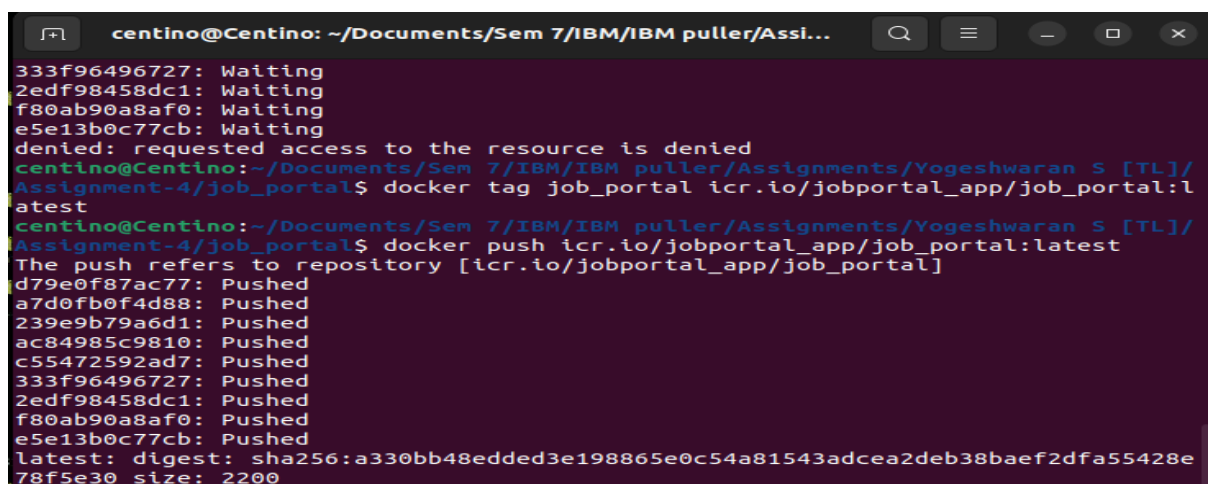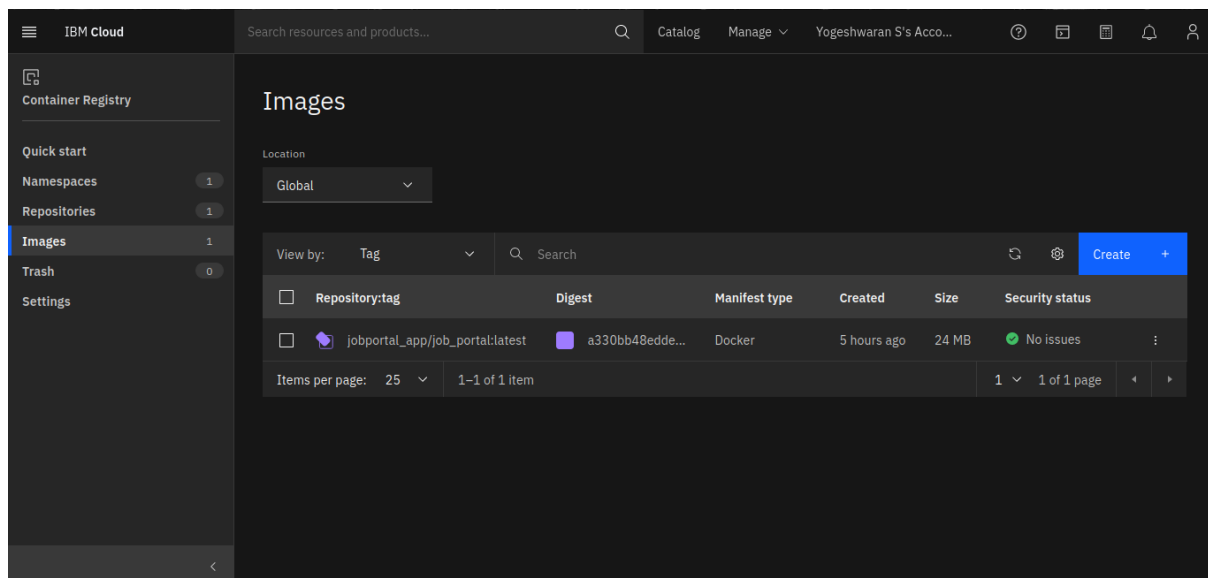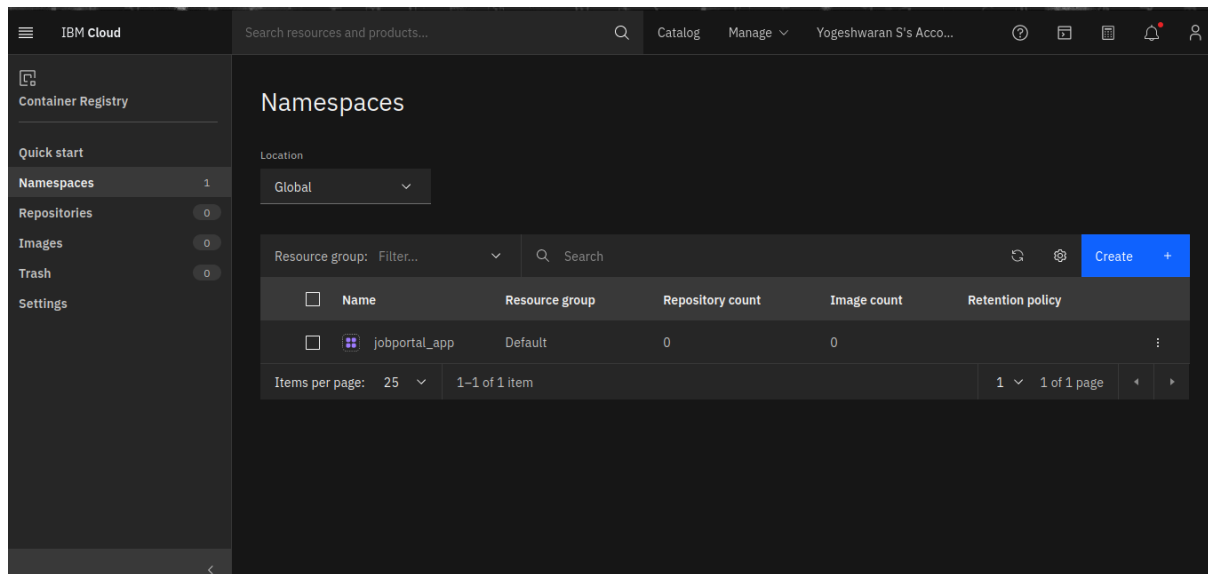
Run in docker playground

