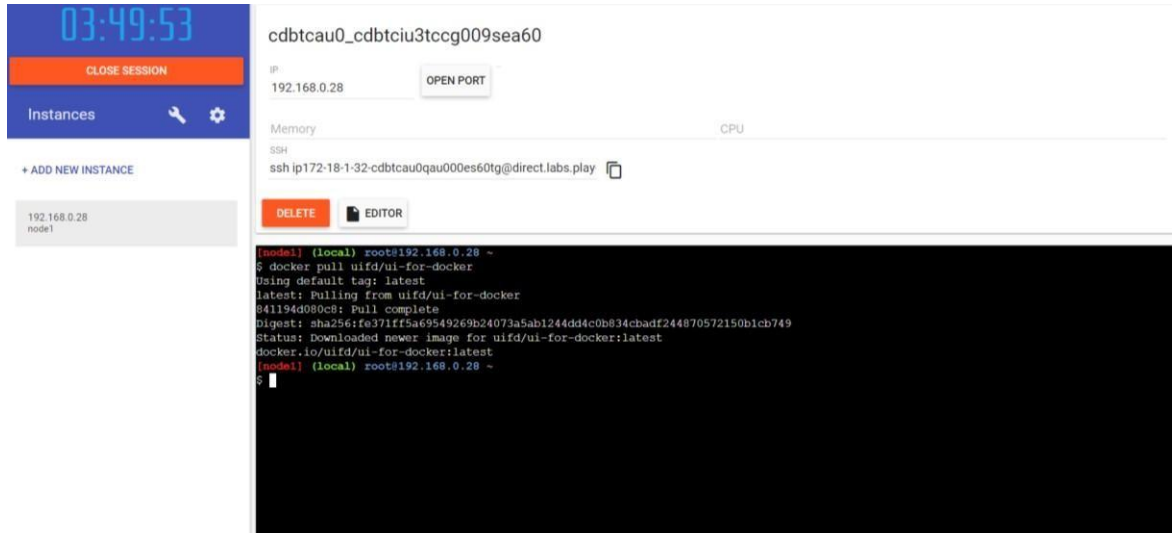


## Assignment -4

### Question 1:

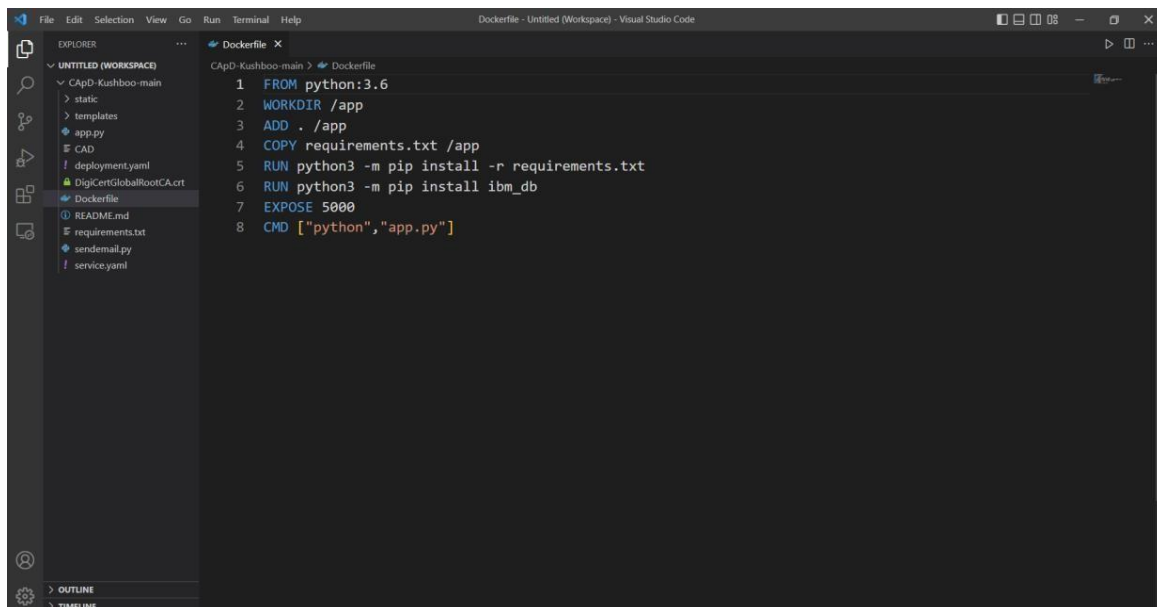
1. Pull an Image from docker hub and run it in docker playground



