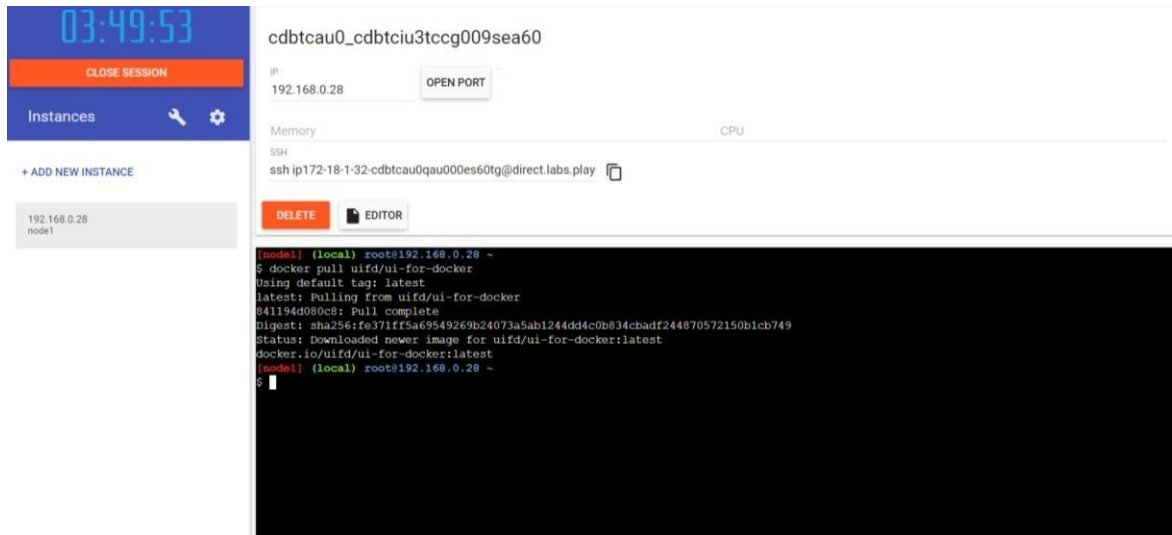


## Assignment -4

## Question 1:

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

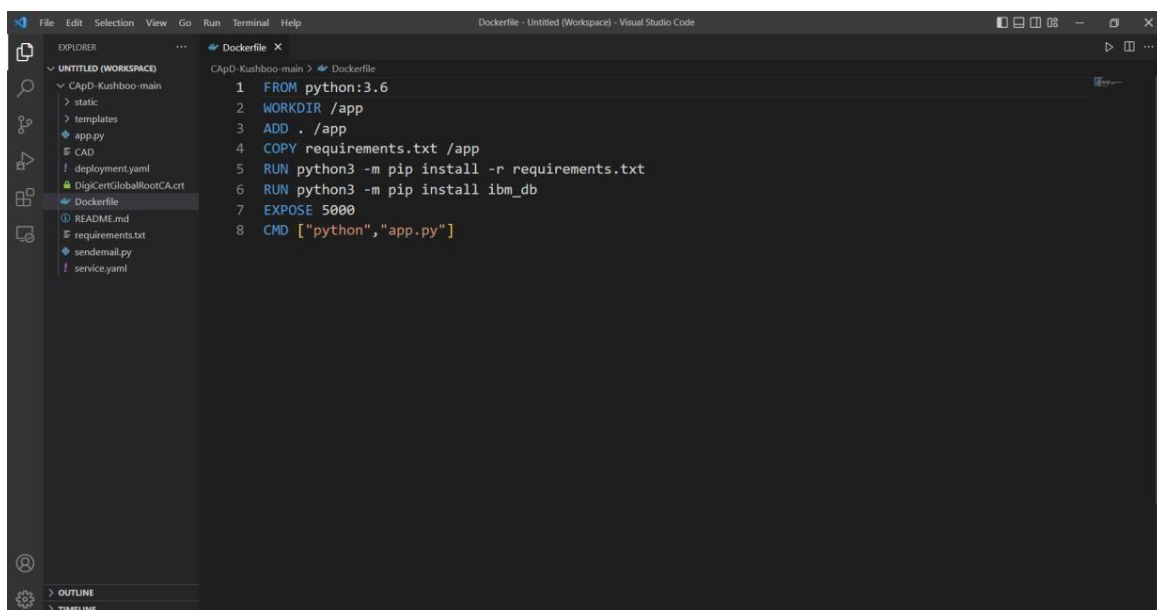


The screenshot shows the Docker Playground interface. On the left, there's a sidebar with a clock showing 03:49:53, a 'CLOSE SESSION' button, and a list of instances. The main area displays the session details for 'cdbtcrau0\_cdbtcrau3tccg009sea60' with IP '192.168.0.28'. Below this, there's a terminal window showing the command 'docker pull uifd/ui-for-docker' and its 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:fe371ff5a69849269b24073a5ab1244dd4c0b834cbadf244870572150b1cb749
Status: Downloaded newer image for uifd/ui-for-docker:latest
docker.io/uifd/ui-for-docker:latest
[node1] (local) root@192.168.0.28 ~
```

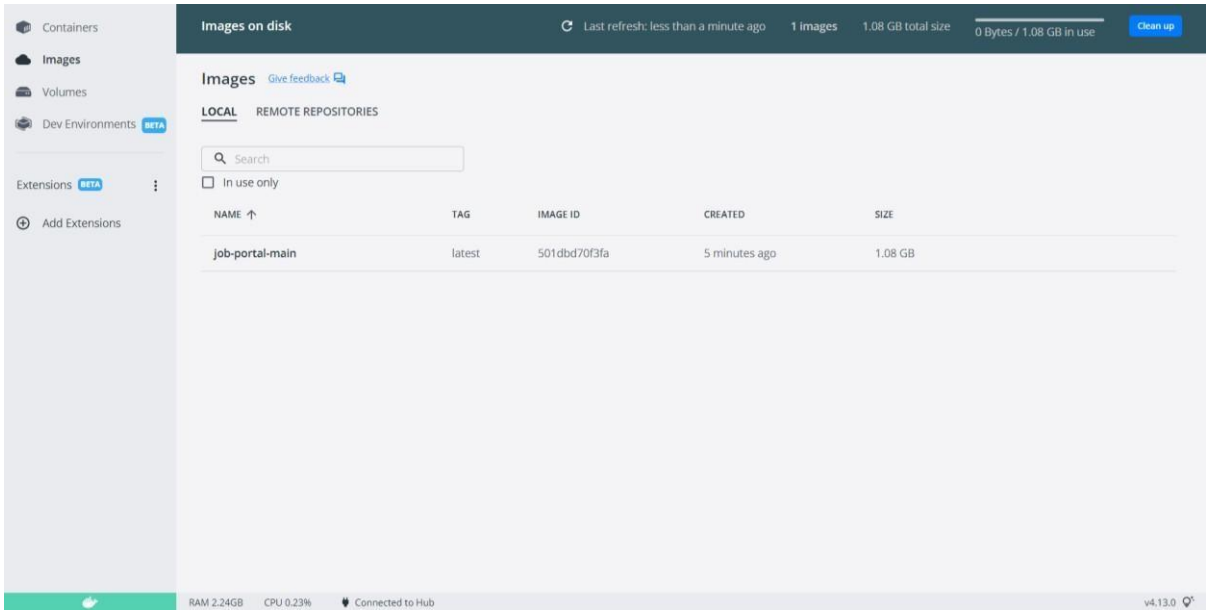
## Question 2:

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



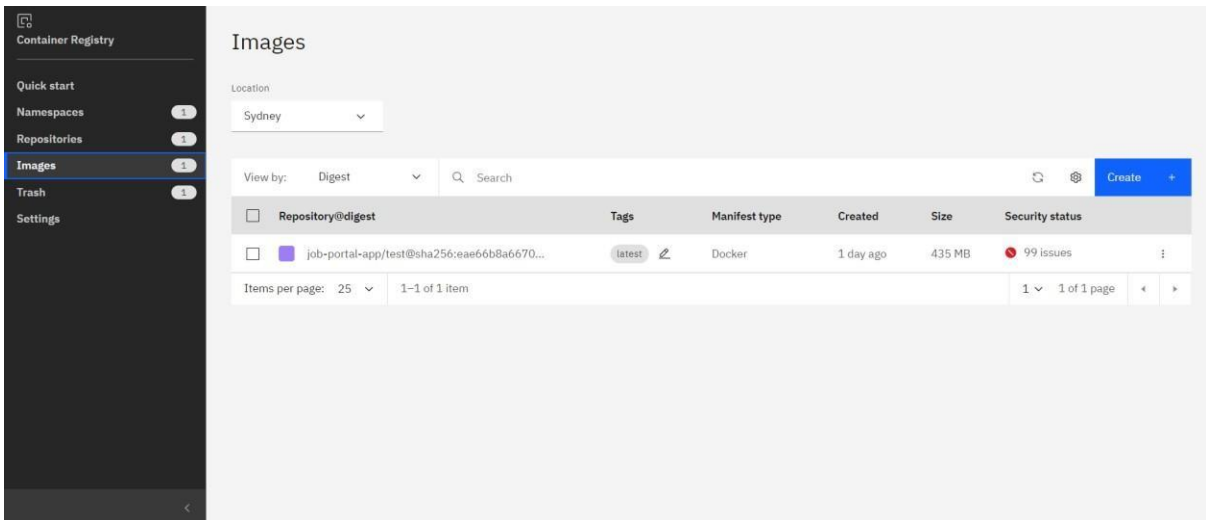
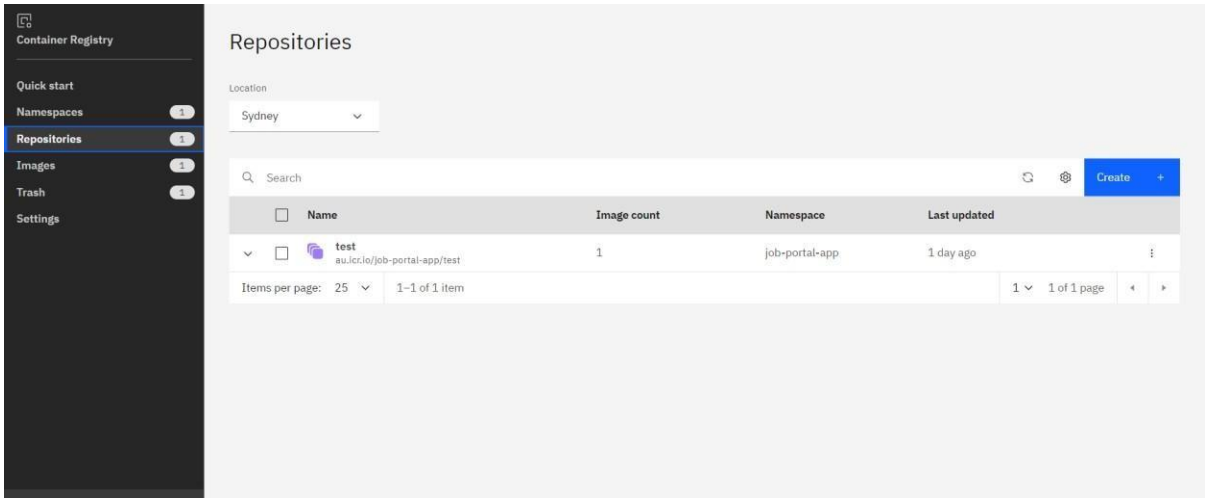
The screenshot shows the Visual Studio Code editor with a Dockerfile open. The Dockerfile content is as follows:

```
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"]
```



Question 3:

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



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```
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]

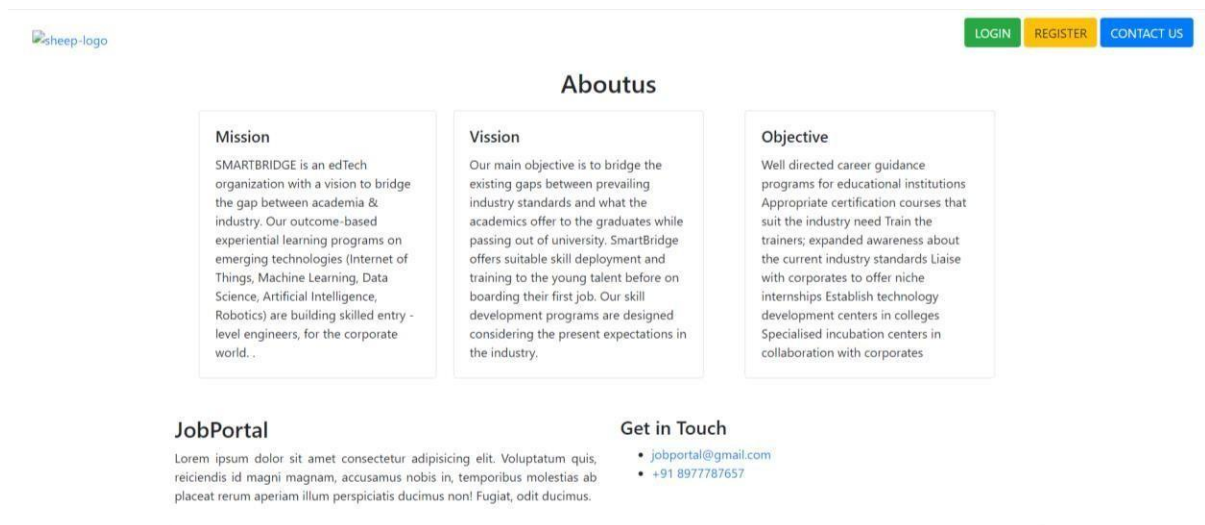
Push an image or a repository to a registry

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
beb3c3cf40b: Mounted from job-portal-app/testrepo
8667e693b201: Mounted from job-portal-app/testrepo
a34f7e8dc8d5: Mounted from job-portal-app/testrepo
789453578d11: Mounted from job-portal-app/testrepo
aad4c808c19f6: Mounted from job-portal-app/testrepo
8ba9f690a8ba: Mounted from job-portal-app/testrepo
3e60d59ef9f: Mounted from job-portal-app/testrepo
1e18e7efcc2: Mounted from job-portal-app/testrepo
c3a8d593ed24: Mounted from job-portal-app/testrepo
26504ed03e4: 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:ea66b8a6670d0f8f4a8fab20d08acc277b93348a54e0755caa586242ba2c01b 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:ea66b8a6670d0f8f4a8fab20d08acc277b93348a54e0755caa586242ba2c01b
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.

