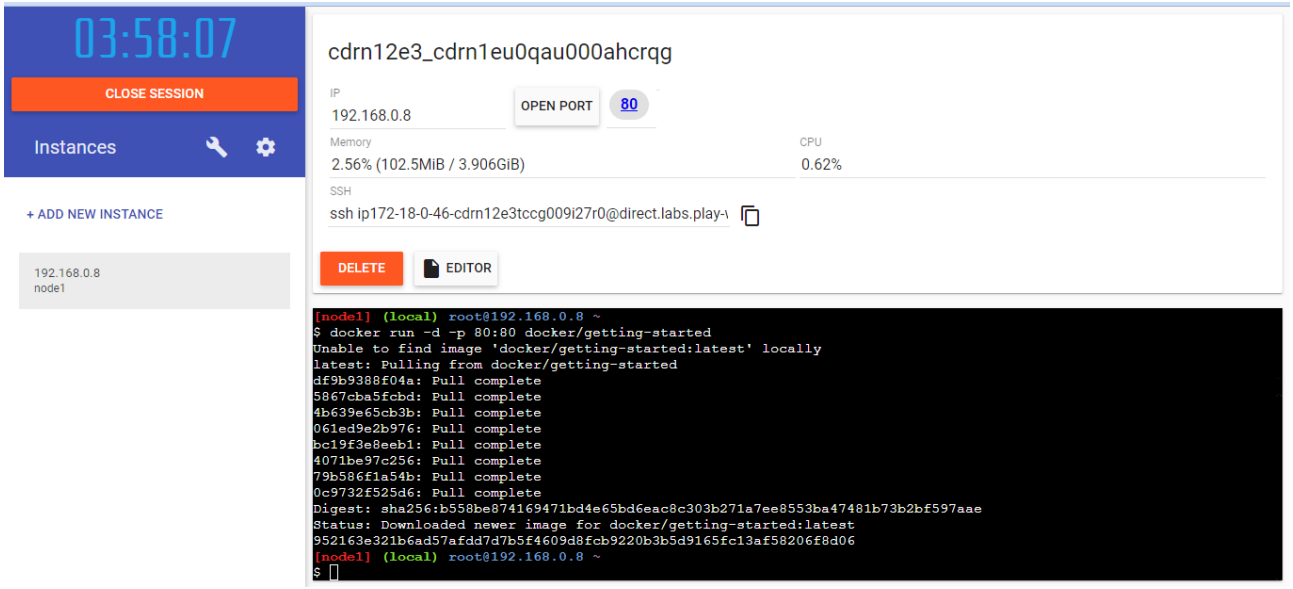
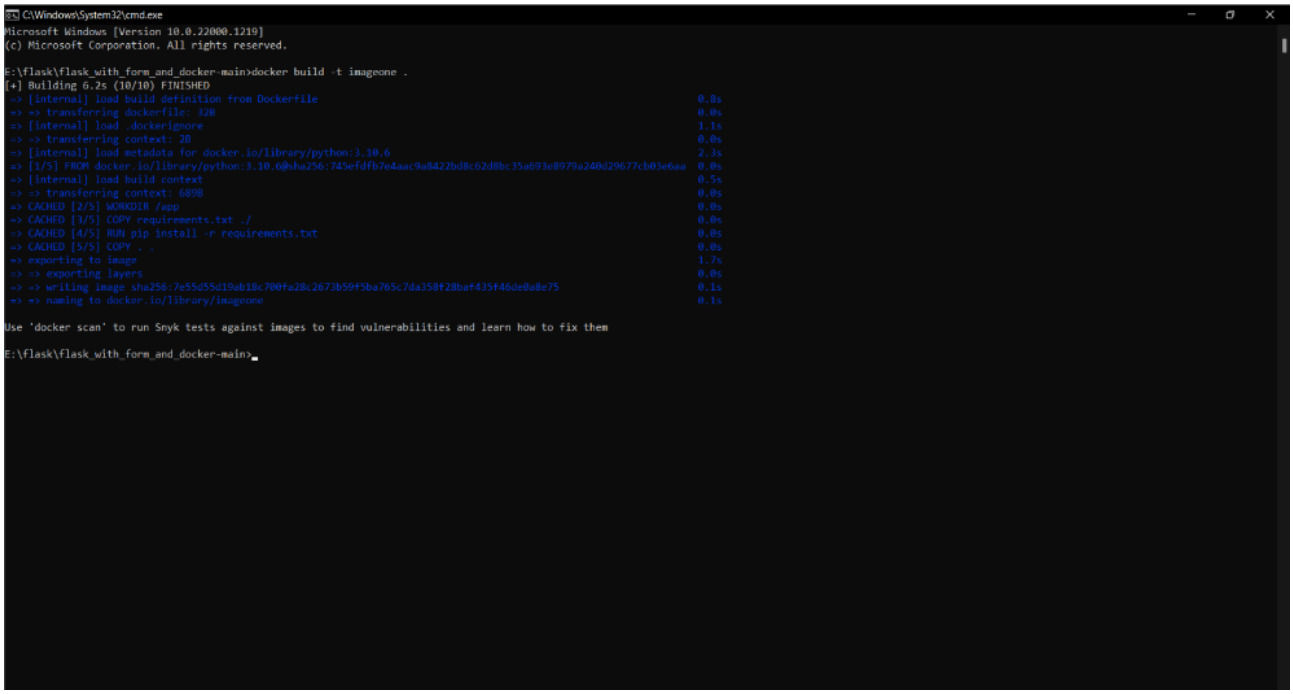
Assignment - 4

