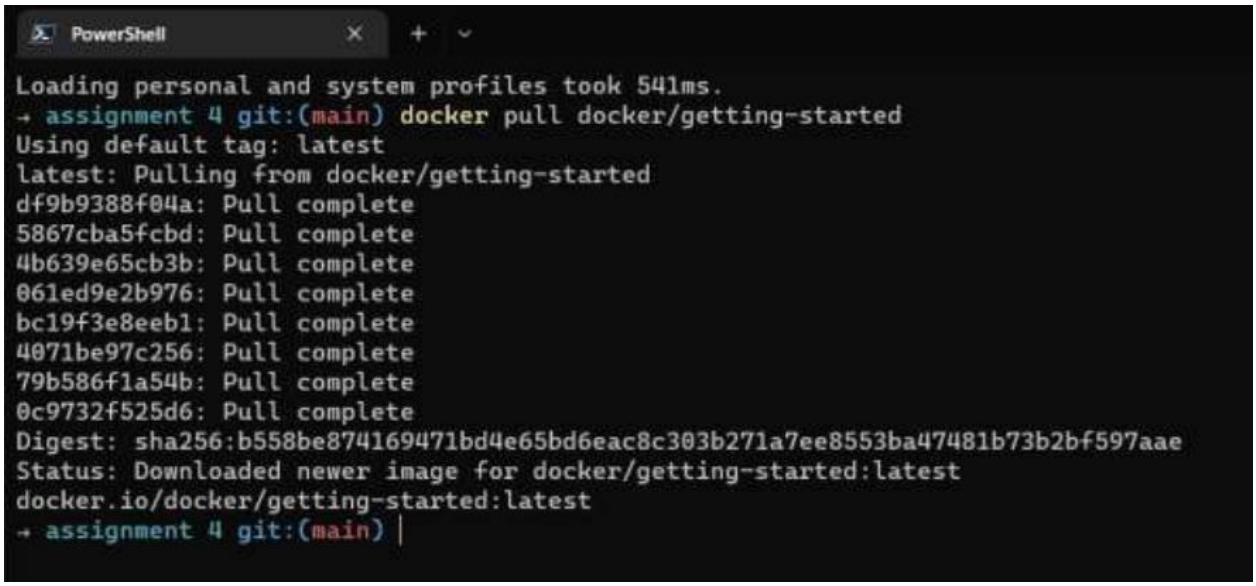
ASSIGNMENT 4

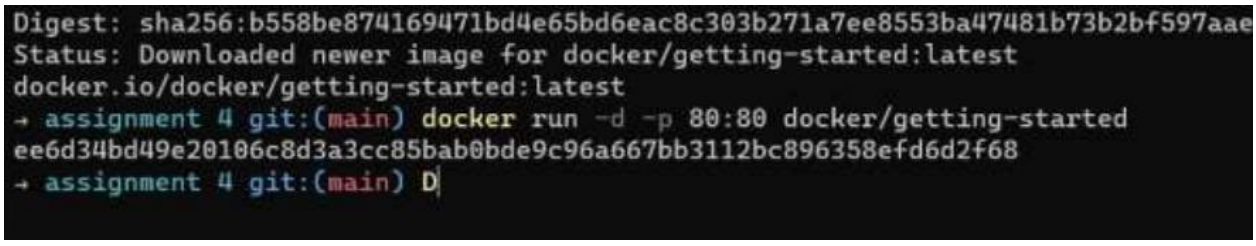
Assignment Date	29th October 2022
Student Name	Gowtham T
Student Roll No.	19Z214
Maximum Marks	2 Marks

