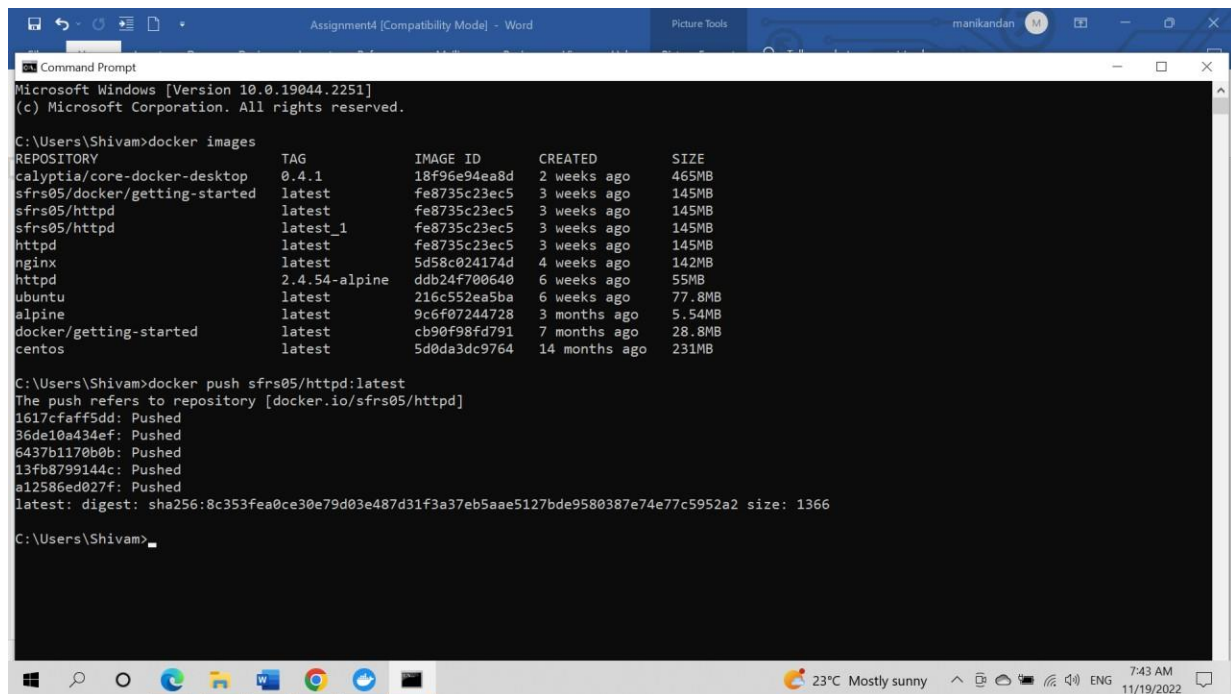


Assignment -4

Assignment Date	14 November 2022
Student Name	Revathi A
Student Roll Number	422419205031
Maximum Marks	2 Marks

