

ASSIGNMENT-4

Assignment Date	01 November 2022
Student Name	ABINAYA K
Student Register Number	4211191021003
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/sreyhtml
```

```
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.

```
PS C:\WINDOWS\system32> docker tag hello-world icr.io/26031ns/hello-world
PS C:\WINDOWS\system32> docker push icr.io/26031ns/hello-world
Using default tag: latest
The push refers to repository [icr.io/26031ns/hello-world]
e07ee1baac5f: Mounted from 09876ns/hello-world
latest: digest: sha256:f54a58bc1aac5ea1a25d796ae155dc228b3f0e11d046ae276b39c4bf2f13d8c4 size: 525
```

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 for a cluster named 'mycluster-free'. The cluster is in the 'Preparing master, workers...' state and expires in 30 days. The 'Worker nodes' section shows a single node with the following details:

Name	Status	Worker pool	Zone	Private IP	Public IP	Version
00000086	Normal	default	Milan 01	10.144.182.125	169.51.200.47	1.24.6_1541

The dashboard also includes a sidebar with navigation options like 'Overview', 'Worker nodes', 'Worker pools', and 'DevOps'. A 'Help' sidebar on the right lists various actions such as 'Log in to your cluster', 'Deploy your app', and 'Troubleshoot'.