

ASSIGNMENT-4

Assignment Date	01 November 2022
Student Name	Praveen Raj B
Student Register Number	312319104303
Maximum Marks	2 Marks

Question 1:

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

```
PS C:\Windows\system32> docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
Digest: sha256:e18f0a777aefabe047a671ab3ec3eed05414477c951ab1a6f352a06974245fe7
Status: Image is up to date for hello-world:latest
docker.io/library/hello-world:latest
PS C:\Windows\system32>
```

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.

```
Administrator: Windows PowerShell (x64)
PS C:\Windows\system32> docker tag hello-world icr.io/12121ns/hello-world
PS C:\Windows\system32> docker push icr.io/12121ns/hello-world
using default tag: latest
The push refers to repository [icr.io/12121ns/hello-world]
e07ee1baac5f: Mounted from 06001ns/hello-world
latest: digest: sha256:f54a38bc1aac5ea1a25d796ae155dc228b3f0e11d046ae270b39c4bf2f13d8c4 size: 525
PS C:\Windows\system32>
```

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 displays the IBM Cloud Kubernetes dashboard. The main heading is 'mycluster-free' with a status indicator 'Preparing master, workers...' and a red 'Expires in 30 days' warning. The 'Worker nodes' tab is selected, showing a table with one node: '0000000c' with a status of 'Provision pending'. The table columns include Name, Status, Worker pool, Zone, Private IP, Public IP, and Version. A right-hand sidebar contains a 'Help' section with links like 'Log in to your cluster', 'Deploy your app', and 'Expose your app'. The bottom of the screen shows a Windows taskbar with various application icons and system information like '25°C Cloudy' and the date '01-11-2022'.

Name	Status	Worker pool	Zone	Private IP	Public IP	Version
0000000c	Provision pending	default	Milan 01			--> 1.24.6_1541