2. create job portal application and deploy in desktop application
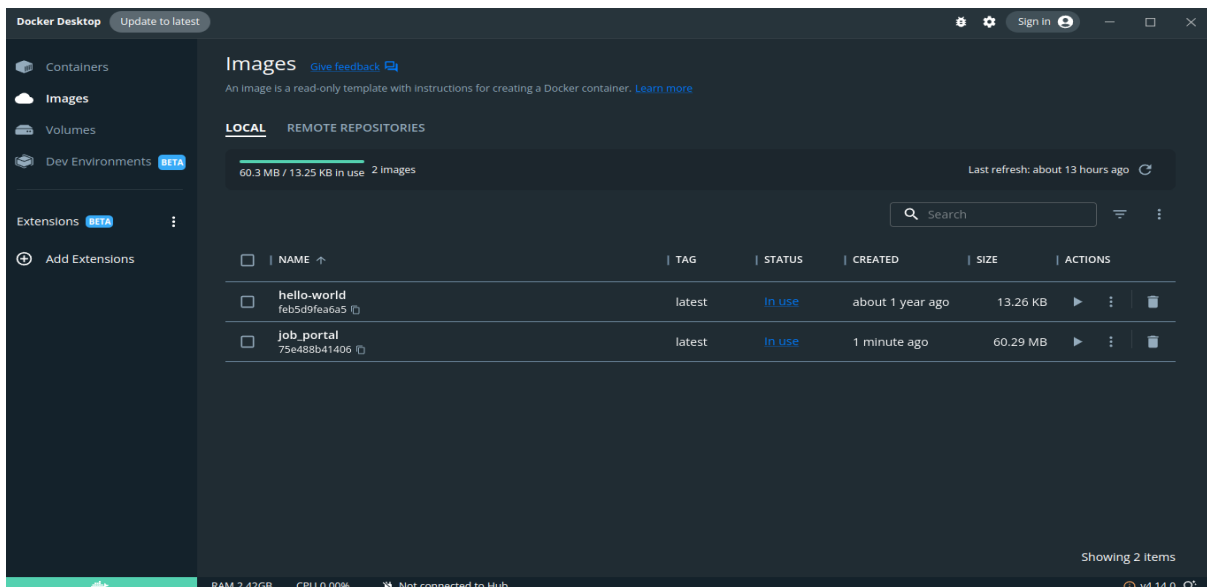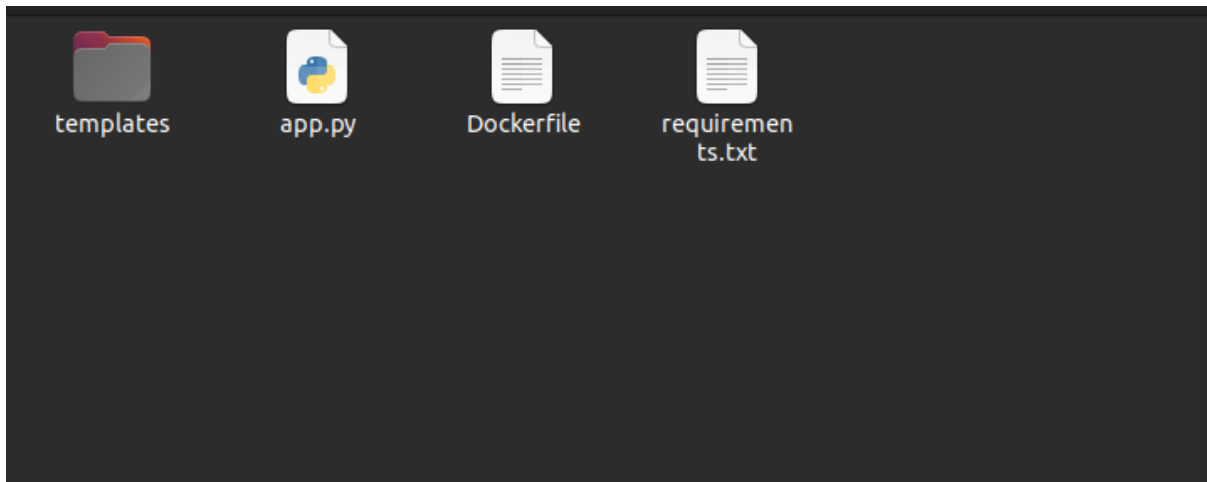
Home   Post Job

