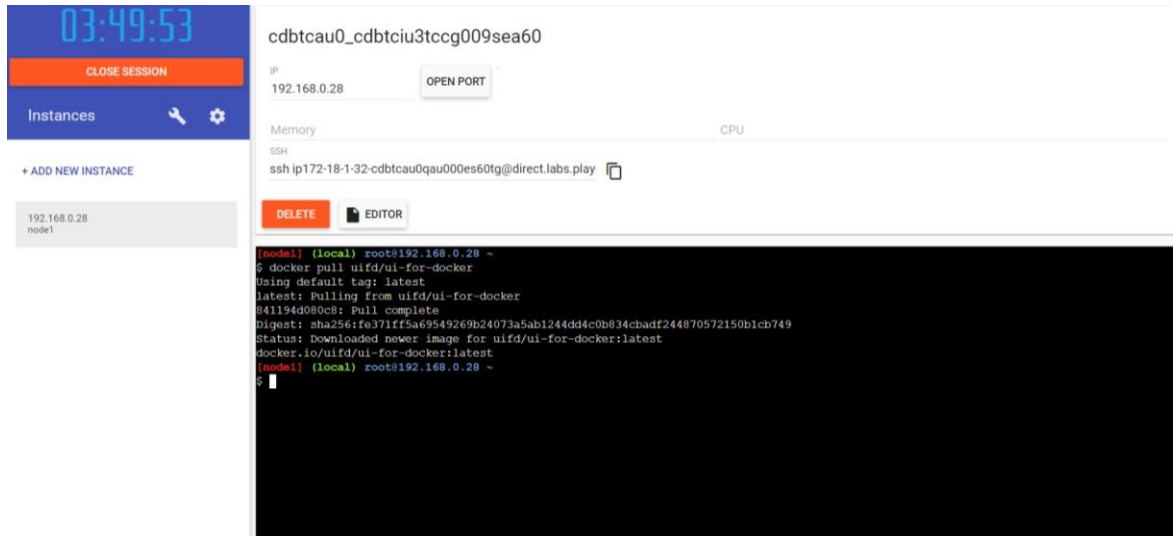


Assignment -4

Question 1:

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

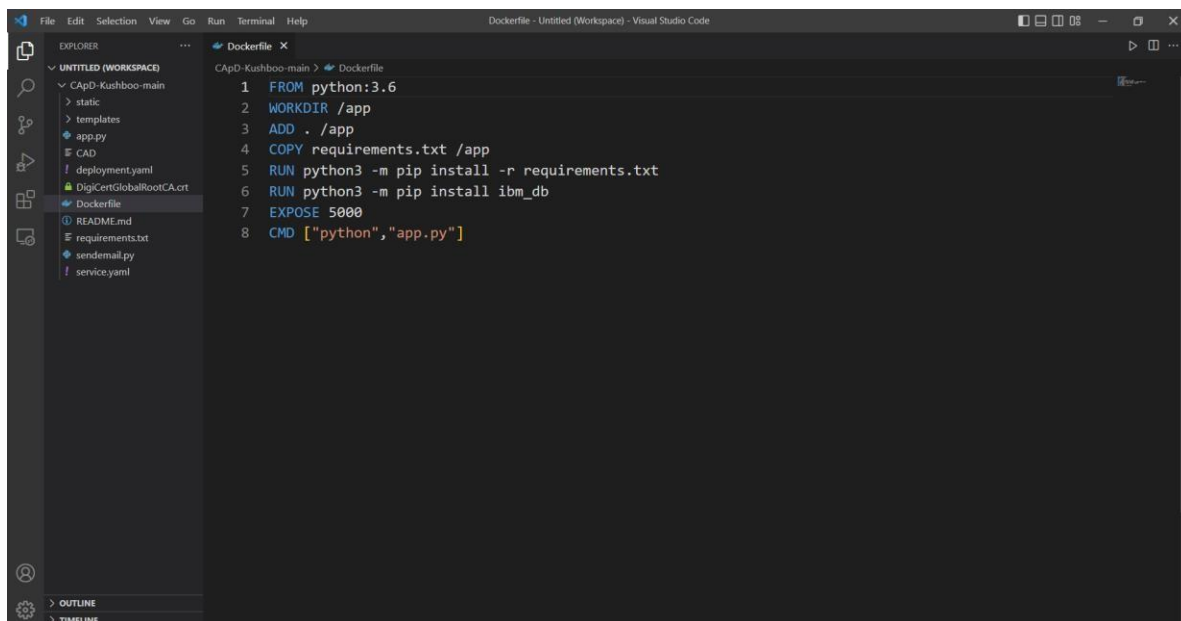


The screenshot shows the Docker Playground interface. On the left, there's a sidebar with a timer at 03:49:53, a 'CLOSE SESSION' button, and an 'Instances' section showing a single instance with IP 192.168.0.28 and name 'node1'. The main area displays the instance details, including the IP, an 'OPEN PORT' button, and an SSH command: `ssh ip172-18-1-32-cdbtcu0qau000es60tg@direct.labs.play`. Below this, there are 'DELETE' and 'EDITOR' buttons. The terminal window shows the following output:

```
(node1) (local) root@192.168.0.28 ~
$ docker pull uifd/ui-for-docker
Using default tag: latest
latest: Pulling from uifd/ui-for-docker
841194d080c8: Pull complete
Digest: sha256:fe371ff5a69549269b34073a5ab1244dd4c0b834chadf244870572150b1cb749
Status: Downloaded newer image for uifd/ui-for-docker:latest
docker.io/uifd/ui-for-docker:latest
(node1) (local) root@192.168.0.28 ~
$
```

Question 2:

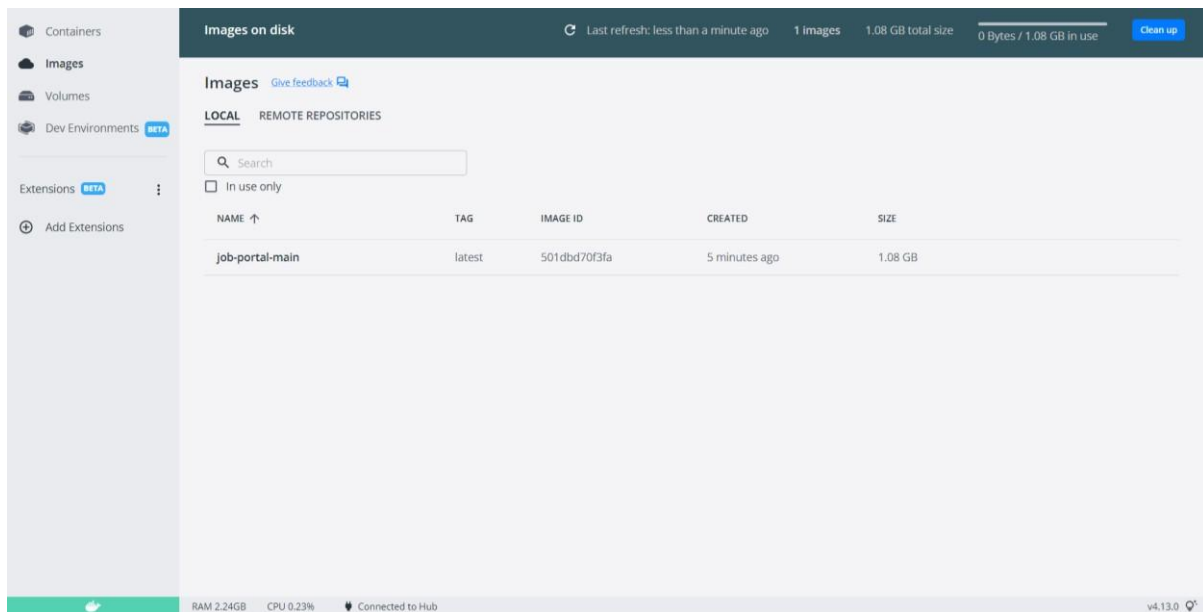
2. Create a docker file for the jobportal application and deploy it in Docker desktop application.



The screenshot shows a Visual Studio Code editor with a Dockerfile open. The Dockerfile content is as follows:

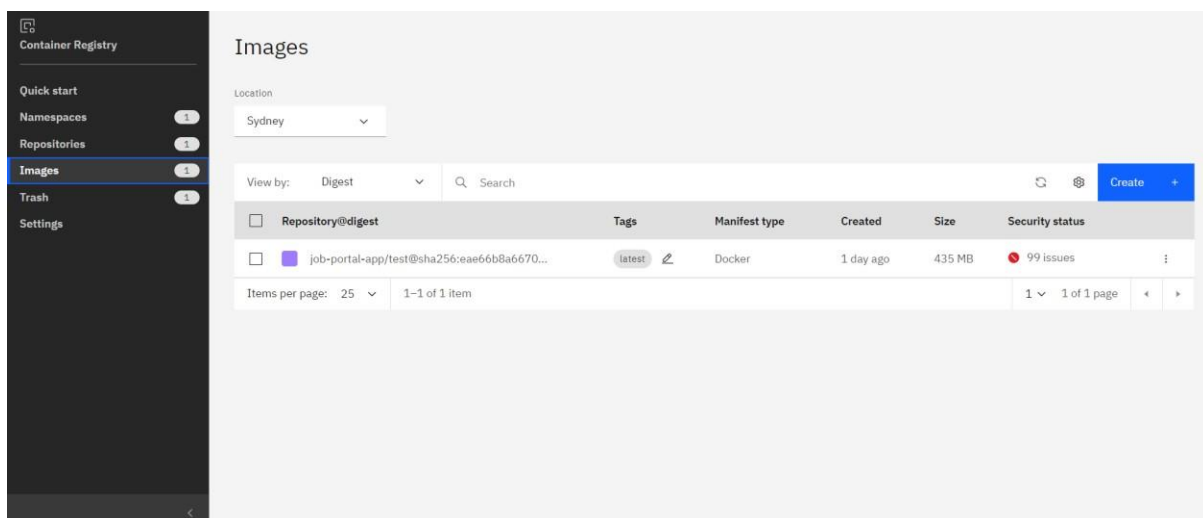
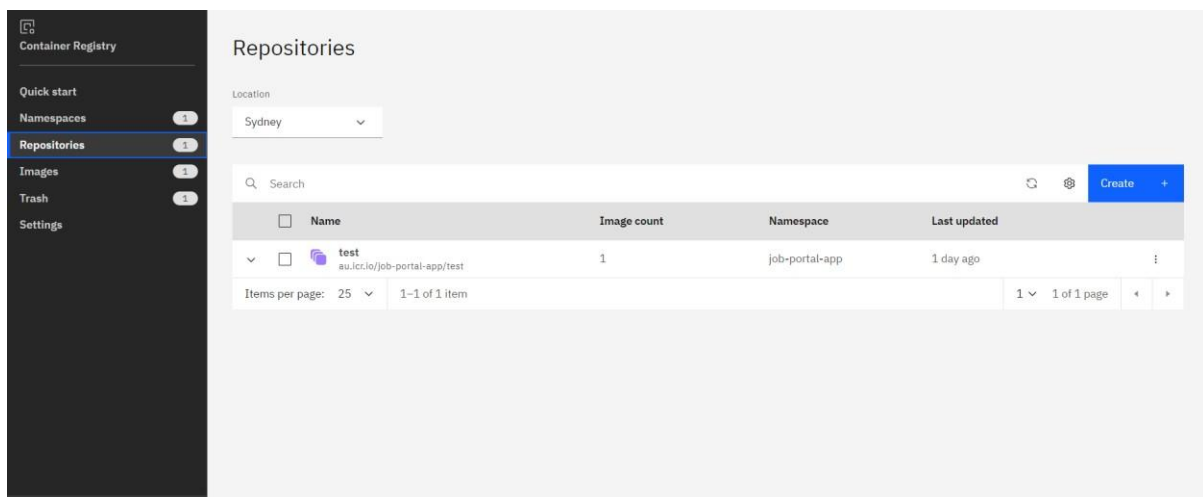
```
1 FROM python:3.6
2 WORKDIR /app
3 ADD . /app
4 COPY requirements.txt /app
5 RUN python3 -m pip install -r requirements.txt
6 RUN python3 -m pip install ibm_db
7 EXPOSE 5000
8 CMD ["python", "app.py"]
```

The left sidebar shows the Explorer view with a file tree for 'UNTITLED (WORKSPACE)' containing files like 'static', 'templates', 'app.py', 'CAD', 'deployment.yaml', 'Dockerfile', 'README.md', 'requirements.txt', 'sendemail.py', and 'service.yaml'.



