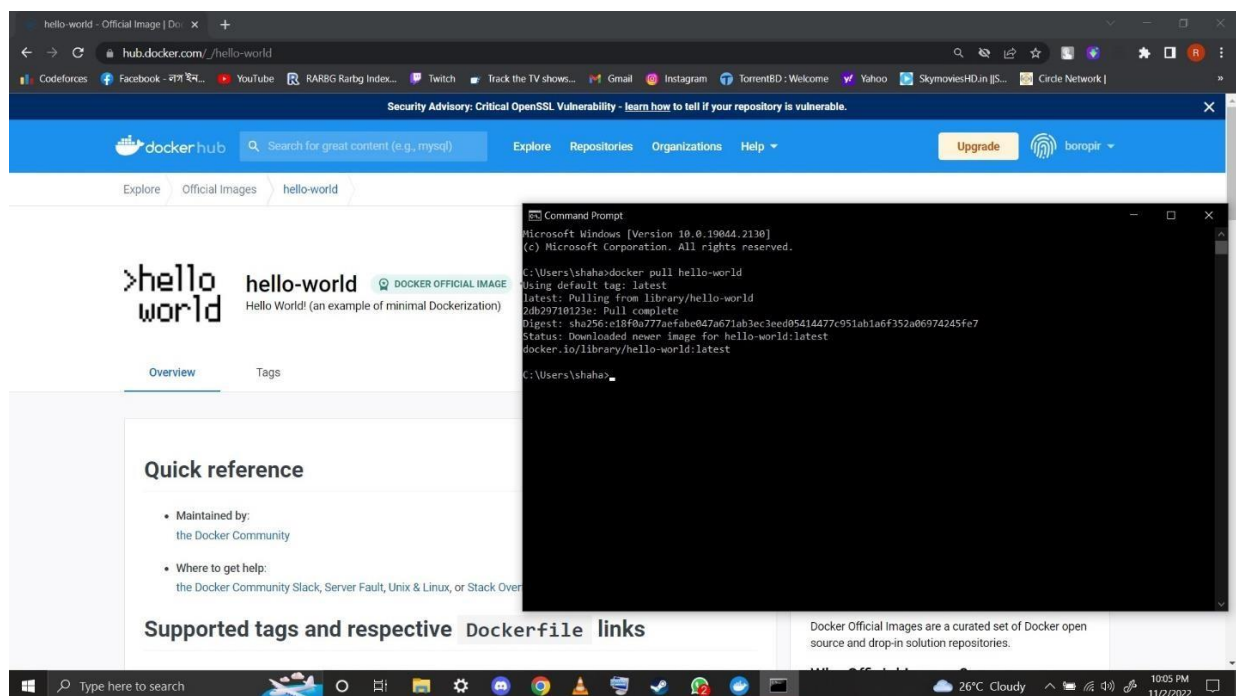
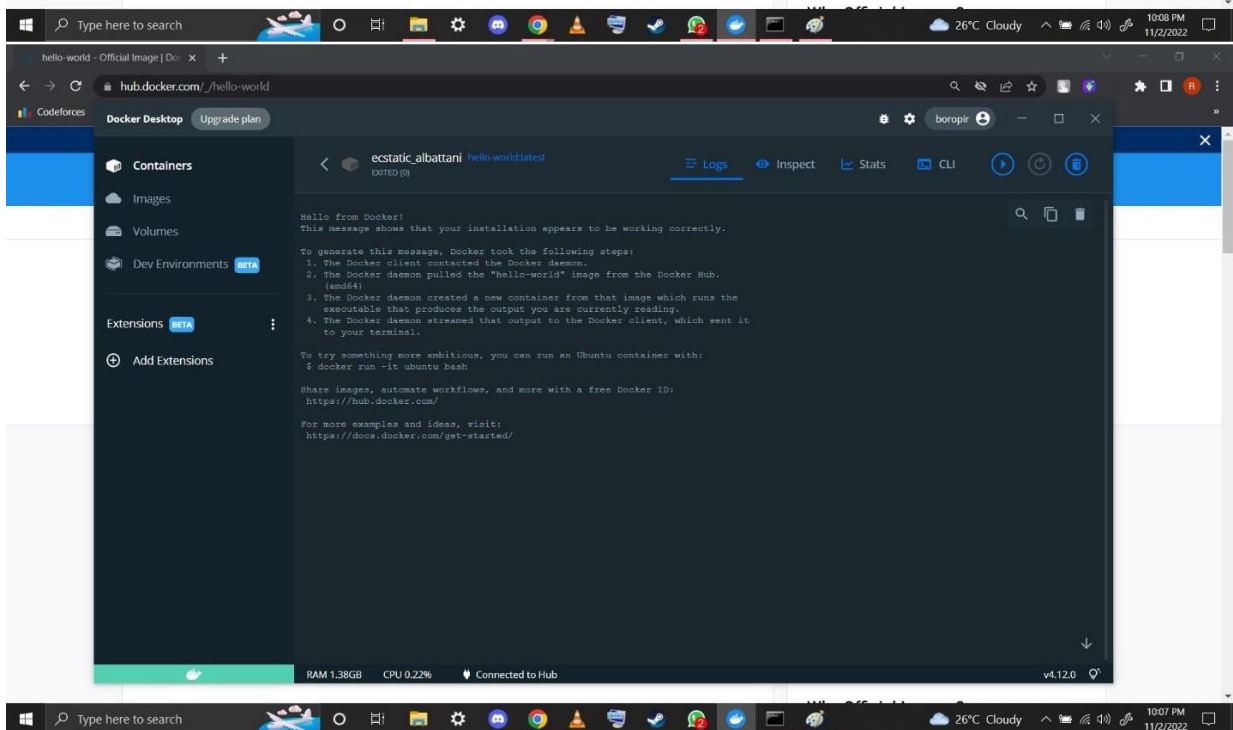
