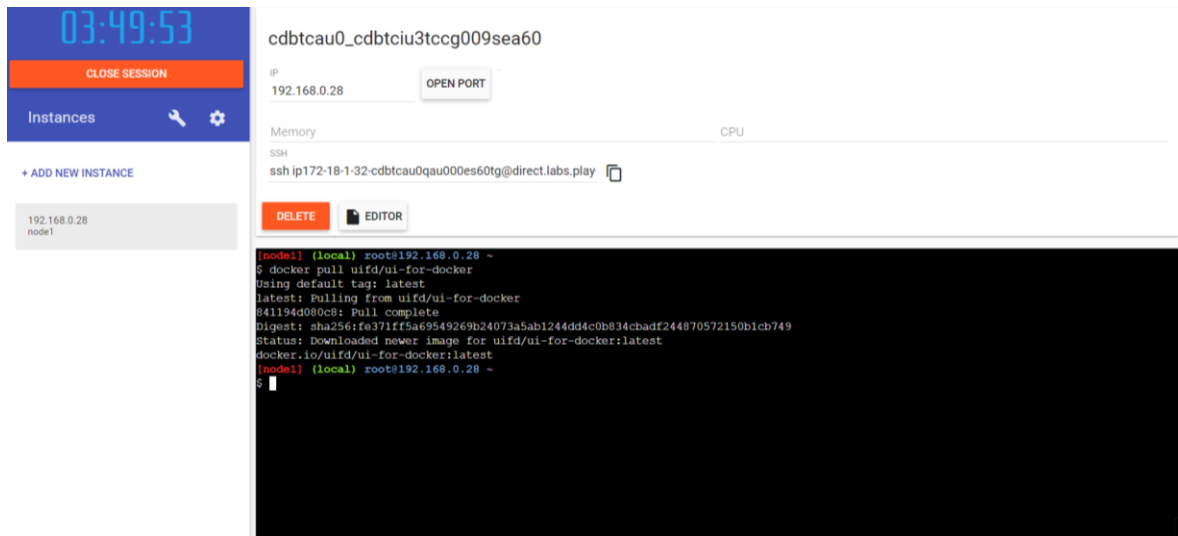


## Assignment -4

|                     |                 |
|---------------------|-----------------|
| Assignment Date     | 07 October 2022 |
| Student Name        | NITHYA SRI.V    |
| Student Roll Number | 311519205044    |
| Maximum Marks       | 2 Marks         |

