

ASSIGNMENT-4

Assignment Date	01 November 2022
Student Name	S.Varunapriya
Student Register Number	312319104180
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 job portal app.

```
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:f54a3b8c1aaf5eata25d786ae155de22b3f0e11d4d2ae276b39c4bf2f1a8d4 size: 529
PS C:\Windows\system32>
```

Question 4:

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

The screenshot shows the IBM Cloud console interface. The top navigation bar includes the IBM Cloud logo, a search bar, and links to Catalog, Manage, and the user's account (Varuna Priya's Account). The main content area displays the 'Clusters' section for 'mycluster-free', which is in the 'Preparing master, workers...' state and expires in 30 days. A 'Kubernetes dashboard' button is visible. The 'Worker nodes' section is expanded, showing a table with one node:

Name	Status	Worker pool	Zone	Private IP	Public IP	Version
000000b2	Normal	default	Milan 01	10.144.183.56	169.51.194.202	1.24.6_1541

The bottom of the screenshot shows the Windows taskbar with various application icons and the system clock indicating 00:36 on 02-11-2022.