

ASSIGNMENT 4 – OUTPUT SCREENSHOTS

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

labs.play-with-docker.com/p/ce09b1m3tccg009ilhtg#ce09b1m3_ce09b3e3tccg009ilhu0

03:49:52

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.13
node1

ce09b1m3_ce09b3e3tccg009ilhu0

IP
192.168.0.13

OPEN PORT 80

Memory
1.63% (65.29MiB / 3.906GiB)

CPU
0.11%

SSH
ssh ip172-18-0-94-ce09b1m3tccg009ilhtg@direct.labs.play-

DELETE EDITOR

```
4b639e65cb3b: Pull complete
061ed9e2b976: Pull complete
bc19f3e8eeb1: Pull complete
4071be97c256: Pull complete
79b586f1a54b: Pull complete
0c9732f525d6: Pull complete
Digest: sha256:b558be874169471bd4e65bd6eac8c303b271a7ee8553ba47481b73b2bf597aae
Status: Downloaded newer image for docker/getting-started:latest
docker.io/docker/getting-started:latest
[node1] (local) root@192.168.0.13 ~
$ docker run -dp 80:80 docker/getting-started
d64312fd88b0bd5836e7c97813ba7913866a628ee3463cc9693dc591a44aae8
[node1] (local) root@192.168.0.13 ~
$
```

03:43:17

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.13
node1

ce09b1m3_ce09gpe3tccg009ili8g

IP
192.168.0.13

OPEN PORT

Memory
1.14% (45.56MiB / 3.906GiB)