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

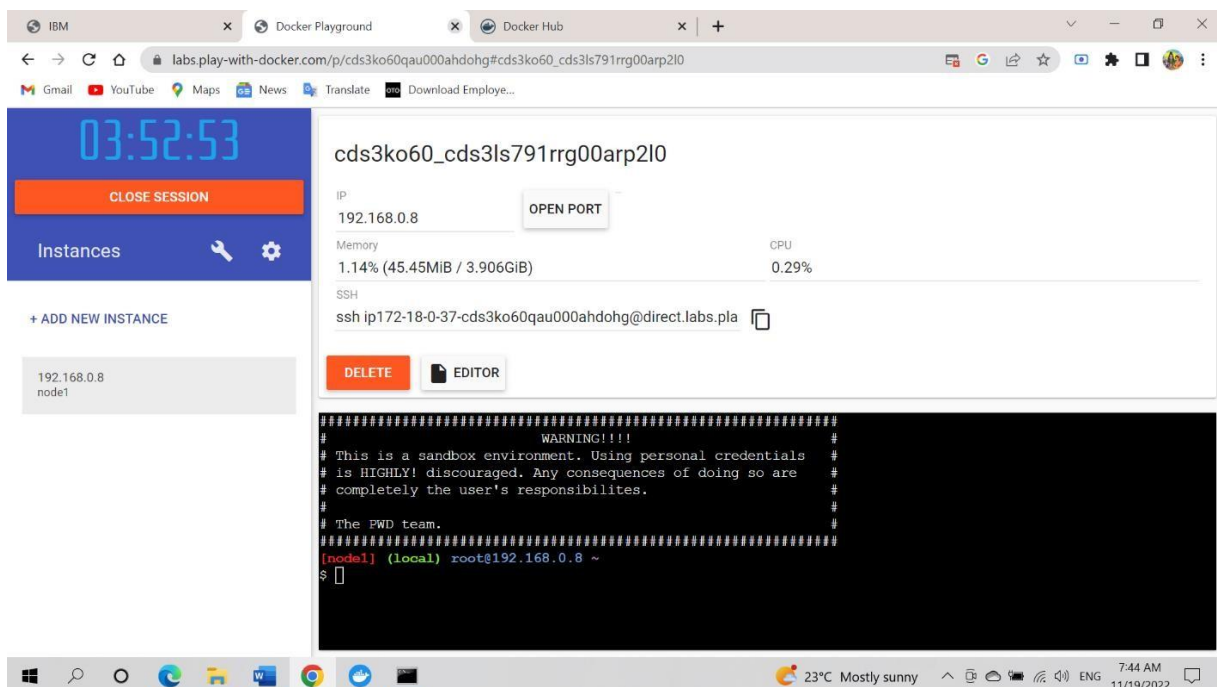


```
Microsoft Windows [Version 10.0.19044.2251]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Shivam>docker images
REPOSITORY              TAG         IMAGE ID      CREATED       SIZE
calyptia/core-docker-desktop 0.4.1      18f96e94ea8d  2 weeks ago  465MB
sfrs05/docker/getting-started latest      fe8735c23ec5  3 weeks ago  145MB
sfrs05/httpd             latest      fe8735c23ec5  3 weeks ago  145MB
sfrs05/httpd             latest_1    fe8735c23ec5  3 weeks ago  145MB
httpd                    latest      fe8735c23ec5  3 weeks ago  145MB
nginx                    latest      5d58c024174d  4 weeks ago  142MB