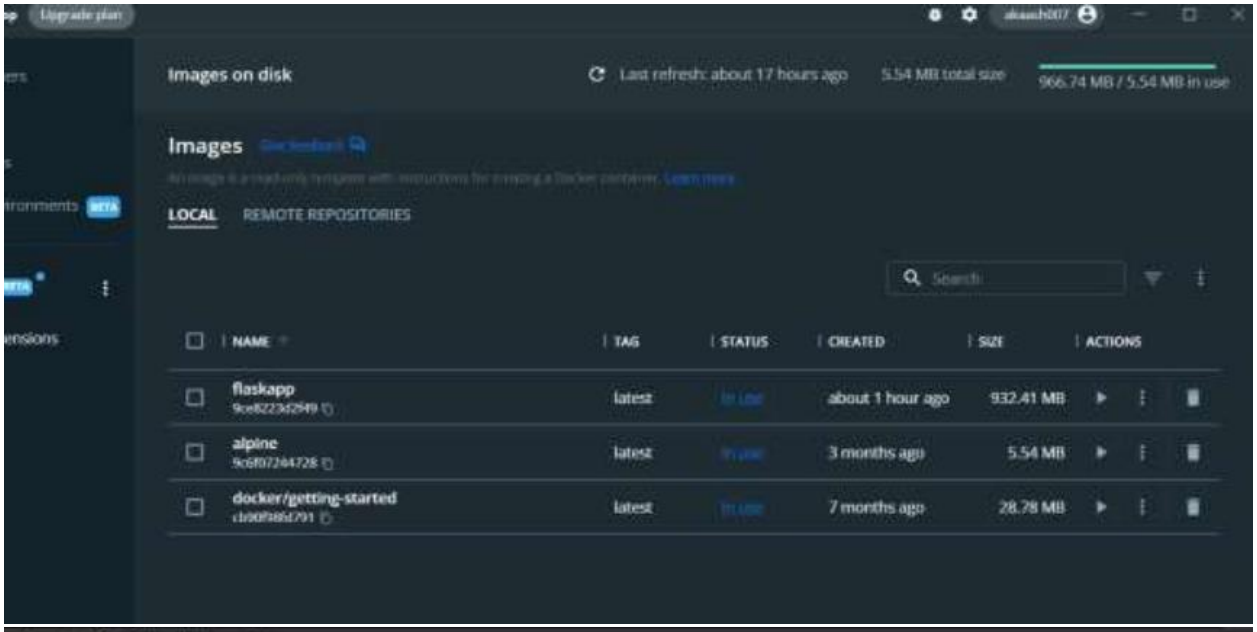
1. Pull an Image from docker hub and run it in docker playground

