

ASSIGNMENT-4

Assignment Date	01 November 2022
Student Name	Sathiyapriya T
Student Register Number	312319104152
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 MyCluster console. The left sidebar has a menu with 'Overview', 'Worker nodes', 'Worker pools', and 'DevOps' (marked as 'New'). The main area displays a table of worker nodes. The table has columns for Name, Status, Worker pool, Zone, Private IP, Public IP, and Version. One node is listed with ID 00000087, status 'Provisioning - Preparing to meter worker', and version 1.24.6_1541. The status is indicated by a blue circular arrow icon. The table also includes filters, search, and pagination controls.

<input type="checkbox"/>	Name	Status	Worker pool	Zone	Private IP	Public IP	Version
<input type="checkbox"/>	00000087	Provisioning - Preparing to meter worker	default	Milan 01	10.144.183.75	169.51.194.221	--> 1.24.6_1541