httpd                    2.4.54-alpine ddb24f700640  6 weeks ago  55MB
ubuntu                   latest      216c552ea5ba  6 weeks ago  77.8MB
alpine                   latest      9c6f07244728  3 months ago  5.54MB
docker/getting-started    latest      cb90f98fd791  7 months ago  28.8MB
centos                   latest      5d0da3dc9764  14 months ago  231MB

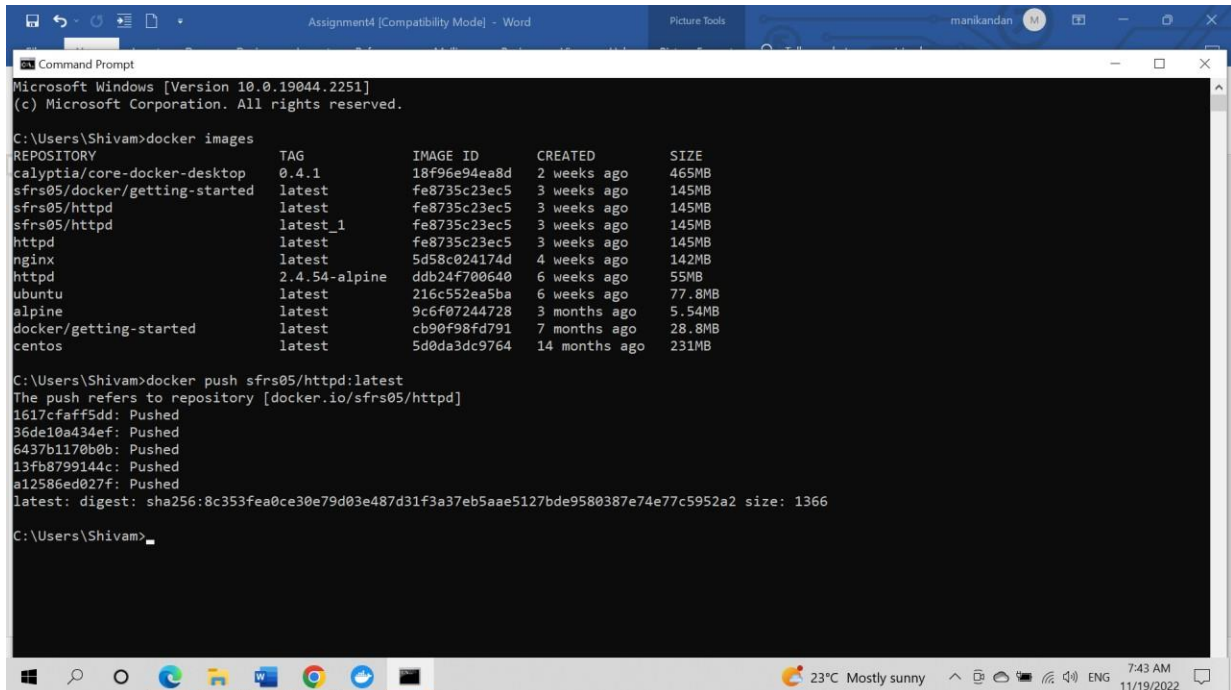
C:\Users\Shivam>docker push sfrs05/httpd:latest
The push refers to repository [docker.io/sfrs05/httpd]
1617cfaff5dd: Pushed
36de10a434ef: Pushed
6437b1170b0b: Pushed
13fb8799144c: Pushed
a12586ed027f: Pushed
latest: digest: sha256:8c353fea0ce30e79d03e487d31f3a37eb5aae5127bde9580387e74e77c5952a2 size: 1366

C:\Users\Shivam>
```



