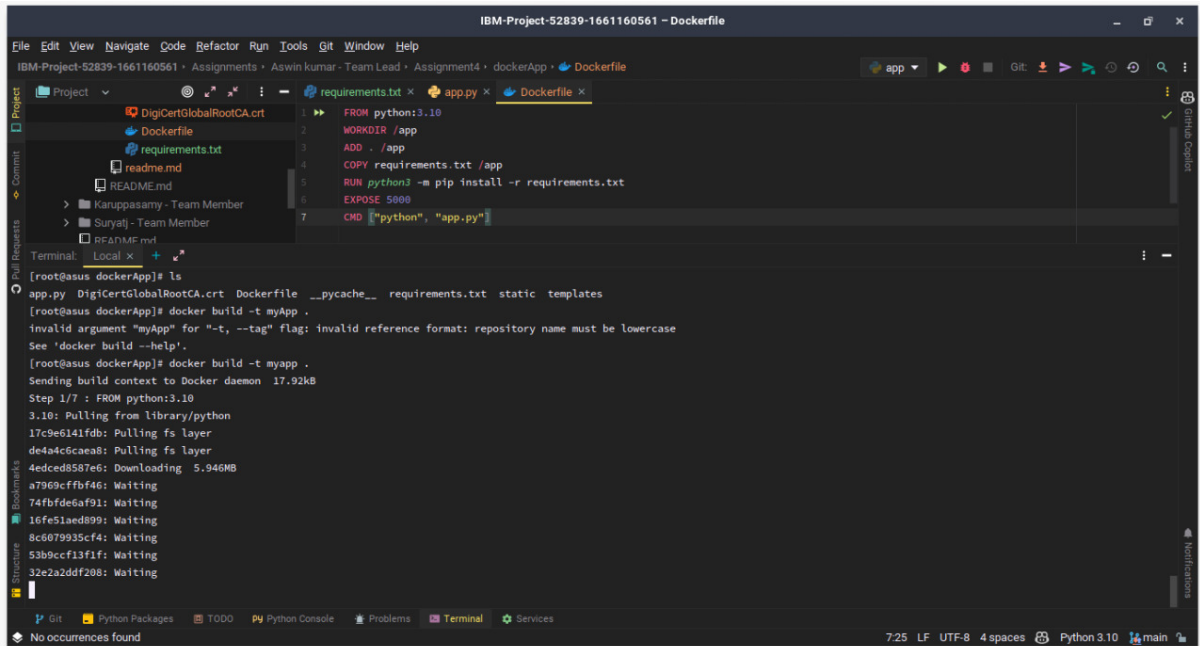


Assignment -4

Student Name	P.Abiruban
Student Roll Number	951919CS005
Maximum Marks	2 Marks

Question-1:

