

ASSIGNMENT-4

Assignment Date	01 November 2022
Team ID	PNT2022TMID53854
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
```

```
CM ["/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 tags: latest
The push refers to repository [icr.io/12121ns/hello-world]
e07ee1baac5f: Mounted from 86091ns/hello-world
latest: digest: sha256:f54a38bc1aac5ea1a25d796ae155dc228b3f0e11d046ae276b39c4bf2f13d8c4 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 cluster, 'mycluster-free', is in the 'Preparing master, workers...' state and will expire in 30 days. The 'Worker nodes' section shows a single node with ID '00000008c' that is 'Provisioning pending'. The node is part of the 'default' worker pool in the 'Milan 01' zone, with a version of '1.24.6_1541'. The dashboard includes a sidebar with navigation options like 'Overview', 'Worker nodes', 'Worker pools', and 'DevOps'. A right-hand sidebar provides a 'Help' section with links to 'Log in to your cluster', 'Deploy your app', 'Expose your app', 'Add storage to your app', 'Connect integrations', 'Install add-ons', and 'Troubleshoot'.

Name	Status	Worker pool	Zone	Private IP	Public IP	Version
00000008c	Provisioning pending	default	Milan 01			1.24.6_1541