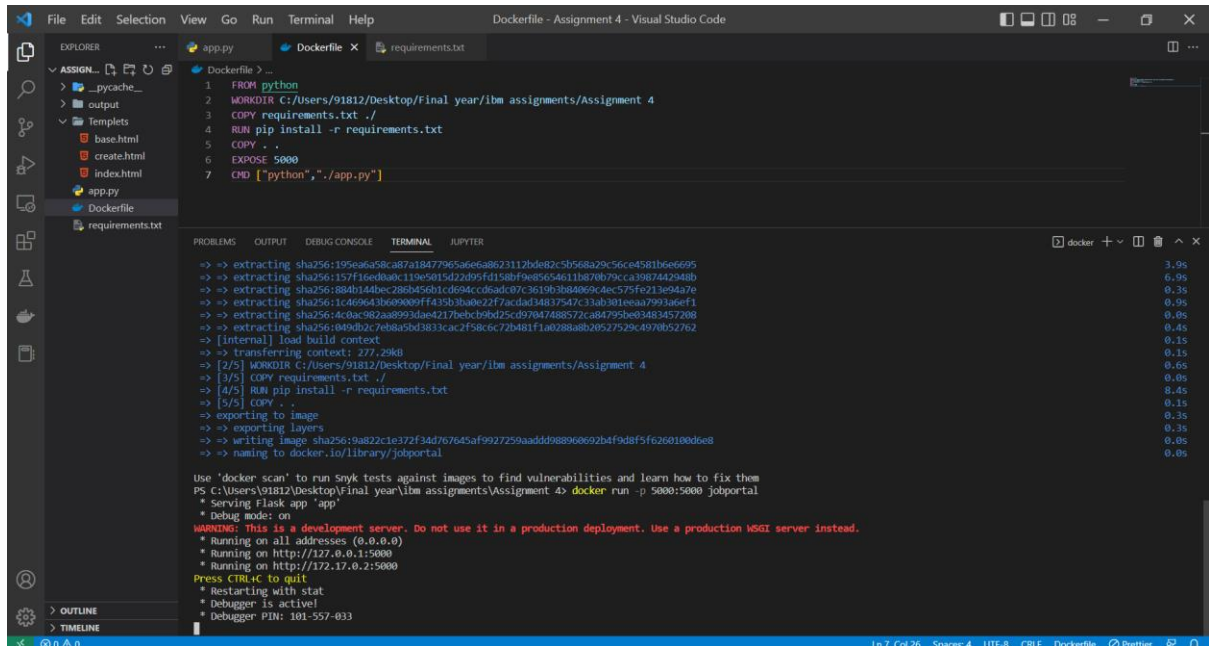
CPU
0.15%

SSH
ssh ip172-18-0-48-ce09b1m3tccg009ilhtg@direct.labs.play-

DELETE EDITOR

```
#####
[node1] (local) root@192.168.0.13 ~
$ docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
2db29710123e: Pull complete
Digest: sha256:faa03e786c97f07ef34423fcccceec2398ec8a5759259f94d99078f264e9d7af
Status: Downloaded newer image for hello-world:latest
docker.io/library/hello-world:latest
[node1] (local) root@192.168.0.13 ~
$ docker run -dp 80:80 hello-world
979c96208f333389c8ddfee2637519227820db027ff55331999f5e18a7997a26
[node1] (local) root@192.168.0.13 ~
$
```

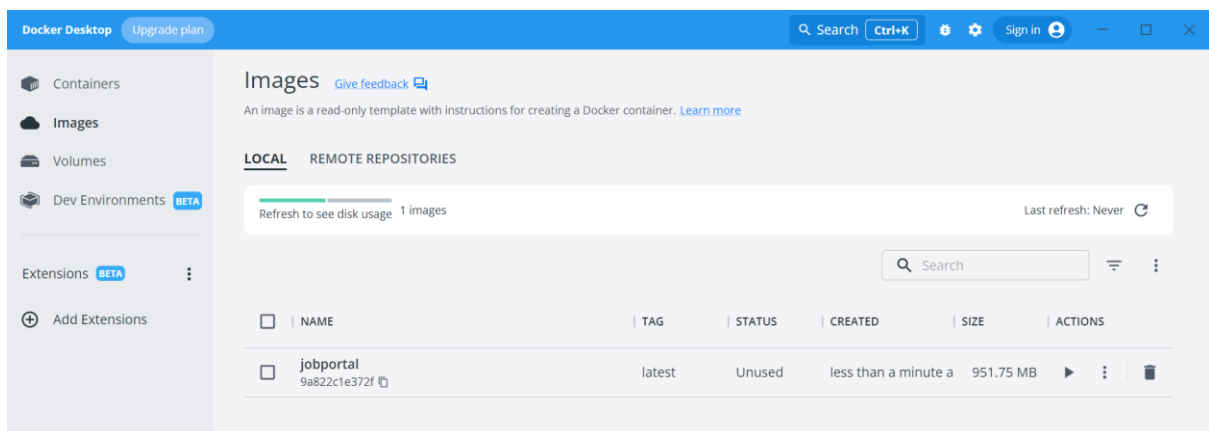
2. Create a docker file for the application and deploy it in Docker desktop application.



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

```
1 FROM python
2 WORKDIR C:/Users/91812/Desktop/Final_year/ibm assignments/Assignment 4
3 COPY requirements.txt ./
4 RUN pip install -r requirements.txt
5 COPY . .
6 EXPOSE 5000
7 CMD ["python", "./app.py"]
```

The terminal output shows the execution of these instructions, including the extraction of layers, copying of files, and the final command to run the application. The output also includes a warning about the development server and instructions to use a production server instead.



127.0.0.1:5000/create/

GoogleBLB Study ResourcesLeetCodeMy DriveInboxgfgGithubIBMSEM 7Coursera(21) WhatsAppDeep Learning For...

Add a New Message

TITLE

Hello

MESSAGE CONTENT

This is a message

Submit

Home

HELLO !

WRITE YOUR MESSAGES

TITLE : Message One

MESSAGE : Message One Content

TITLE : Message Two

MESSAGE : Message Two Content

TITLE : Hello

MESSAGE : This is a message

3.Create a IBM container registry and deploy helloworld app or jobportalapp.

