

ASSIGNMENT-4

Assignment Date	01 November 2022
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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 job portal app.

```
Administrator: Windows PowerShell (586)
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]
e07e1baac5f1: Mounted from 86991ns/hello-world
latest: digest: sha256:f5a218bc1a85e1a25d79cae1556c228b9f0e11d8d6a276b9e4bf2f1ad8d4 size: 525
PS C:\Windows\system32>
```

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 IBM Cloud Kubernetes dashboard. The cluster 'mycluster-free' is in the 'Preparing master, workers...' state and expires in 30 days. The 'Worker nodes' tab is selected, showing a single node with the following details:

Name	Status	Worker pool	Zone	Private IP	Public IP	Version
000000b2	Normal	default	Milan 01	10.144.183.56	169.51.194.202	1.24.6_1541

The dashboard also includes a sidebar with 'Overview', 'Worker nodes', 'Worker pools', and 'DevOps' (marked as 'New'). The bottom of the screen shows the Windows taskbar with various application icons and the system clock indicating 00:36 on 02-11-2022.