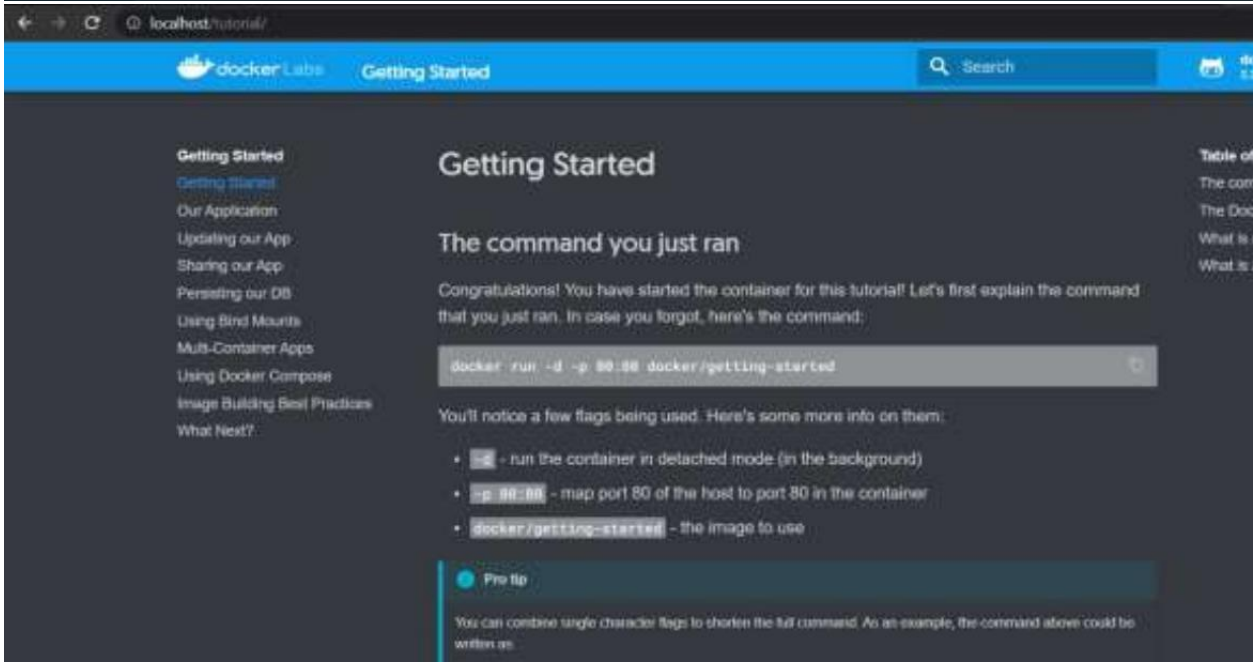
Pulling image from docker hub –



Running on docker playground -




Images on disk
Last refresh: about 17 hours ago
5.54 MB total size
966.74 MB / 5.54 MB in use
Images
LOCAL
REMOTE REPOSITORIES
Search
NAME
TAG
STATUS
CREATED
SIZE
ACTIONS
flaskapp
latest
about 1 hour ago
932.41 MB
alpine
latest
3 months ago
5.54 MB
docker/getting-started
latest
7 months ago
28.78 MB


localhost/tutorial/
docker Labs
Getting Started
Search
Getting Started
Our Application
Updating our App
Sharing our App
Persisting our DB
Using Bind Mounts
Multi-Container Apps
Using Docker Compose
Image Building Best Practices
What Next?
Getting Started
The command you just ran
Congratulations! You have started the container for this tutorial! Let's first explain the command that you just ran. In case you forgot, here's the command:
docker run -d -p 80:80 docker/getting-started
You'll notice a few flags being used. Here's some more info on them:
-d - run the container in detached mode (in the background)
-p 80:80 - map port 80 of the host to port 80 in the container
docker/getting-started - the image to use
Pro tip
You can combine single character flags to shorten the full command. As an example, the command above could be written as

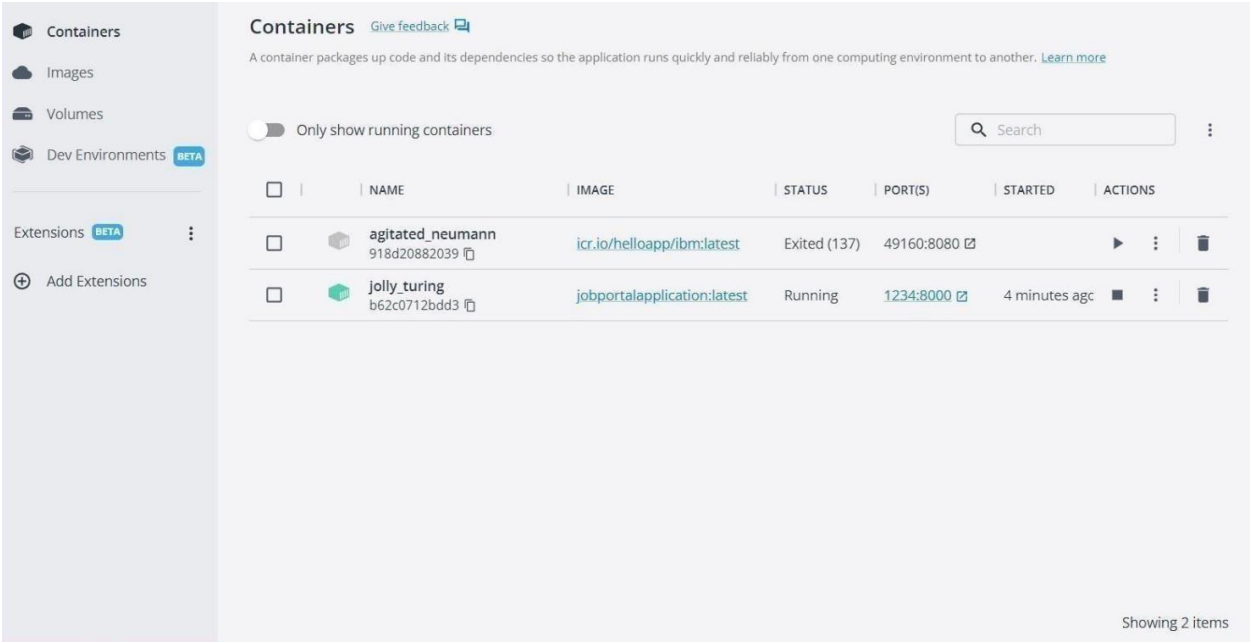
2. Create a docker file for the job portal application and deploy it in docker application.