Question 3:

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



```
Command Prompt - docker run -p 5000:5000 au.icr.io/job-portal-app/test

C:\Users\user>docker push job-portal-main au.icr.io/job-portal-app/test
"docker push" requires exactly 1 argument.
See 'docker push --help'.

Usage: docker push [OPTIONS] NAME[:TAG]

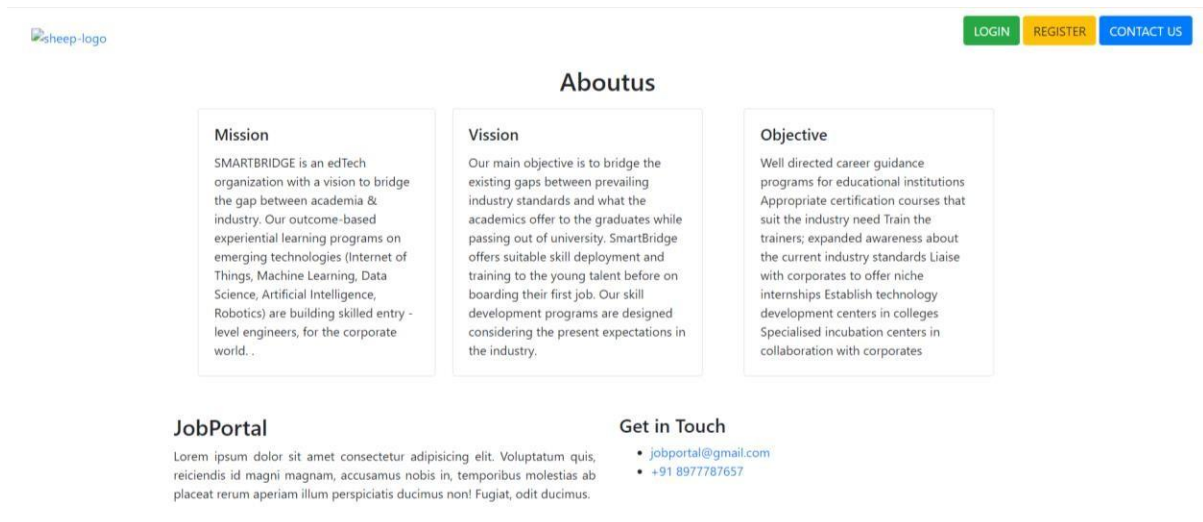
Push an image or a repository to a registry

C:\Users\user>docker tag job-portal-main au.icr.io/job-portal-app/test

C:\Users\user>docker push au.icr.io/job-portal-app/test
Using default tag: latest
The push refers to repository [au.icr.io/job-portal-app/test]
90ff7c020340: Mounted from job-portal-app/testrepo
bcb3c2cf4fb: Mounted from job-portal-app/testrepo
8667e693b201: Mounted from job-portal-app/testrepo
a347e8dcdb45: Mounted from job-portal-app/testrepo
789453578d11: Mounted from job-portal-app/testrepo
aad4c808c19f6: Mounted from job-portal-app/testrepo
8ba9f690a8a2: Mounted from job-portal-app/testrepo
3e60459ef9f: Mounted from job-portal-app/testrepo
1e18e7efcc2: Mounted from job-portal-app/testrepo
c3a8d593ed24: Mounted from job-portal-app/testrepo
20a504ed3be4: Mounted from job-portal-app/testrepo
8bf428bde72: Mounted from job-portal-app/testrepo
31892cc314cb: Mounted from job-portal-app/testrepo
11936051f93b: Mounted from job-portal-app/testrepo
latest: digest: sha256:eae66b8a670d0f8f4a8fab20d08acc277b93348a54e0755caa586242ba2c01b size: 3259

C:\Users\user>docker pull au.icr.io/job-portal-app/test
Using default tag: latest
latest: Pulling from job-portal-app/test
Digest: sha256:eae66b8a670d0f8f4a8fab20d08acc277b93348a54e0755caa586242ba2c01b
Status: Image is up to date for au.icr.io/job-portal-app/test:latest
au.icr.io/job-portal-app/test:latest

C:\Users\user>docker run -p 5000:5000 au.icr.io/job-portal-app/test
* Serving Flask app 'app' (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: off
* Running on all addresses.
  WARNING: This is a development server. Do not use it in a production deployment.
* Running on http://172.17.0.2:5000/ (Press CTRL+C to quit)
172.17.0.1 - - [27/Oct/2022 13:43:20] "GET / HTTP/1.1" 200 -
172.17.0.1 - - [27/Oct/2022 13:43:20] "GET /css/style.css HTTP/1.1" 404 -
172.17.0.1 - - [27/Oct/2022 13:43:21] "GET /static/img/smartinternz.png HTTP/1.1" 404 -
```



Question 4:

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.