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 details for instance 'cdbtcrau0\_cdbtcrau3tccg009sea60' with IP '192.168.0.28'. Below this, there's a terminal window showing the command 'docker pull uifd/ui-for-docker' being executed. The output shows the image being pulled from Docker Hub, with the digest 'sha256:fe371ff5a69849269b24073a5ab1244dd4c0b834cbadf244870572150b1cb749' and the status 'Downloaded newer image for uifd/ui-for-docker:latest'.

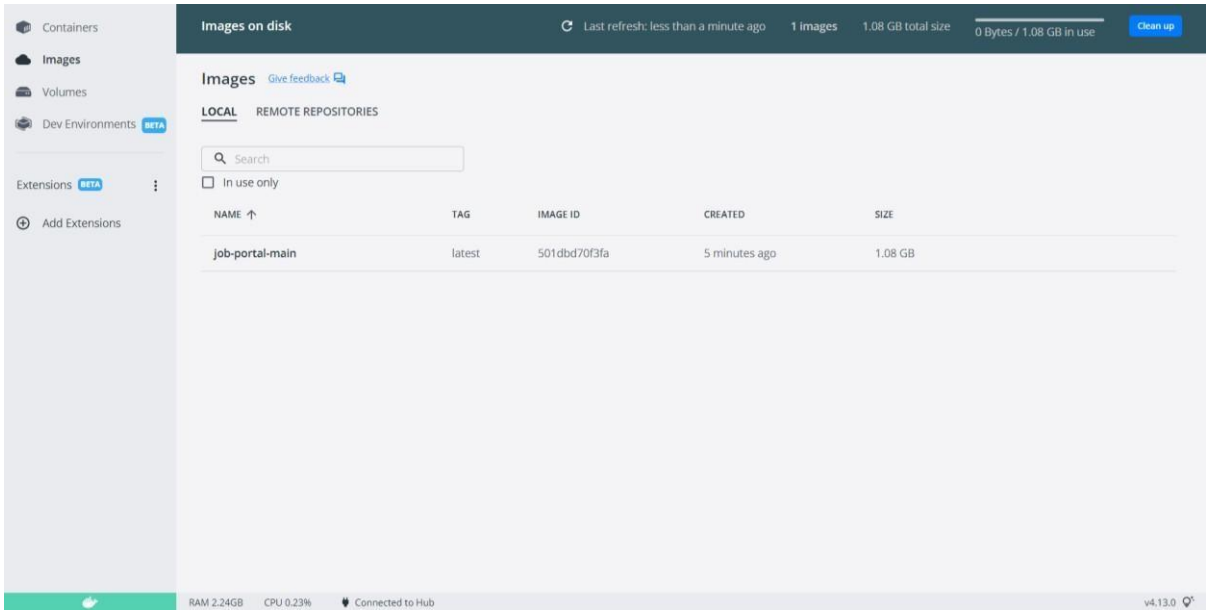
### Question 2:

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



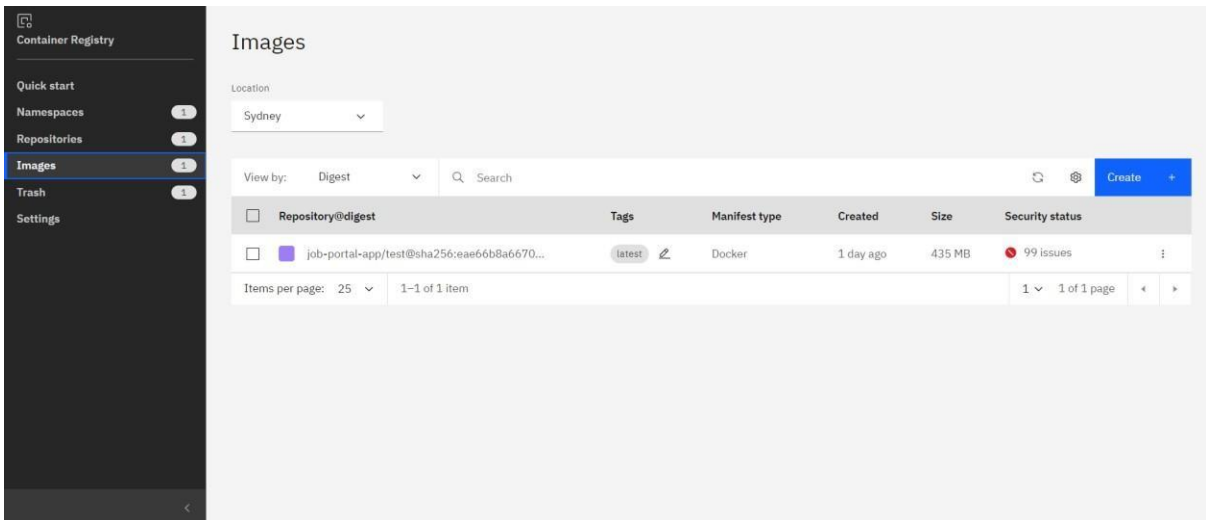
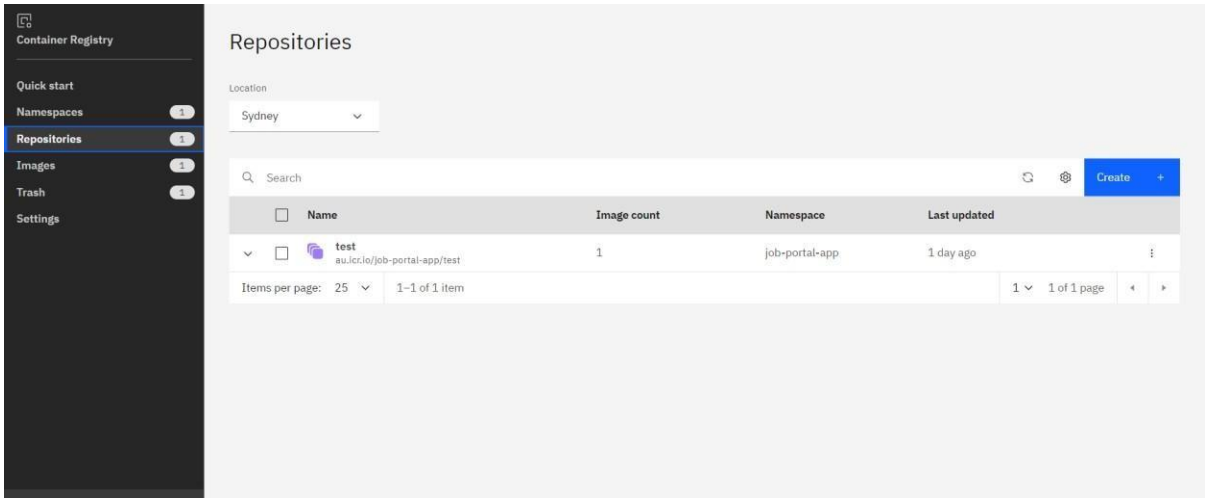
The screenshot shows the Visual Studio Code editor with a Dockerfile open. The Dockerfile contains the following instructions:

```
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.



```

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
eb3c3c3f40b: Mounted from job-portal-app/testrepo
8667e693b201: Mounted from job-portal-app/testrepo
a347e8dcb45: 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
26504ed03ed4: 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 -

```



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## Aboutus

### 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

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### Get in Touch

- jobportal@gmail.com
- +91 8977787657

## 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.

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: [Empty]
- 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.

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## JobPortal

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## Get in Touch

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