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

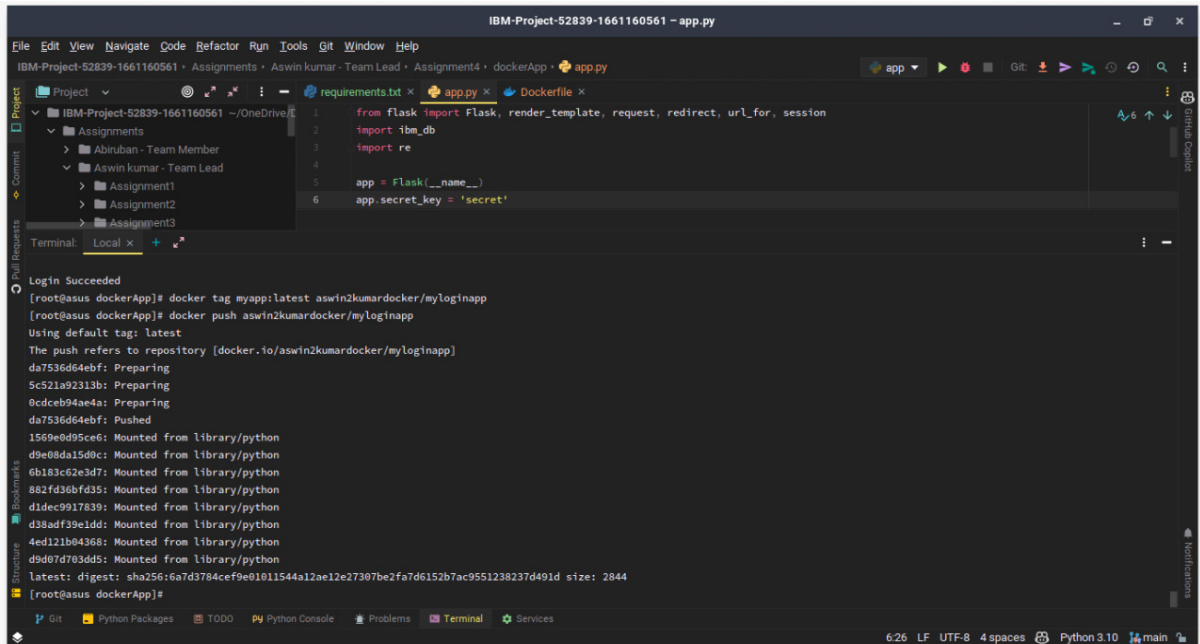


The screenshot shows the VS Code editor with a Dockerfile open. The Dockerfile contains the following instructions:

```
1 FROM python:3.10
2 WORKDIR /app
3 ADD . /app
4 COPY requirements.txt /app
5 RUN python3 -m pip install -r requirements.txt
6 EXPOSE 5000
7 CMD ["python", "app.py"]
```

The terminal output shows the following commands and results:

```
[root@asus dockerApp]# ls
app.py  DigiCertGlobalRootCA.crt  Dockerfile  __pycache__  requirements.txt  static  templates
[root@asus dockerApp]# docker build -t myApp .
Invalid argument "myApp" for "-t, --tag" flag: invalid reference format: repository name must be lowercase
See 'docker build --help'.
[root@asus dockerApp]# docker build -t myapp .
Sending build context to Docker daemon 17.92kB
Step 1/7 : FROM python:3.10
3.10: Pulling from library/python
17c9e6141fdb: Pulling fs layer
de4a4c6caeb8: Pulling fs layer
4edced8587e6: Downloading 5.946MB
a7969c9ffb746: Waiting
74fbfde6af91: Waiting
16fe51aed899: Waiting
8c6079935cf4: Waiting
53b9ccf131f1: Waiting
32e2a2ddf208: Waiting
```



The screenshot shows the VS Code editor with app.py open. The app.py file contains the following code:

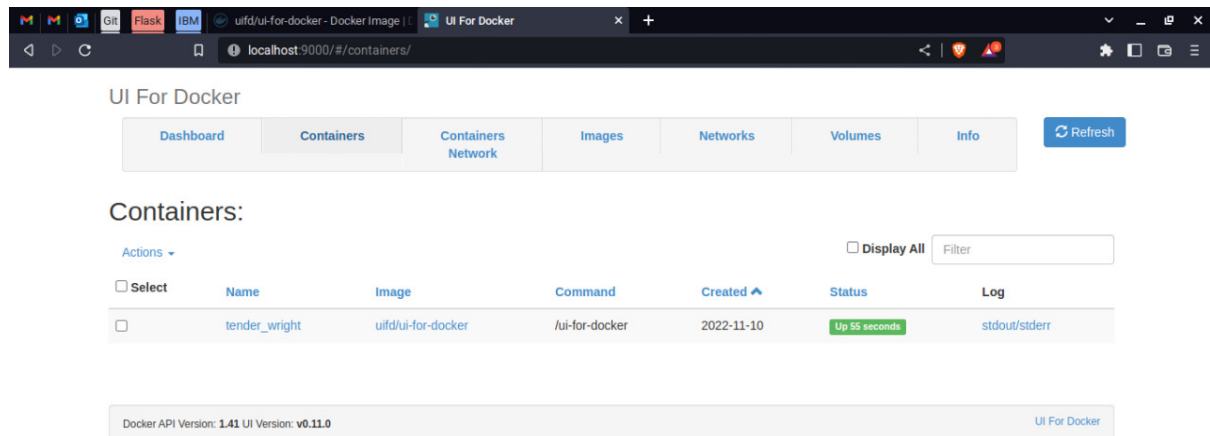
```
1 from flask import Flask, render_template, request, redirect, url_for, session
2 import ibm_db
3 import re
4
5 app = Flask(__name__)
6 app.secret_key = 'secret'
```