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  JUPYTER

API endpoint:      https://cloud.ibm.com
Region:           eu-gb
User:             2019506115@smartinternz.com
Account:          Vineetha R S's Account (3ec6588f55b348988636282ff00884a9)
Resource group:   No resource group targeted, use 'C:\Program Files\IBM\Cloud\bin\ibmcloud.exe target -g RESOURCE_GROUP'
CF API endpoint:
Org:
Space:
PS C:\Users\91812\Documents\kubernetes> ibmcloud cr region-set global
The region is set to 'global', the registry is 'icr.io'.

OK
PS C:\Users\91812\Documents\kubernetes> ibmcloud cr namespace-add vineetha
No resource group is targeted. Therefore, the default resource group for the account ('Default') is targeted.

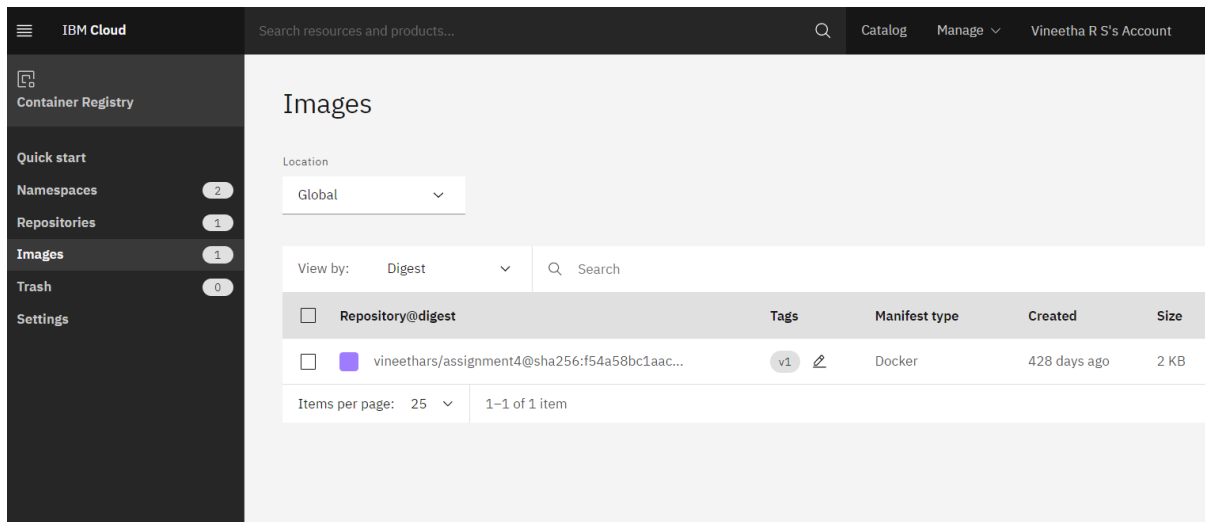
Adding namespace 'vineetha' in resource group 'Default' for account Vineetha R S's Account in registry icr.io...

Successfully added namespace 'vineetha'

OK
PS C:\Users\91812\Documents\kubernetes> ibmcloud cr login
Logging 'docker' in to 'icr.io'...
Logged in to 'icr.io'.

OK
PS C:\Users\91812\Documents\kubernetes> docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
2db29710123e: Pull complete
Digest: sha256:faa03e786c97f07ef34423fccceec2398ec8a5759259f94d99078f264e9d7af
Status: Downloaded newer image for hello-world:latest
docker.io/library/hello-world:latest
PS C:\Users\91812\Documents\kubernetes> docker image ls
REPOSITORY      TAG      IMAGE ID      CREATED      SIZE
jobportal       latest   474b753146a0   About an hour ago   952MB
hello-world     latest   feb5d9fea6a5   14 months ago   13.3kB
PS C:\Users\91812\Documents\kubernetes> docker tag hello-world icr.io/vineethars/assignment4:v1
PS C:\Users\91812\Documents\kubernetes> docker push icr.io/vineethars/assignment4:v1
The push refers to repository [icr.io/vineethars/assignment4]
e07ee1baac5f: Pushed
v1: digest: sha256:f54a58bc1aac5ea1a25d796ae155dc228b3f0e11d046ae276b39c4bf2f13d8c4 size: 525
PS C:\Users\91812\Documents\kubernetes> █
```

<input type="checkbox"/>	NAME	TAG	STATUS	CREATED	SIZE	ACTIONS
<input type="checkbox"/>	jobportal 474b753146a0	latest	In use	about 1 hour ago	952.02 MB	
<input type="checkbox"/>	hello-world feb5d9fea6a5	latest	Unused	about 1 year ago	13.26 KB	
<input type="checkbox"/>	icr.io/vineethars/assignment4 feb5d9fea6a5	v1	Unused	about 1 year ago	13.26 KB	



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.

