

ASSIGNMENT-4

Assignment Date	01 November 2022
Student Name	SANTHOSH R S
Student Register Number	312319104147
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/ibm

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)
"docker push" requires exactly 1 argument.
See 'docker push --help'.

Usage: docker push [OPTIONS] NAME[:TAG]

Push an image or a repository to a registry
PS C:\Windows\system32> docker push icr.io/12345ns/hello-world
Using default tag: latest
The push refers to repository [icr.io/12345ns/hello-world]
e07ee1baac5f: Pushed
latest: digest: sha256:f54a58bc1aac5ea1a25d796ae15dc228b3f0e11d046ae276b39c4bf2f13d8c4 size: 525
PS C:\Windows\system32> ibmcloud cr image-list
Listing images...

Repository          Tag    Digest                                Namespace    Created    Size    Security status
icr.io/12345ns/hello-world  latest  f54a58bc1aac                    12345ns      1 year ago  2.5 kB    -
OK
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 for a cluster named 'mycluster-free'. The cluster is in a 'Normal' state and expires in 30 days. The 'Worker nodes' tab is selected, showing a table with one node.

Name	Status	Worker pool	Zone	Private IP	Public IP	Version
000000ae	Normal	default	Milan 01	10.144.182.113	169.51.200.15	1.24.6_1541

At the bottom of the screen, the Windows taskbar is visible with the time set to 7:09 PM.