

## ASSIGNMENT- 4

Student Name	Jeffrey H
Register Number	737819ITR031
Marks	2 Marks

### Question 1:

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

```
C:\Users\mjeev\OneDrive\Desktop\IBM\Deployment Of App In IBM Cloud\Containerize The App\flask_docker>docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
Digest: sha256:faa03e786c97f07ef34423fccceec2398ec8a5759259f94d99078f264e9d7af
Status: Image is up to date for hello-world:latest
docker.io/library/hello-world:latest

C:\Users\mjeev\OneDrive\Desktop\IBM\Deployment Of App In IBM Cloud\Containerize The App\flask_docker>
```

### Question 2:

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

```
FROM helloworld:latest
```

```
WORKDIR ~/Desktop/
```

```
ADD . helloworld/
```

```
WORKDIR ~/Desktop/htmlfile
```

```
RUN pip install -r requirements
```

```
RUN chmod +x app.sh
```

CMD ["/bin/sh","app.sh"]

### Question 3:

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

```
C:\Users\mjeev\OneDrive\Desktop\IBM\Deployment Of App In IBM Cloud\Containerize The App\flask_docker>docker tag hello-world us.icr.io/narenjee/myimages:v1

C:\Users\mjeev\OneDrive\Desktop\IBM\Deployment Of App In IBM Cloud\Containerize The App\flask_docker>docker push us.icr.io/narenjee/myimages:v1
The push refers to repository [us.icr.io/narenjee/myimages]
e07ee1baac5f: Layer already exists
v1: digest: sha256:f54a58bc1aac5ea1a25d796ae155dc228b3f0e11d046ae276b39c4bf2f13d8c4 size: 525

C:\Users\mjeev\OneDrive\Desktop\IBM\Deployment Of App In IBM Cloud\Containerize The App\flask_docker>
```

### Question 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.

The screenshot shows the IBM Cloud Kubernetes dashboard for a cluster named 'mycluster-free'. The cluster is in the 'Preparing master, workers...' state and expires in 30 days. The 'Worker nodes' tab is selected, showing a table with one node in a 'Provision pending' state. The node has ID '00000099', is in the 'default' worker pool, and is located in the 'Milan 01' zone. The dashboard includes a search bar, a filter icon, and an 'Add' button. A sidebar on the right contains a 'Help' section with links to 'Log in to your cluster', 'Deploy your app', 'Expose your app', 'Add storage to your app', 'Connect integrations', 'Install add-ons', and 'Troubleshoot'.

Name	Status	Worker pool	Zone	Private IP	Public IP
00000099	Provision pending	default	Milan 01		