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The screenshot shows the IBM Cloud Kubernetes dashboard for a cluster named 'mycluster-free'. The cluster is in a 'Preparing master, workers...' state and is set to expire in 30 days. The dashboard displays the following information:

- Node status:** 1 of 1 Pending
- Add-on status:** Error (Unknown)
- Master status:** Unknown
- Ingress status:** Pending

**Details:**

- Cluster ID: cdq86d5f0g0g53c17iig
- Version: 1.24.7\_1542
- Infrastructure: Classic
- Zones: Milan 01
- Created: 11/16/2022, 11:59 AM
- Resource group: [Link]
- Image security enforcement: [Enable]

**Node health:** 1 total nodes

The dashboard also includes a sidebar with navigation links (Overview, Worker nodes, Worker pools, DevOps) and a right-hand help menu with links like 'Log in to your cluster', 'Deploy your app', etc.

The 'Aboutus' page for SMARTBRIDGE features a clean, modern design with a navigation bar at the top containing 'LOGIN', 'REGISTER', and 'CONTACT US' buttons. The page is divided into three main sections:

- Mission:** SMARTBRIDGE is an edTech organization with a vision to bridge the gap between academia & industry. Our outcome-based experiential learning programs on emerging technologies (Internet of Things, Machine Learning, Data Science, Artificial Intelligence, Robotics) are building skilled entry-level engineers, for the corporate world.
- Vission:** Our main objective is to bridge the existing gaps between prevailing industry standards and what the academics offer to the graduates while passing out of university. SmartBridge offers suitable skill deployment and training to the young talent before on boarding their first job. Our skill development programs are designed considering the present expectations in the industry.
- Objective:** Well directed career guidance programs for educational institutions. Appropriate certification courses that suit the industry need. Train the trainers; expanded awareness about the current industry standards. Liaise with corporates to offer niche internships. Establish technology development centers in colleges. Specialised incubation centers in collaboration with corporates.

**JobPortal:** Lorem ipsum dolor sit amet consectetur adipiscing elit. Voluptatum quis, reiciendis id magni magnam, accusamus nobis in, temporibus molestias ab placeat rerum aperiam illum perspiciatis ducimus non! Fugiat, odit ducimus.

**Get in Touch:**

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