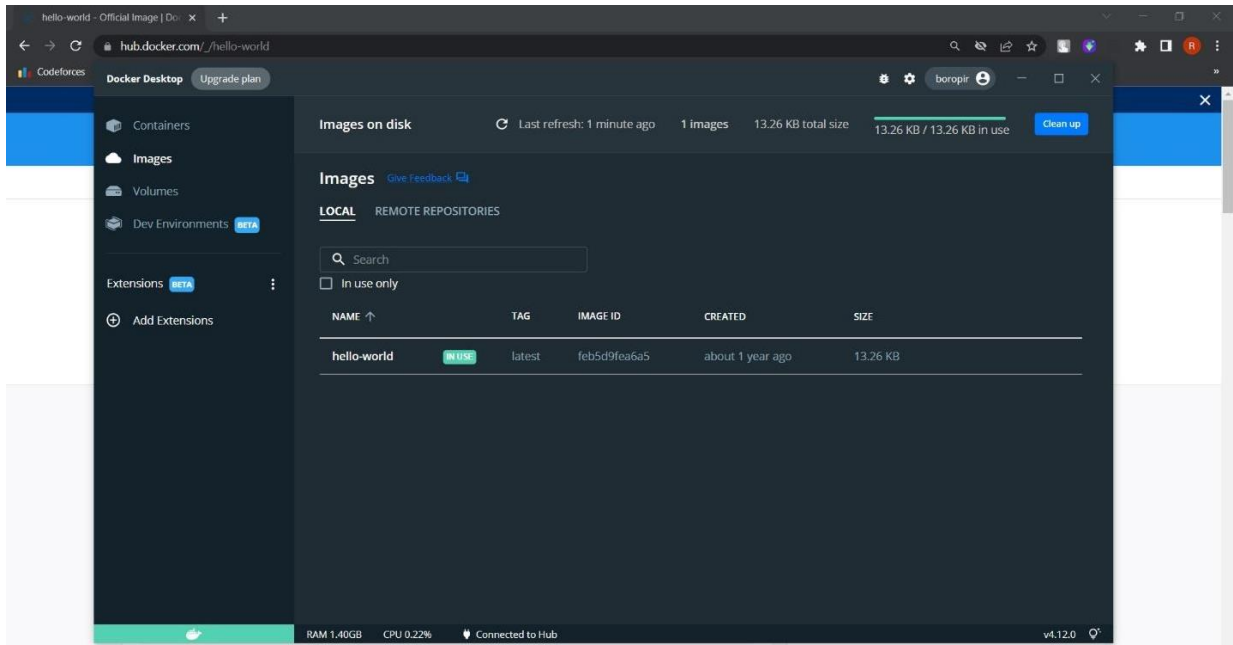