Docker file –

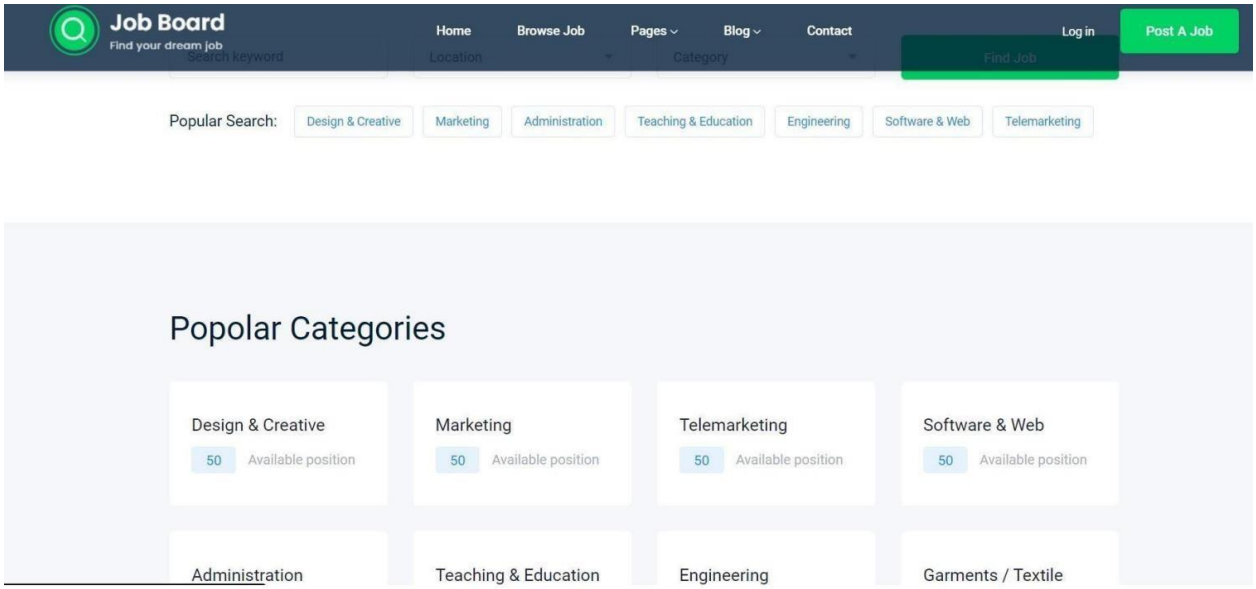
```
1   FROM python:3.8-buster
2
3   WORKDIR /app
4
5   COPY requirements.txt /app/
6
7   RUN pip install -r requirements.txt
8
9   COPY . /app/
10
11  RUN cp .env.dev.sample .env
12
13  EXPOSE 8000
14
15  RUN chmod +x entrypoint.sh
16
17  CMD ["sh", "entrypoint.sh"]
```

Deployment in docker application –


PowerShell
Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
~ FlaskApp git:(main)