The screenshot shows the Docker Playground web interface. On the left, there's a sidebar with a timer at 03:52:53, a 'CLOSE SESSION' button, and an 'Instances' section showing one instance named 'node1' with IP 192.168.0.8. The main area displays details for the container 'cds3ko60_cds3ls791rrg00arp2l0', including its IP (192.168.0.8), memory usage (1.14% / 45.45MiB), CPU usage (0.29%), and an SSH command. Below this, there's a terminal window showing a warning message and the prompt '[node1] (local) root@192.168.0.8 ~\$'.

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



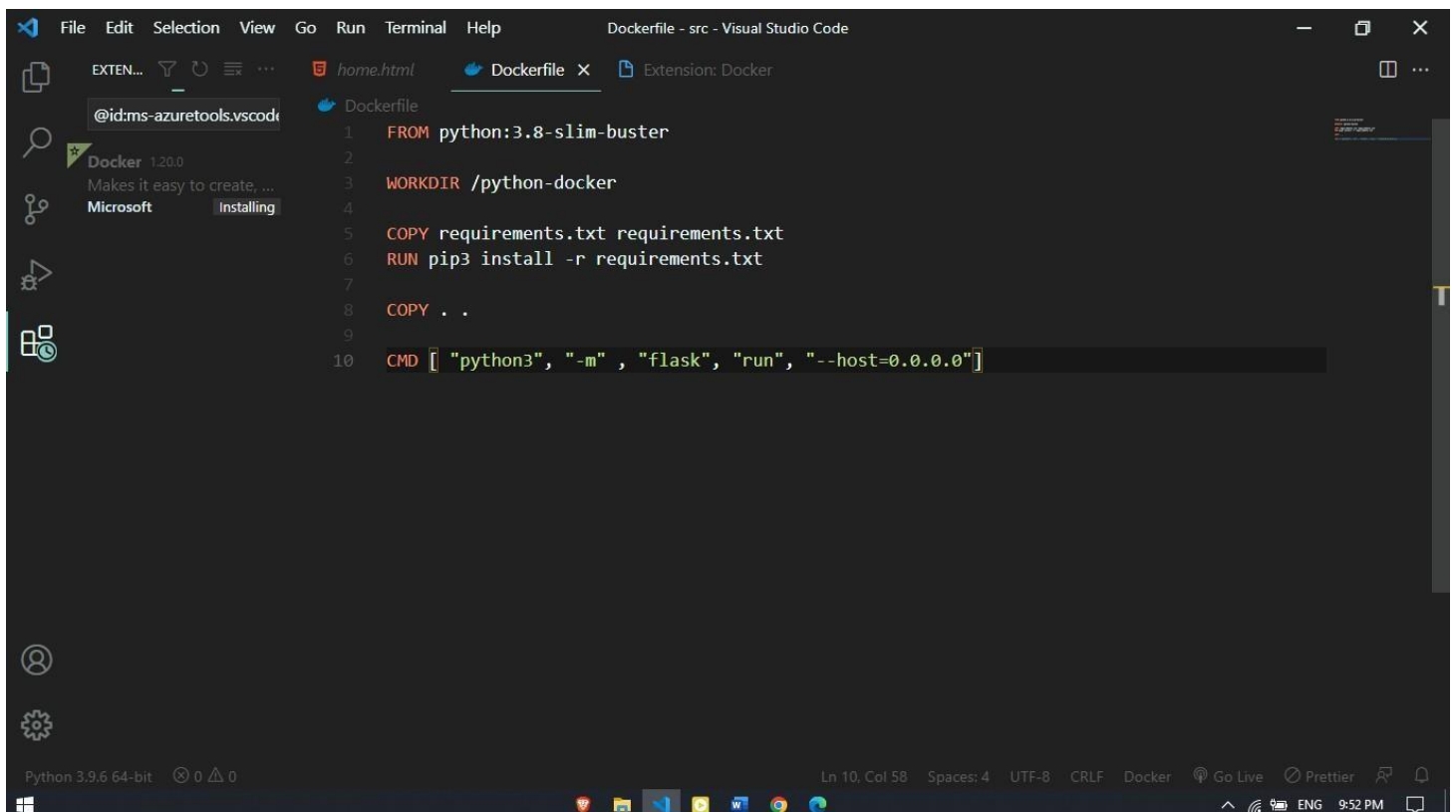
```
Microsoft Windows [Version 10.0.19044.2251]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Shivam>docker images
REPOSITORY              TAG         IMAGE ID      CREATED       SIZE
calyptia/core-docker-desktop 0.4.1      18f96e94ea8d  2 weeks ago  465MB
sfrs05/docker/getting-started latest      fe8735c23ec5  3 weeks ago  145MB
sfrs05/httpd             latest      fe8735c23ec5  3 weeks ago  145MB
sfrs05/httpd             latest_1    fe8735c23ec5  3 weeks ago  145MB
httpd                    latest      fe8735c23ec5  3 weeks ago  145MB
nginx                    latest      5d58c024174d  4 weeks ago  142MB
httpd                    2.4.54-alpine ddb24f700640  6 weeks ago  55MB
ubuntu                   latest      216c552ea5ba  6 weeks ago  77.8MB
alpine                   latest      9c6f07244728  3 months ago  5.54MB
docker/getting-started    latest      cb90f98fd791  7 months ago  28.8MB
centos                   latest      5d0da3dc9764  14 months ago  231MB

C:\Users\Shivam>docker push sfrs05/httpd:latest
The push refers to repository [docker.io/sfrs05/httpd]
1617cfa9f5dd: Pushed
36de10a434ef: Pushed
6437b1170b0b: Pushed
13fb8799144c: Pushed
a12586ed027f: Pushed
latest: digest: sha256:8c353fea0ce30e79d03e487d31f3a37eb5aae5127bde9580387e74e77c5952a2 size: 1366

C:\Users\Shivam>
```

Dockerfile



```
File Edit Selection View Go Run Terminal Help Dockerfile - src - Visual Studio Code
EXTEN... home.html Dockerfile x Extension: Docker
@id:ms-azuretools.vscod
Docker 1.20.0
Microsoft Installing
Dockerfile
1 FROM python:3.8-slim-buster
2
3 WORKDIR /python-docker
4
5 COPY requirements.txt requirements.txt
6 RUN pip3 install -r requirements.txt
7
8 COPY . .
9
10 CMD ["python3", "-m", "flask", "run", "--host=0.0.0.0"]

Python 3.9.6 64-bit 0 0 Ln 10, Col 58 Spaces:4 UTF-8 CRLF Docker Go Live Prettier ENG 9:52 PM
```