The terminal output shows the following commands and results:

```
[root@asus dockerApp]# docker tag myapp:latest aswin2kumardocker/myloginapp
[root@asus dockerApp]# docker push aswin2kumardocker/myloginapp
Using default tag: latest
The push refers to repository [docker.io/aswin2kumardocker/myloginapp]
da7536d64ebf: Preparing
5c521a92313b: Preparing
0cdceb94ae4a: Preparing
da7536d64ebf: Pushed
1569e0d95ce6: Mounted from library/python
d9e08da15d0c: Mounted from library/python
6b183c2e3d7: Mounted from library/python
882fd36bf435: Mounted from library/python
d1dec9917839: Mounted from library/python
d38adf39e1dd: Mounted from library/python
4ed121b04368: Mounted from library/python
d9d07d703dd5: Mounted from library/python
latest: digest: sha256:6a7d3784cef9e01811544a12ae12e27307be2fa7d6152b7ac9551238237d491d size: 2844
[root@asus dockerApp]#
```

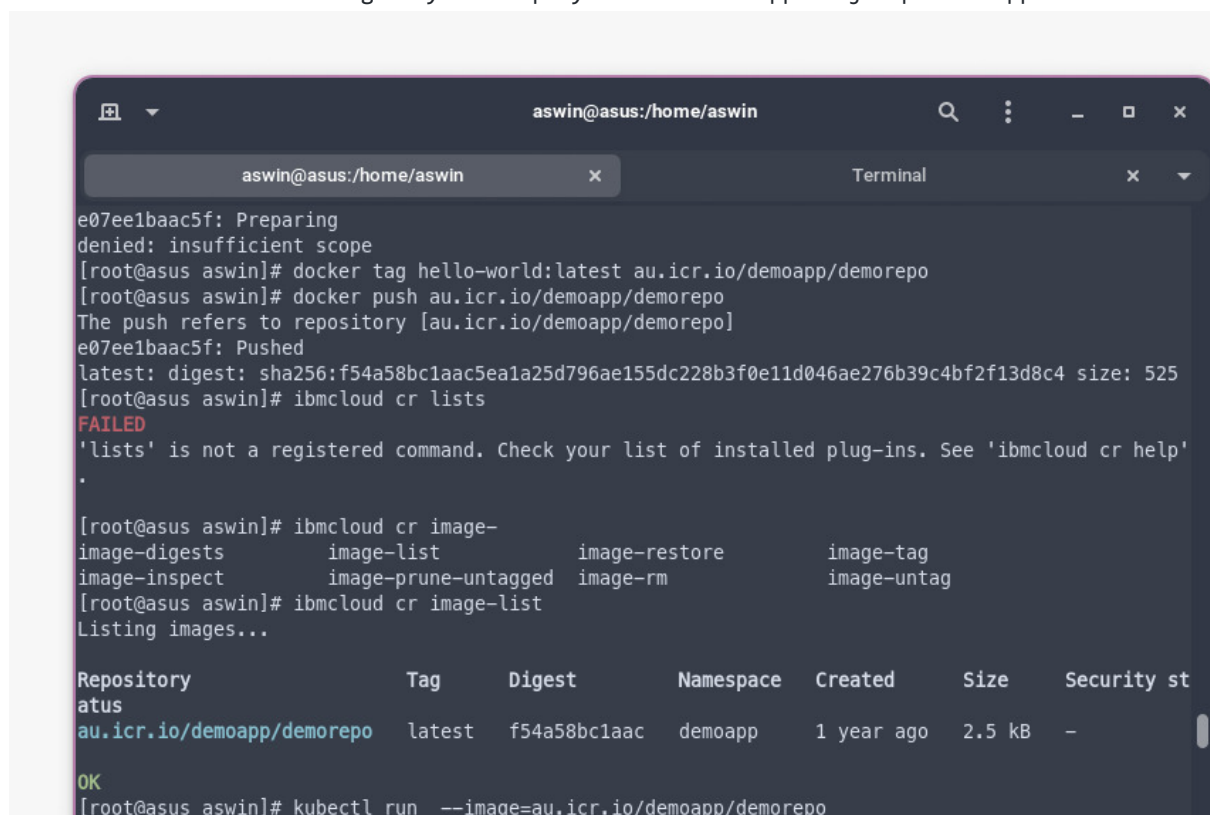
Question-2:

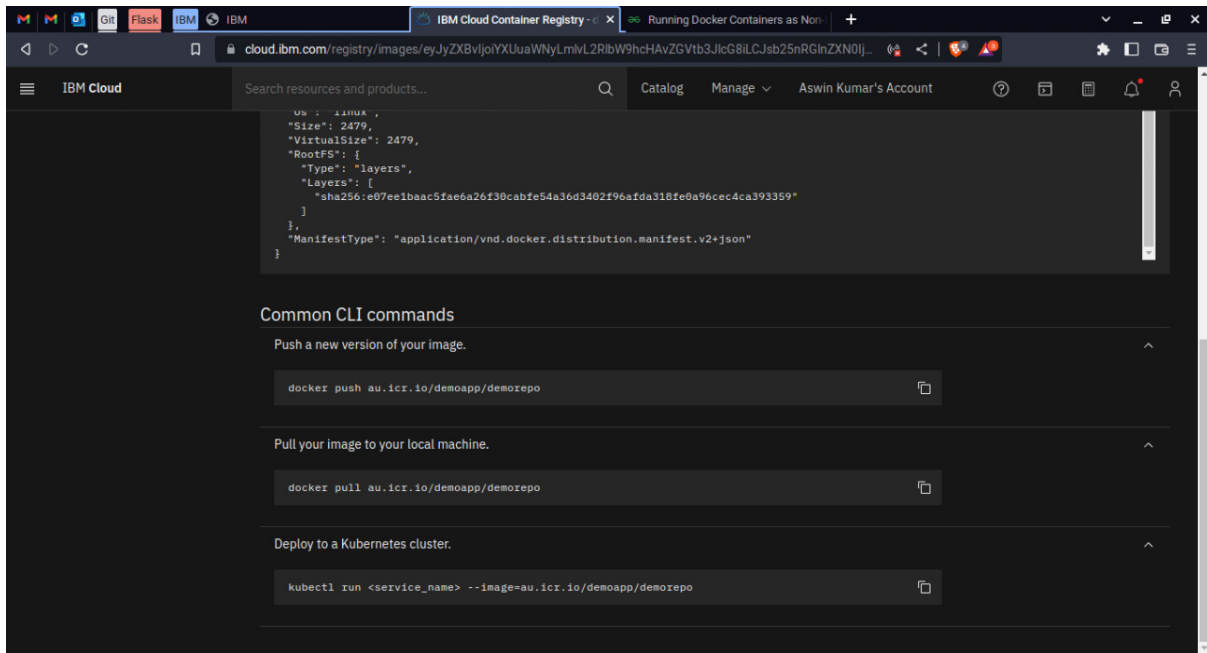
2. Create a docker file for the jobportal application and deploy it in Docker desktop application.



Question-3:

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





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.

