

## ASSIGNMENT- 4

Assignment Date	08 November 2022
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Register Number	961819104049
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)
OK
PS C:\Windows\system32> docker tag hello-world icr.io/06091ns/hello-world
PS C:\Windows\system32> docker push icr.io/06091ns/hello-world
using default tag: latest
The push refers to repository [icr.io/06091ns/hello-world]
e07ee1baac5f: Mounted from 12345ns/hello-world
latest: digest: sha256:f54a58bc1aac5ea1a25d796ae155dc228b3f0e11d046ae276b39c4bf2f13d8c4 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 Clusters management interface. At the top, there's a navigation bar with 'IBM Cloud', search, and various icons. Below it, the 'Clusters / mycluster-free' section is visible. A status indicator shows 'Preparing master, workers...' with a progress bar. A red badge indicates 'Expires in 30 days'. There are buttons for 'Add tags', 'Help', 'Kubernetes dashboard', and 'Actions...'. On the left, a sidebar lists 'Overview', 'Worker nodes' (selected), 'Worker pools', and 'DevOps' with a 'New' button. The main area displays a table of worker nodes. The table has columns: Name, Status, Worker pool, Zone, Private IP, and Public IP. One node is listed with ID '0000006f', status 'Provision pending...', worker pool 'default', and zone 'Milan 01'. At the bottom, there are pagination controls showing 'Items per page: 25', '1-1 of 1 item', and '1 of 1 page'.

Name	Status	Worker pool	Zone	Private IP	Public IP
0000006f	Provision pending...	default	Milan 01		