

ASSIGNMENT-4

Assignment Date	01 November 2022
Student Name	K.Kamalaventhana
Student Register Number	821719104012
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 (x86)
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 06091ns/hello-world
latest: digest: sha256:f54a58bc1aac5ea1a25d796ae155dc228b3f0e11d046ae276b39cabf2f13d8c4 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 shows the IBM Cloud console interface. At the top, there's a navigation bar with 'IBM Cloud', a search bar, and user account information. Below this, a banner for 'mycluster-free' indicates the cluster is 'Preparing master, workers...' and 'Expires in 30 days'. The left sidebar shows navigation options: Overview, Worker nodes (selected), Worker pools, and DevOps (with a 'New' button). The main content area displays a table of worker nodes. The table has columns for Name, Status, Worker pool, Zone, Private IP, Public IP, and Version. One worker node is listed with ID '00000087', status 'Provisioning - Preparing to meter worker', and is associated with the 'default' worker pool in the 'Milan 01' zone. The bottom of the screen shows the Windows taskbar with the time 12:43 AM on 02-11-2022.

Name	Status	Worker pool	Zone	Private IP	Public IP	Version
00000087	Provisioning - Preparing to meter worker	default	Milan 01	10.144.183.75	169.51.194.221	--> 1.24.6_1541