Assignment -4

Assignment Date	27 October 2022
Student Name	GODSON RAJ R
Student Roll Number	211419104079
Maximum Marks	2 Marks

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





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

Dockerfile:

FROM

python:3.6

WORKDIR

/app ADD. /app

COPY requirements.txt /app

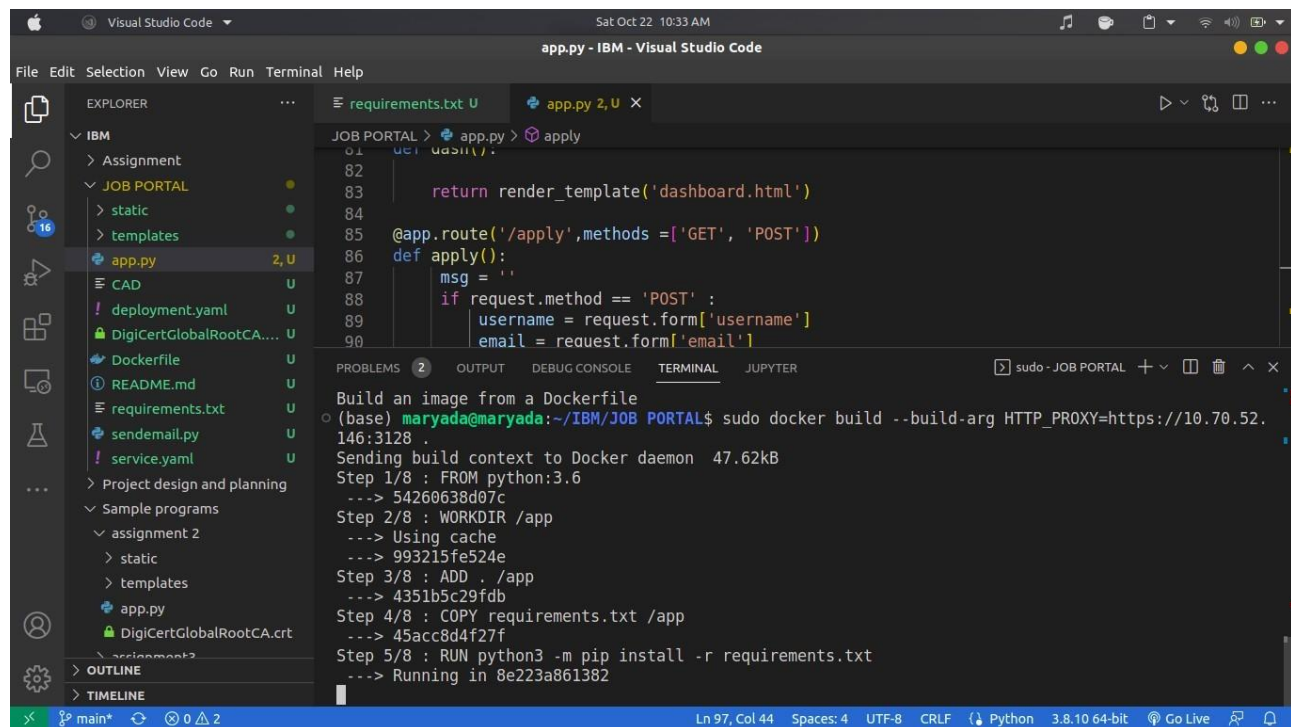
RUN python3 -m pip install -r

requirements.txt

install ibm_db

EXPOSE 5000

CMD ["python","app.py"]