JOB FINDER

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Your Name

Your Email

Password

Repeat your password

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

```
C:\Windows\System32\cmd.exe - docker build.
Microsoft Windows [Version 10.0.19044.2130]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>docker build .
[+] Building 66.3s (7/10)
=> [internal] load build definition from Dockerfile 2.9s
=> => transferring dockerfile: 199B 0.5s
=> [internal] load .dockerignore 3.1s
=> => transferring context: 2B 0.1s
=> [internal] load metadata for docker.io/library/python:3.7-alpine 14.5s
=> [auth] library/python:pull token for registry-1.docker.io 0.8s
=> [1/5] FROM docker.io/library/python:3.7-alpine@sha256:6e24a01708ffd8a4a99c1f4c357a96190b7efe47230c3bed184b8f4ad368fb9f 30.4s
=> => resolve docker.io/library/python:3.7-alpine@sha256:6e24a01708ffd8a4a99c1f4c357a96190b7efe47230c3bed184b8f4ad368fb9f 0.6s
=> => sha256:6e24a01708ffd8a4a99c1f4c357a96190b7efe47230c3bed184b8f4ad368fb9f 1.65kB / 1.65kB 0.0s
=> => sha256:c7f521e75er40f0260cb22ee68c13d0337a1aafeb724e015c4629347152c01bf 1.37kB / 1.37kB 0.0s
=> => sha256:caace8a014d1c9f31120c0a96a2ee9bb0257daab97791c86700712ed7e30948 7.71kB / 7.71kB 0.0s
=> => sha256:47858aee13bf9c7c2b62cfacdc9ce2524aefef339d0c0ed8935c6507a276d00 673.19kB / 673.19kB 2.7s
=> => sha256:21d1eb95d7074516a0447cc0067020af40c4fb512abc36162c174c0d0c22bf50 11.10MB / 11.10MB 16.4s
=> => sha256:17ac4101fac6ced0416dec3e04584d913e58bfd5a585dff62f684807d10ac77e 230B / 230B 3.1s
=> => extracting sha256:47858aee13bf9c7c2b62cfacdc9ce2524aefef339d0c0ed8935c6507a276d00 5.8s
=> => sha256:a4cc00d82d4786274c2a21d71815bfc13e37a06d9fbd0d00fd08abe21971d18b 2.89MB / 2.89MB 9.5s
=> => extracting sha256:21d1eb95d7074516a0447cc0067020af40c4fb512abc36162c174c0d0c22bf50 2.6s
=> => extracting sha256:17ac4101fac6ced0416dec3e04584d913e58bfd5a585dff62f684807d10ac77e 0.0s
=> => extracting sha256:a4cc00d82d4786274c2a21d71815bfc13e37a06d9fbd0d00fd08abe21971d18b 1.0s
=> [internal] load build context 1.9s
=> => transferring context: 5.65kB 0.3s
=> [2/5] WORKDIR /app 2.5s
=> [3/5] RUN pip install pipenv 13.7s
```

```
C:\Windows\System32\cmd.exe - docker push icr.io/smartfashionapp/ibm
Space:

C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>ibmcloud cr region-set global
The region is set to 'global', the registry is 'icr.io'.

OK

C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>ibmcloud cr login
Logging 'docker' in to 'icr.io'...
Logged in to 'icr.io'.

OK

C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
myapp                1.0-recovere       95232a1151f8       18 minutes ago     97.9MB
myapp                1.0-recovered      95232a1151f8       18 minutes ago     97.9MB
icr.io/smartfashionapp/app  ibm                95232a1151f8       18 minutes ago     97.9MB
saravanan0310/alpine   latest             9c6f07244728       3 months ago       5.54MB
ibm/alpine             latest             9c6f07244728       3 months ago       5.54MB
alpine                latest             9c6f07244728       3 months ago       5.54MB
saravanan/alpine       latest             9c6f07244728       3 months ago       5.54MB

C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>docker tag myapp icr.io/smartfashionapp/ibm:
Error parsing reference: "icr.io/smartfashionapp/ibm:" is not a valid repository/tag: invalid reference format

C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>docker tag myapp icr.io/smartfashionapp/ibm
Error response from daemon: No such image: myapp:latest

C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>docker tag 95232a1151f8 icr.io/smartfashionapp/ibm

C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>docker push icr.io/smartfashionapp/ibm
Using default tag: latest
The push refers to repository [icr.io/smartfashionapp/ibm]
879dc0a7d13a: Preparing
45ca0a7778a1: Preparing
420a6604802f: Preparing
c49c12d42c1e: Preparing
ed37f306c964: Preparing
31e0f81c5bec: Waiting
03aede2981e3: Waiting
0606086122fd: Waiting
994393dc58e7: Waiting
```

4. Create a Kubernetes cluster in IBM cloud and deploy hello world image or job portal image and also expose the same app to run in node port.