### Question 1:

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

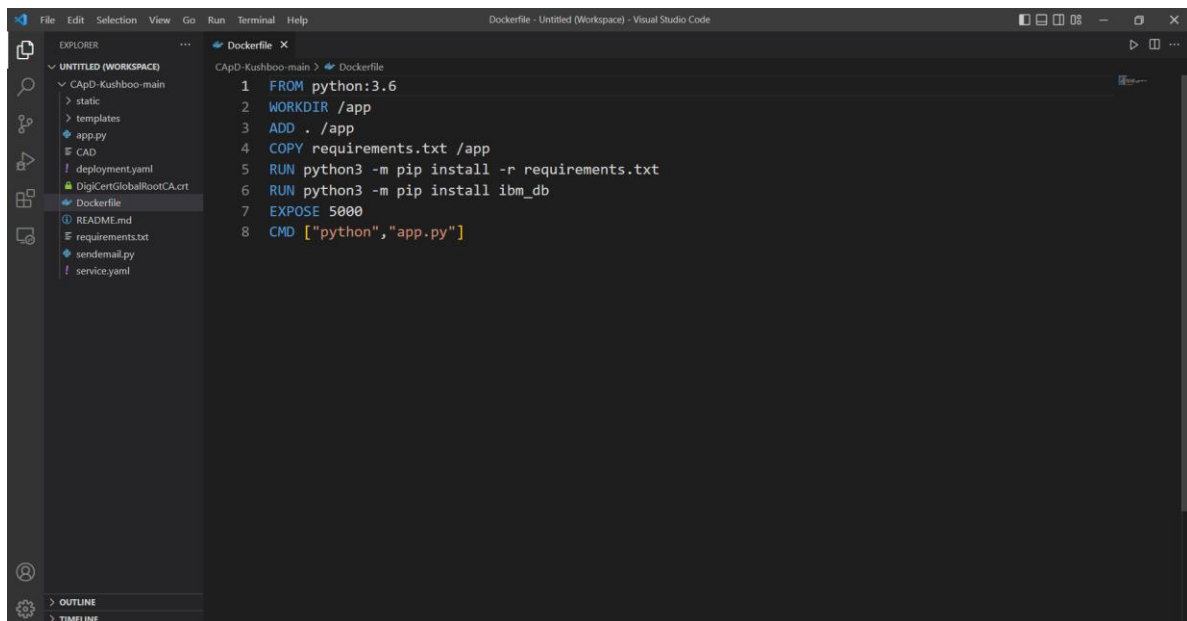


The screenshot shows the Docker Playground interface. On the left, there's a sidebar with a clock showing 03:49:53, a 'CLOSE SESSION' button, and a list of instances. The main area displays the instance details for 'cdbtcu0\_cdbtcui3tccg009sea60', including its IP (192.168.0.28) and an SSH command. Below this, a terminal window shows the following commands and 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:fe371ff5a69549269b24073a5ab1244dd4c0b834cbadf244870572150b1cb749
Status: Downloaded newer image for uifd/ui-for-docker:latest
docker.io/uifd/ui-for-docker:latest
[node1] (local) root@192.168.0.28 ~
```

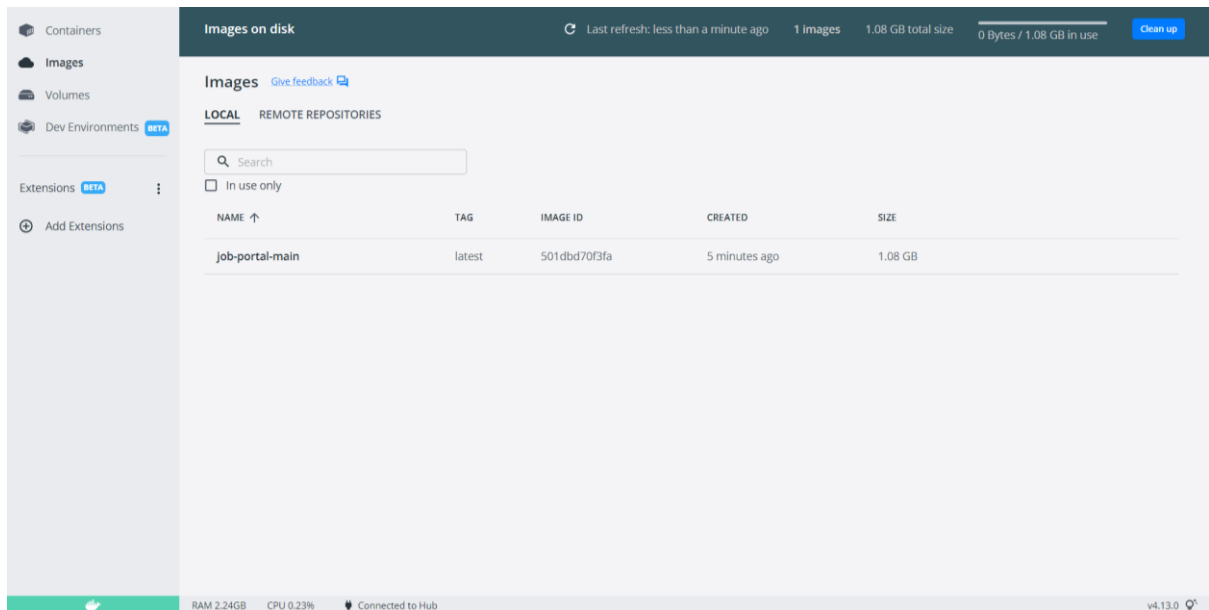
### Question 2:

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



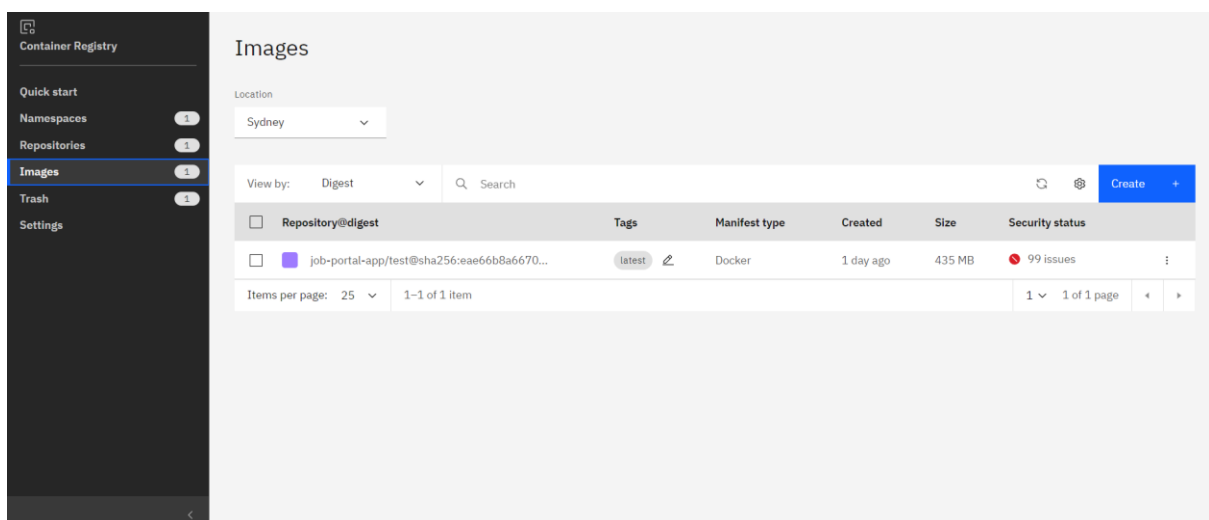
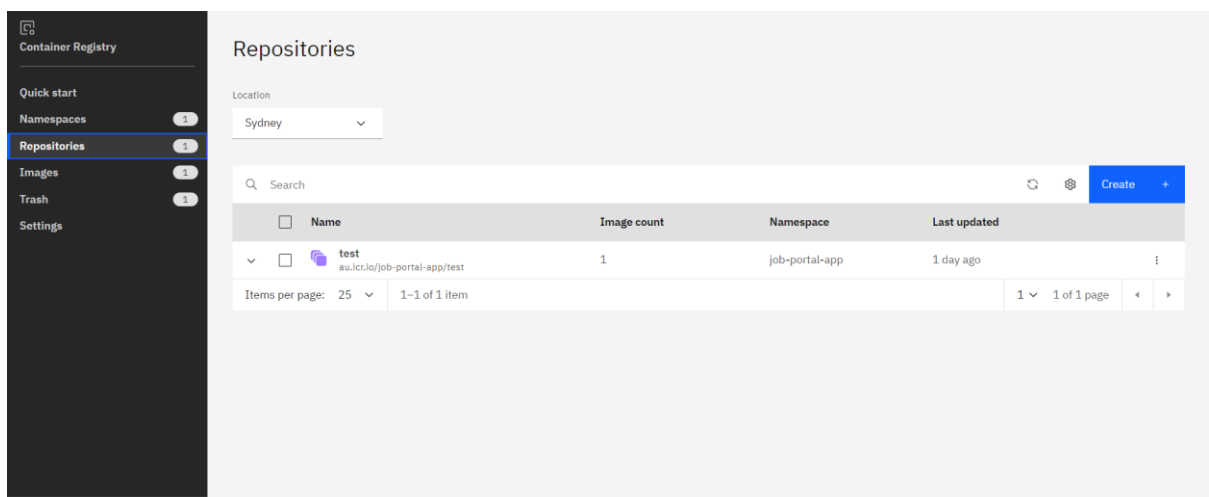
The screenshot shows the Visual Studio Code editor with a Dockerfile open. The Dockerfile contains the following instructions:

```
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
3eb3ce3cfa8b: Mounted from job-portal-app/testrepo
46b7e693b201: Mounted from job-portal-app/testrepo
a3d7e8dcb45: Mounted from job-portal-app/testrepo
789453578d11: Mounted from job-portal-app/testrepo
aa4c808c19f6: Mounted from job-portal-app/testrepo
8ba9ff09e08a: Mounted from job-portal-app/testrepo
3e07059ef9f: Mounted from job-portal-app/testrepo
1e18e7e1fcc2: Mounted from job-portal-app/testrepo
c3a0d593ed24: Mounted from job-portal-app/testrepo
26a504e03be4: Mounted from job-portal-app/testrepo
8bf42b0de72: Mounted from job-portal-app/testrepo
81892cc314cb: Mounted from job-portal-app/testrepo
11936051f93b: Mounted from job-portal-app/testrepo
latest: digest: sha256:eae66b8a6670d0f8f4a8fab20d08acc277b93348a54e0755caa586242ba2c01b 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:eae66b8a6670d0f8f4a8fab20d08acc277b93348a54e0755caa586242ba2c01b
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 -
```



LOGINREGISTERCONTACT US

## 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

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

### 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.

Clusters /

mycluster-free

Normal

Expires in 30 days

Add tags

Help

Kubernetes dashboard

Actions...

Overview

Worker nodes

Worker pools

DevOps New

Expires in 30 days:

Be sure to back up your data, your cluster will be deleted in 30 days. To access the full capabilities of the service, try out a [standard cluster](#).

Node status

1 of 1

Normal

Details

Add-on status

0 of 0

Normal

Details

Master status

Normal

Docs

Ingress status

Unknown

Docs

Details

Cluster ID

cdd9137f9ohzksau52o0

Version

1.23.13\_1550

Infrastructure

Classic

Zones

Milan 01

Created

27/10/2022, 7:37 pm

Resource group

Default

Image security enforcement

Enable

Node health

Worker node details

LOGIN

REGISTER

CONTACT US

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

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

jobportal@gmail.com

+91 8977787657