Assignment Date	9 September 2022
Student Name	Arul Jeshin A
Student Roll Number	111519205001
Maximum Marks	2 Marks

Question 1:

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

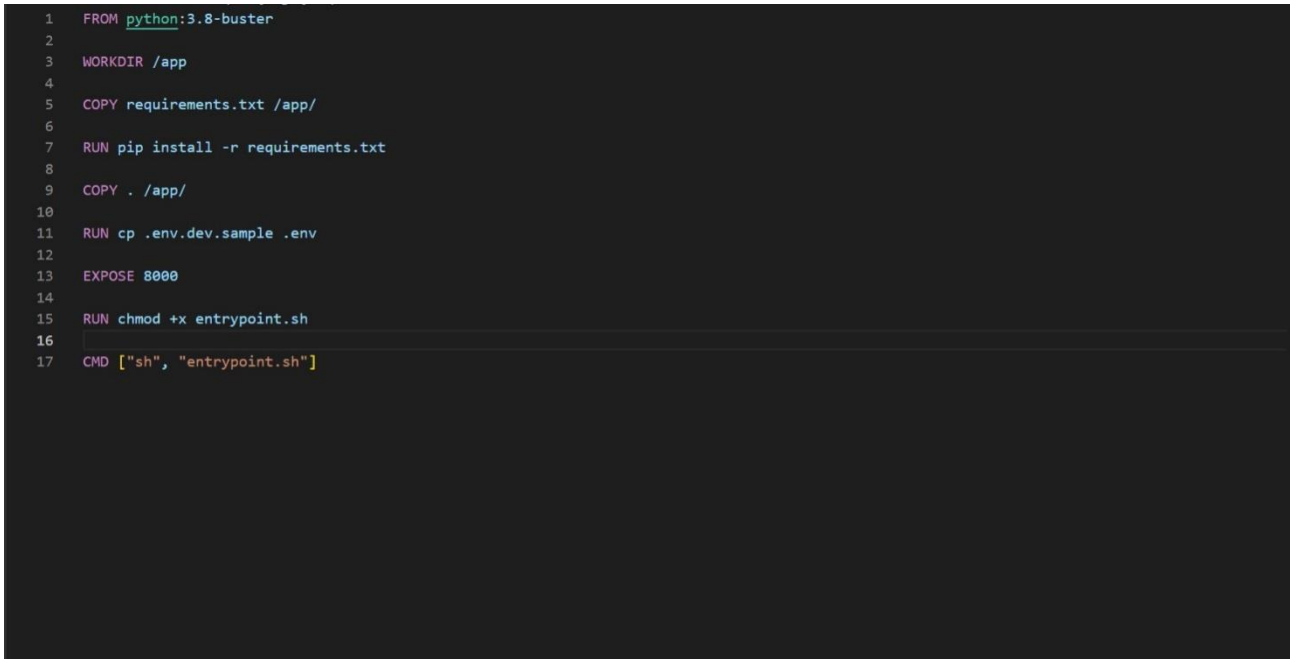



C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22000.1219]
(c) Microsoft Corporation. All rights reserved.
E:\flask\flask_with_form_and_docker-main>docker build -t imageone .
[+] Building 6.2s (10/10) FINISHED
=> [internal] load build definition from Dockerfile 0.8s
=> => transferring dockerfile: 32B 0.0s
=> [internal] load .dockerignore 1.1s
=> => transferring context: 2B 0.0s
=> [internal] load metadata for docker.io/library/python:3.10.6 2.3s
=> [1/5] FROM docker.io/library/python:3.10.6@sha256:745efdfb7e4aac9a8422bd8c62d8bc35a693e8979a240d29677cb03e6aa 0.0s