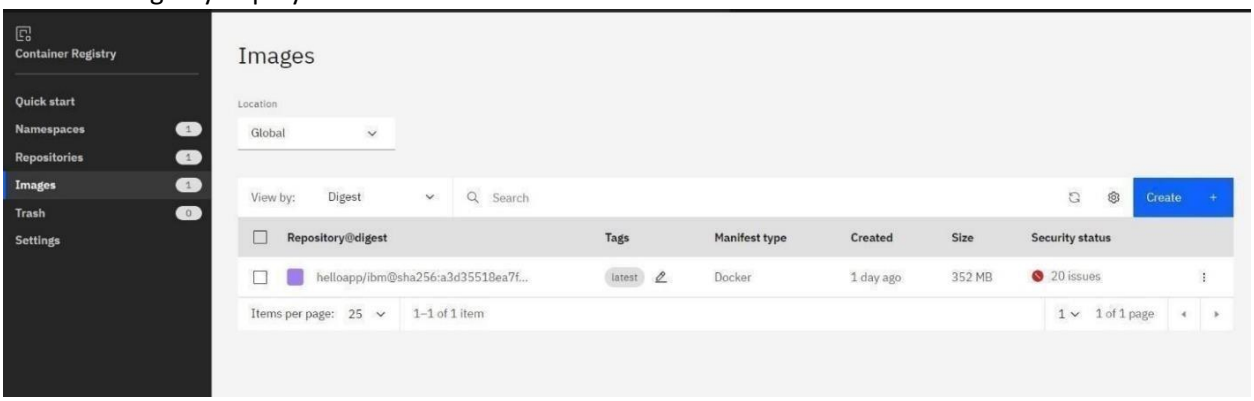

Containers
Images
Volumes
Dev Environments BETA
Extensions BETA
Add Extensions
Containers
Give feedback
A container packages up code and its dependencies so the application runs quickly and reliably from one computing environment to another. Learn more
Only show running containers
Search
NAME
IMAGE
STATUS
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
Showing 2 items