Organization Name: Yogeshwaran
Location: Chennai
Job Role: Lead Engineer
Eligibility: MS.AI
Experience: AL MI
Compensation 36 lpa
Service Agreement: nil
Apply Within: 30 days

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

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

CPU Usage

CPU (cores)

0.01

0.005

0

22:07 22:08 22:09 22:10 22:11 22:12 22:13 22:14 22:15 22:16 22:17 22:18 22:19

Memory Usage

Memory (bytes)

20 Mi

0 Mi

22:07 22:08 22:09 22:10 22:11 22:12 22:13 22:14 22:15 22:16 22:17 22:18 22:19

Pods

Name	Images	Labels	Node	Status	Restarts	CPU Usage (cores)	Memory Usage (bytes)	Created ↑	
● jobportal-6ccb499b9c-stmds	Show all	Show all	10.144.188.47	Running	0	3.00m	35.59Mi	an hour ago	⋮

● jobportal

Image
icr.io/jobportal-app/jobportal:1

Status

Ready	Started	Started At
true	true	2022-11-12T15:45:07Z

Mounts

Name	Read Only	Mount Path	Sub Path	Source Type	Source Name
kube-api-access-h8lvz	true	/var/run/secrets/kubernetes.io/serviceaccount	-	Projected	-

Security Context

Privileged
false