```

Login with your Docker ID to push and pull images from Docker Hub. If you don't have a Docker ID, head over to https://hub.docker.com to create one.
Username: vineethars16
Password:
Login Succeeded

Logging in with your password grants your terminal complete access to your account.
For better security, log in with a limited-privilege personal access token. Learn more at https://docs.docker.com/go/access-tokens/
PS C:\Users\91812\Desktop\Final year\ibm assignments\Assignment 4> docker tag jobportal vineethars16/helloworld:latest
PS C:\Users\91812\Desktop\Final year\ibm assignments\Assignment 4> docker commit inspiring_kepler vineethars16/helloworld:latest
sha256:3b2ab88cc96dc2981503231a7b18089f3e19965d142c9dcb39c6af7b6c210d3c
PS C:\Users\91812\Desktop\Final year\ibm assignments\Assignment 4> docker push vineethars16/helloworld:latest
The push refers to repository [docker.io/vineethars16/helloworld]
78d24f8ad08c: Pushed
c6a690b92aab: Pushed
3f2036fa55ce: Pushed
473fefb0f548: Pushed
6df47eebc771: Pushed
345c9e42b8e4: Pushed
24bf8dd8c4a6: Mounted from library/python
18bbb218c890: Mounted from library/python
e6e9854ca999: Pushed
397a239a053b: Pushed
89c3244a87b2: Pushed
80231db1194c: Pushed
f1c1f2298584: Mounted from library/python
ccba29d69370: Mounted from library/python
latest: digest: sha256:c0e561d777bab5e1b61c013bf9e15cacc61455933249d9d3c19f4da53fa76871 size: 3262
PS C:\Users\91812\Desktop\Final year\ibm assignments\Assignment 4>

```

kubernetes
default
Search

Create

Workloads

Cron Jobs
Daemon Sets
Deployments
Jobs
Pods
Replica Sets
Replication Controllers
Stateful Sets

Service

Ingresses
Ingress Classes
Services

Config and Storage

Config Maps
Persistent Volume Claims
Secrets
Storage Classes

Create from input

Create from file

Create from form

App name *

vineetha

8 / 24

Container image *

vineethars16/helloworld:latest

Number of pods *

1

Service *

External

Port *

5000

Target port *

5000

Protocol *

TCP

Port

Target port

Protocol *

TCP

Namespace *

default

Deploy

Preview

Cancel

Show advanced options

kubernetes
default
Search

Service > Services

Workloads

Cron Jobs
Daemon Sets
Deployments
Jobs
Pods

Services

Name	Labels	Type	Cluster IP	Internal Endpoints	External Endpoints	Created
vineetha	Show all	NodePort	172.21.28.102	vineetha:5000 TCP vineetha:30995 TCP	-	6 minutes ago
kubernetes	Show all	ClusterIP	172.21.0.1	kubernetes:443 TCP kubernetes:0 TCP	-	16 hours ago

App deployed and exposed on <http://169.51.203.9:30995/>

IBM

CAD-B11-5A1E (Evening)

mycluster-free - Kuberne

mycluster-free - IBM Clou

FlaskApp

Not secure

169.51.203.9:30995

Google

BLB Study Resources

LeetCode

My Drive

Inbox

gfg

Github

IBM

Sem 7

Coursera

(2/1) WhatsApp

Deep Learning For...

FLASKAPP

CREATE

HELLO !

WRITE YOUR MESSAGES

TITLE : Message One

MESSAGE : Message One Content

TITLE : Message Two

MESSAGE : Message Two Content