

ASSIGNMENT-4

Assignment Date	01 November 2022
Student Name	Achutha Mallikarjuna
Student Register Number	312319104011
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 job portal 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 an IBM container registry and deploy helloworld app or Job portal app.

```
PS C:\Users\HP> docker tag hello-world icr.io/0034ns/helloworld
PS C:\Users\HP> docker push icr.io/0034ns/helloworld
Using default tag: latest
The push refers to repository [icr.io/0034ns/helloworld]
e07ee1baac5f: Pushed
latest: digest: sha256:f54a58bc1aac5ea1a25d796ae155dc228b3f0e11d046ae276b39c4bf2f13d8c4 size: 525
```

Question 4:

Create a Kubernetes cluster in IBM cloud and deploy helloworld image or job portal image and also expose the same app to run in node port.

The screenshot shows the Docker Desktop application window. The left sidebar contains navigation options: Containers, Images, Volumes, Dev Environments (with a BETA badge), Extensions (with a BETA badge), and Add Extensions. The main panel is titled 'Images on disk' and shows a list of images. The 'LOCAL' tab is selected, displaying a table of images. The table has columns for NAME, TAG, IMAGE ID, CREATED, and SIZE. Two images are listed: 'hello-world' and 'irc.io/0034ns/helloworld', both with the 'latest' tag and a size of 13.26 KB. Below the table, there is a section for 'Connect to Remote Content' with a 'Not connected' status and a 'Sign in' button. The bottom status bar shows 'RAM 1.76GB', 'CPU 0.06%', and 'Not connected to Hub'.

NAME	TAG	IMAGE ID	CREATED	SIZE
hello-world	latest	feb5d9fea6a5	about 1 year ago	13.26 KB
irc.io/0034ns/helloworld	latest	feb5d9fea6a5	about 1 year ago	13.26 KB