=> [internal] load build context 0.5s
=> => transferring context: 689B 0.0s
=> CACHED [2/5] WORKDIR /app 0.0s
=> CACHED [3/5] COPY requirements.txt ./ 0.0s
=> CACHED [4/5] RUN pip install -r requirements.txt 0.0s
=> CACHED [5/5] COPY . . 0.0s
=> exporting to image 1.7s
=> => exporting layers 0.0s
=> => writing image sha256:7e55d55d19ab18c700fa2bc2673b59f5ba765c7da358f28baf435f46de0a8e75 0.1s
=> => naming to docker.io/library/imageone 0.1s
Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
E:\flask\flask_with_form_and_docker-main>

Question 2:

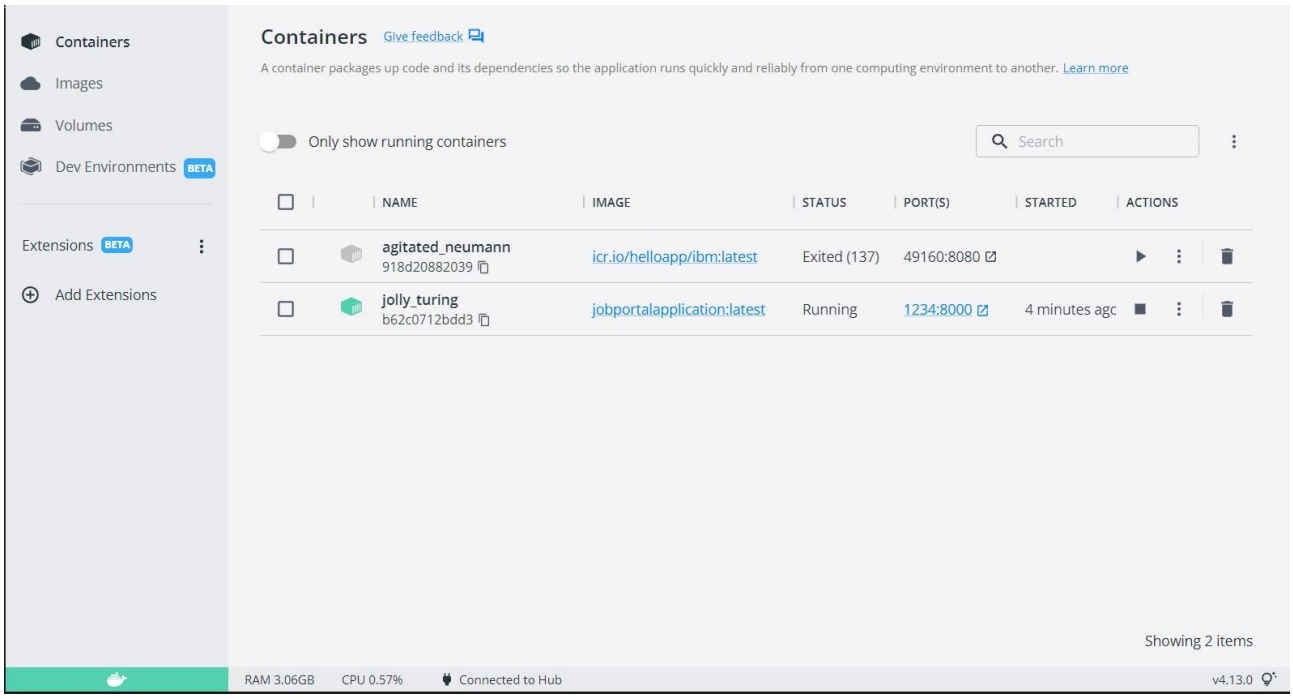
Create a docker file for the jobportal application and deploy it in Docker desktop application.