OUTPUT –



3. Create a IBM container registry and deploy hello-world app or job portal app.

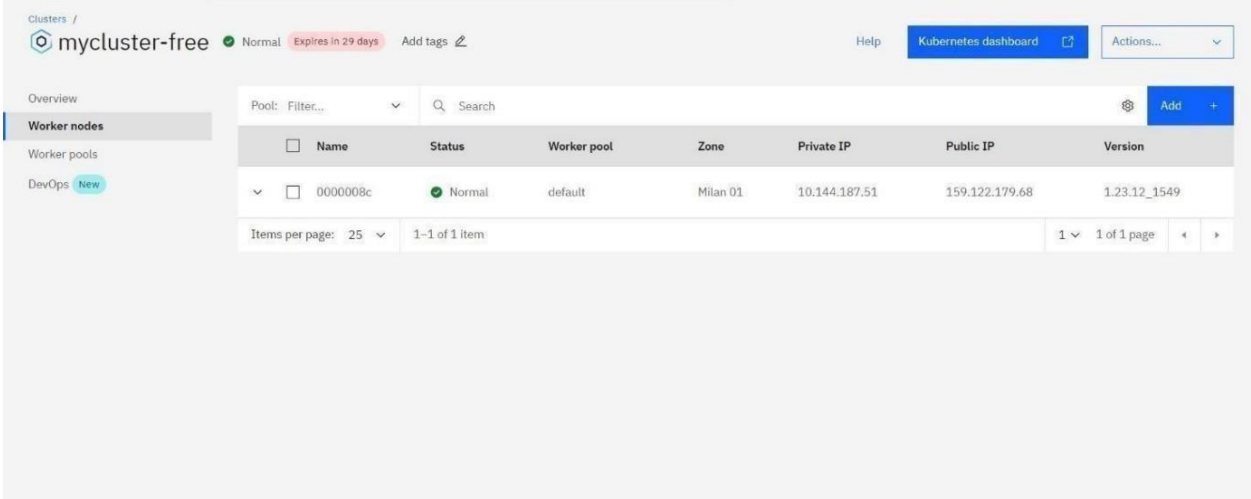
Container registry deployment –



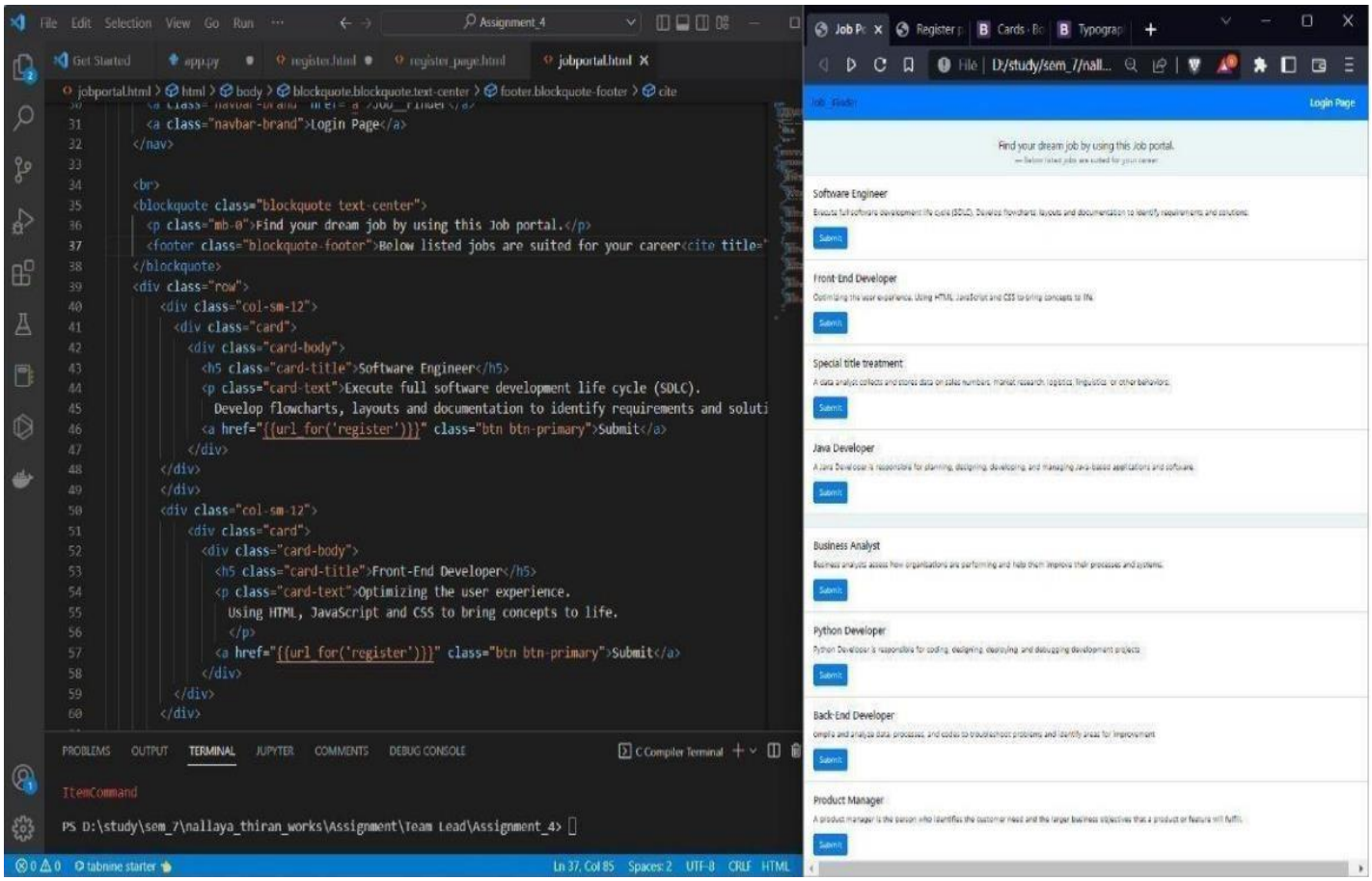
OUTPUT –

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 –



OUTPUT –



Exposing the same app to run in node port –