

ASSIGNMENT-4

Assignment Date	01 November 2022
Student Name	Sasikala V
Student Register Number	312319104150
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:f54a58bc1aac5ea1a25d796ae155dc228b3f0e11d046ae276b39cabf7f13d8c4 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 console for a Kubernetes cluster named 'mycluster-free'. The 'Worker nodes' tab is active, showing a single node with the ID '0000009f'. The node's status is 'Provisioning - Preparin...', and it belongs to the 'default' worker pool in the 'Milan 01' zone. The node's private IP is 10.144.183.12 and its public IP is 169.51.194.1. The console also features a search bar, filters, and pagination controls at the bottom of the node list.

Name	Status	Worker pool	Zone	Private IP	Public IP
0000009f	Provisioning - Preparin...	default	Milan 01	10.144.183.12	169.51.194.1