DOCKERFILE:

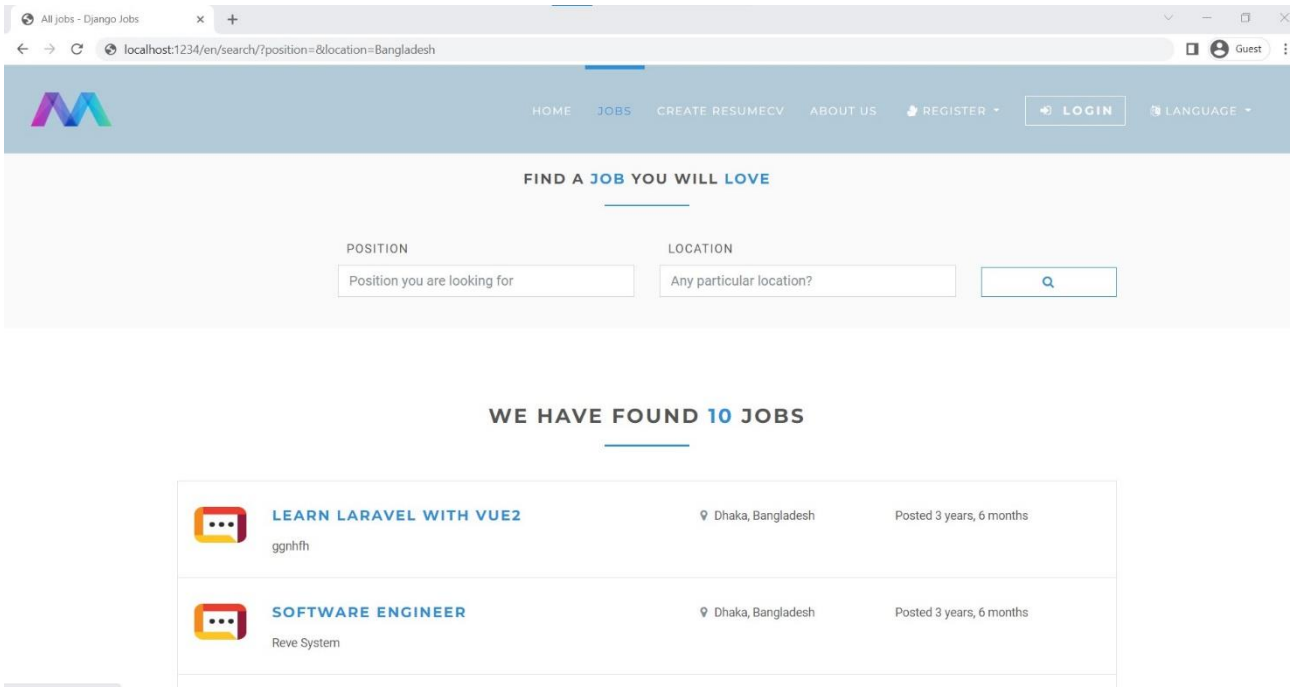


```
FROM python:3.8-buster

WORKDIR /app

COPY requirements.txt /app/

RUN pip install -r requirements.txt

COPY . /app/

RUN cp .env.dev.sample .env

EXPOSE 8000

RUN chmod +x entrypoint.sh

CMD ["sh", "entrypoint.sh"]
```

DEPLOYMENT OF JOBPORTAL APPLICATION:



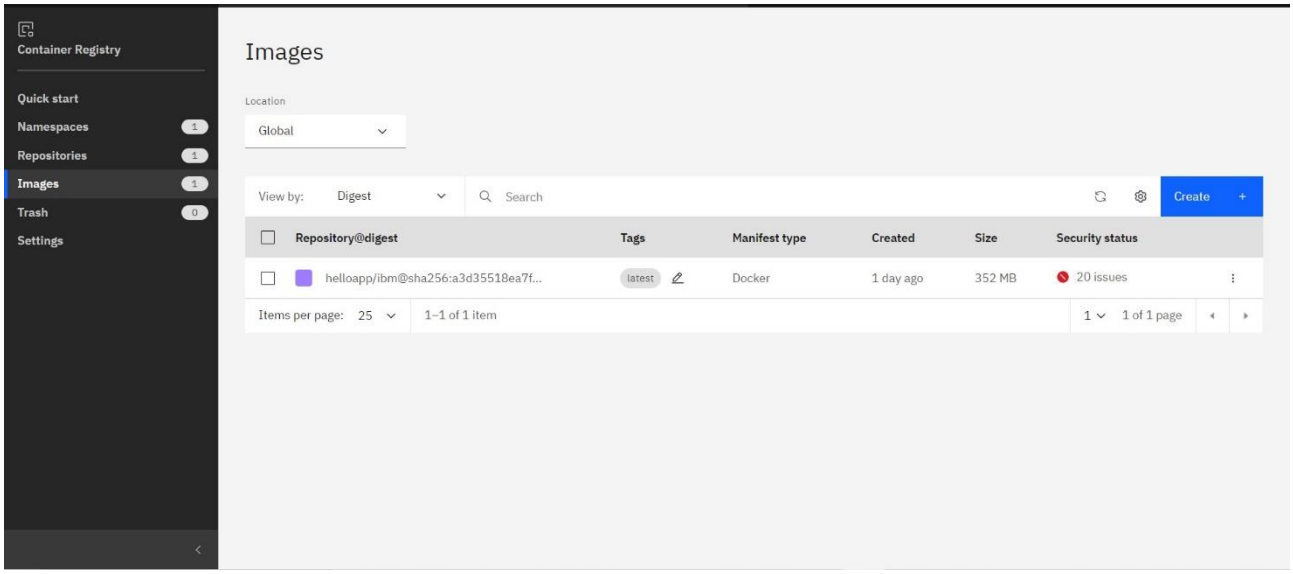
OUTPUT:



Question 3:

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

IBM CONTAINER REGISTRY DEPLOYMENT:

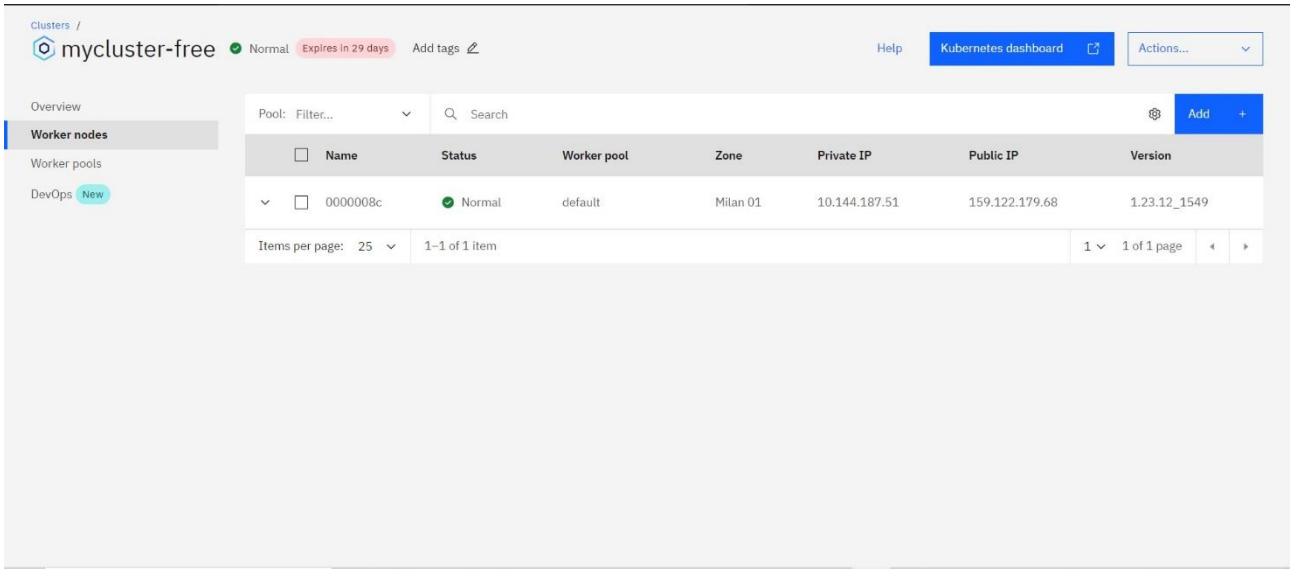


OUTPUT:

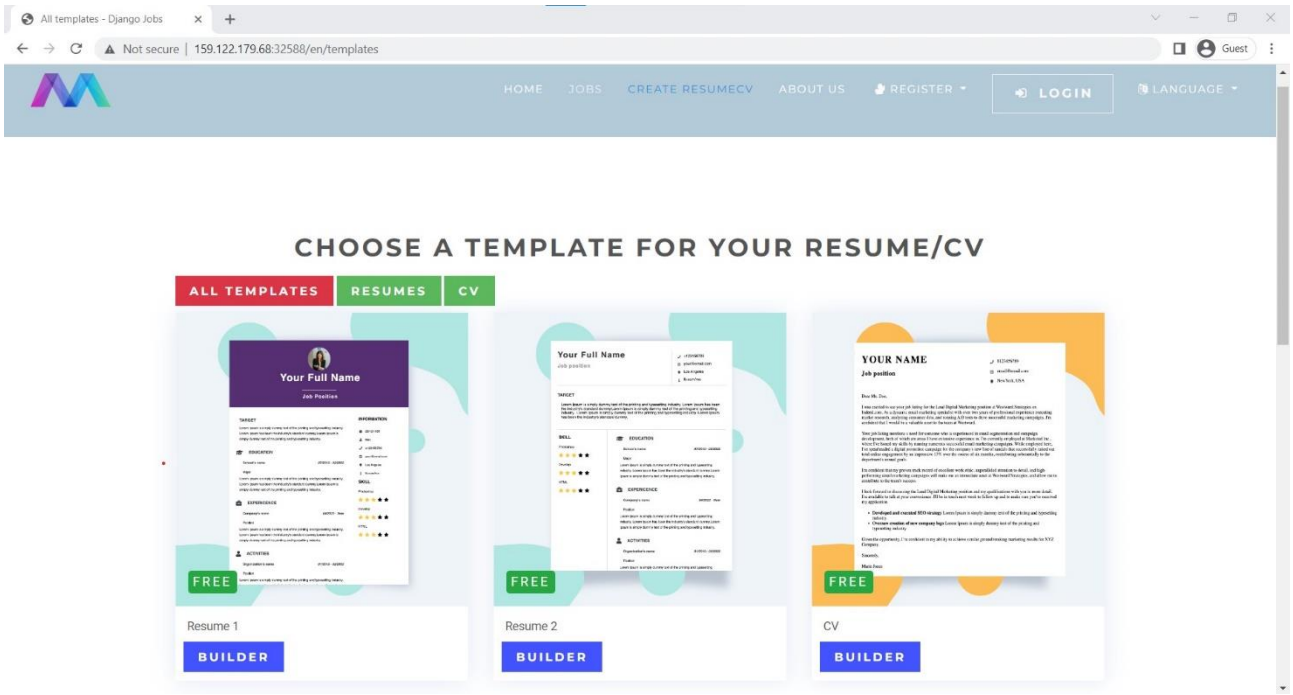
Question 4:

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

Creating kubernetes cluster in IBM cloud and exposing nodeport:



Output:


All templates - Django Jobs
Not secure | 159.122.179.68:32588/en/templates
Guest
HOME
JOBS
CREATE RESUMECV
ABOUT US
REGISTER
LOGIN
LANGUAGE
CHOOSE A TEMPLATE FOR YOUR RESUME/CV
ALL TEMPLATES
RESUMES
CV
Your Full Name
Job Position
FREE
Resume 1
BUILDER
Your Full Name
FREE
Resume 2
BUILDER
YOUR NAME
Job position
FREE
CV
BUILDER