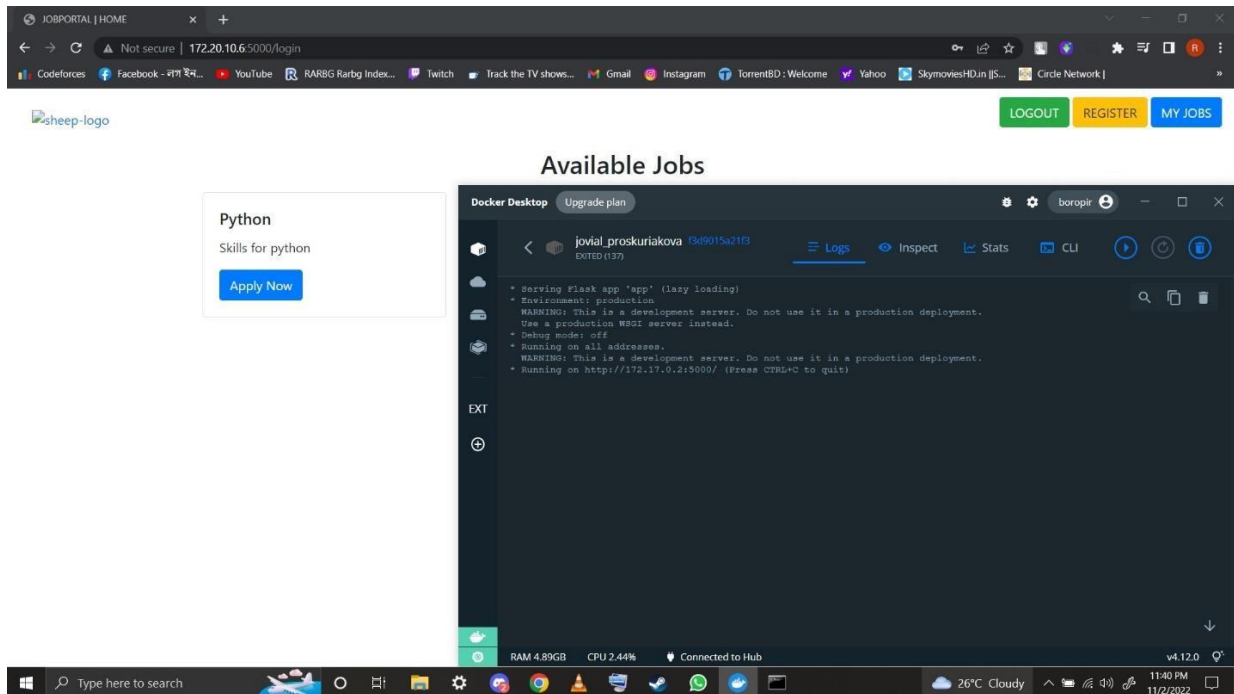


The screenshot shows the Visual Studio Code interface. The Explorer panel on the left displays a file tree for a project named 'JOB PORTAL'. The file 'app.py' is selected and open in the editor. The code in 'app.py' shows a Flask application with a route for '/apply' that renders a 'dashboard.html' template. The terminal at the bottom shows the command 'sudo docker build --build-arg HTTP_PROXY=https://10.70.52.146:3128 .' being executed, which builds a Docker image from the Dockerfile. The build output shows the following steps:

```
Build an image from a Dockerfile
(base) maryada@maryada:~/IBM/JOB PORTAL$ sudo docker build --build-arg HTTP_PROXY=https://10.70.52.146:3128 .
Sending build context to Docker daemon 47.62kB
Step 1/8 : FROM python:3.6
--> 54260638d07c
Step 2/8 : WORKDIR /app
--> Using cache
--> 993215fe524e
Step 3/8 : ADD . /app
--> 4351b5c29fdb
Step 4/8 : COPY requirements.txt /app
--> 45acc8d4f27f
Step 5/8 : RUN python3 -m pip install -r requirements.txt
--> Running in 8e223a861382
```

The screenshot shows the Visual Studio Code interface with a project named 'JOB PORTAL'. The Explorer sidebar on the left shows the file structure, including 'app.py', 'requirements.txt', 'Dockerfile', and 'deployment.yaml'. The main editor displays the code in 'app.py', which defines a Flask application with a single route '/apply' that renders 'dashboard.html'. The terminal at the bottom shows the command 'python app.py' being executed, followed by the successful building of a Docker image with ID '8b022ea43a31'. A table of installed Docker images is also visible:

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
<none>	<none>	8b022ea43a31	12 seconds ago	1.08GB
<none>	<none>	32695b39400c	26 minutes ago	902MB
python	3.6	54260638d07c	10 months ago	902MB
hello-world	latest	feb5d9fea6a5	13 months ago	13.3kB
sandeepdoodigani/sandeepplasmaapp	latest	5653112dee63	15 months ago	105MB



3. Create a IBM container registry and deploy job portal app.

```
Command Prompt
Microsoft Windows [Version 10.0.19044.2130]
(c) Microsoft Corporation. All rights reserved.

C:\Users\shaha>ibmcloud login
API endpoint: https://cloud.ibm.com

Email> 410619104029@smartinternz.com

Password>
Authenticating...
OK

Targeted account Raad Chowdhury's Account (3828f847bb644584acc551e935d0e383)

Select a region (or press enter to skip):
1. au-syd
2. in-che
3. jp-osa
4. jp-tok
5. kr-seo
6. eu-de
7. eu-gb
8. ca-tor
9. us-south
10. us-east
11. br-sao
Enter a number>

API endpoint: https://cloud.ibm.com
Region:
User: 410619104029@smartinternz.com
Account: Raad Chowdhury's Account (3828f847bb644584acc551e935d0e383)
Resource group: No resource group targeted, use 'ibmcloud target -g RESOURCE_GROUP'
CF API endpoint:
Org:
Space:

C:\Users\shaha>
```

```
Command Prompt
C:\Users\shaha>ibmcloud cr login
Logging 'docker' in to 'icr.io'...
Logged in to 'icr.io'.

OK

C:\Users\shaha>docker tag f3d9015a21f3 icr.io/shahibhasan/jobportal

C:\Users\shaha>docker push icr.io/shahibhasan/jobportal
Using default tag: latest
The push refers to repository [icr.io/shahibhasan/jobportal]
21d8888e119b: Pushed
ef5059251a61: Pushed
ba5fa7349894: Pushed
21a1dc0af441: Pushed
4c702597ab8c: Pushed
aad4c808c19f6: Pushed
8ba9f690e8ba: Pushed
3e60d59ef9f9: Pushed
1e18e7e11cc2: Pushed
c3a0d593ed24: Pushed
26a504e63be4: Pushed
8bf42db0de72: Pushed
31892cc314cb: Pushed
11936051493b: Pushed
latest: digest: sha256:910c91f1fe2226ae9306e48d02426c6c513bf54cfad9b960a8cb02bcb0926143 size: 3260

C:\Users\shaha>
```

Google Chrome

Sat Oct 22 11:07 AM

IBM Cloud Container Registry

cloud.ibm.com/registry/repos

how to use sn... Join conversat... Folder - Googl...

IBM Cloud

Search resources and products...

Catalog Manage MARYADA KUMAR LOD...

Container Registry

Quick start

Namespaces 0

Repositories 0

Images 0

Trash 0

Settings

Repositories


Location

Global

Search

Create

<input type="checkbox"/>	Name	Image count	Namespace	Last updated
--------------------------	------	-------------	-----------	--------------



Repositories

Your repositories will live here after you install the command line and push your first image.

Google Chrome

Sat Oct 22 11:09 AM

IBM Cloud Container Registry

cloud.ibm.com/registry/repos

how to use sn... Join conversat... Folder - Googl...

IBM Cloud

Search resources and products...

Catalog Manage MARYADA KUMAR LOD...

Container Registry

Quick start

Namespaces 1

Repositories 1

Images 1

Trash 0

Settings


Repositories

Location

Global

Search

Create

<input type="checkbox"/>	Name	Image count	Namespace	Last updated
<input checked="" type="checkbox"/>	 jobportal icr.io/maryada/jobportal	1	maryada	1 hour ago

Items per page: 25 1-1 of 1 item 1 1 of 1 page

4. Create a Kubernetes cluster in IBM cloud and deploy job portal image and also expose the same app to run in nodeport.

