

Assignment-4

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Question 1:

Pull an Image from docker hub and run it in docker playground.

❏ WINDOWS POWERSHELL

```
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\Admin> 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:\Users\Admin>
```

Docker Desktop

Upgrade plan

pukkallasumathi

Containers

Images

Volumes

Dev Environments

Extensions

Add Extensions

< hello-world:latest

IN USE

IMAGE ID
feb5d9fea6a5

CREATED
about 1 year ago

SIZE
13.26 KB

More actions

RUN

IMAGE HISTORY

COMMAND

0 /bin/sh -c #(nop) CMD ["/hello"] 0 Bytes

1 /bin/sh -c #(nop) COPY file:50563a97010fd7ce1c... 13.26 KB

/bin/sh -c #(nop) COPY file:50563a97010fd7ce1c...
eebd1fa4f4891ac3decdf428333fb2683696f4358af6c2
in /

RAM 3.17GB CPU 3.46% Connected to Hub

v4.12.0

Docker Desktop

Upgrade plan

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Extensions

Add Extensions

Status: Image is up to date for hello-world:latest

Status: Image is up to date for hello-world:latest

Status: Image is up to date for hello-world:latest

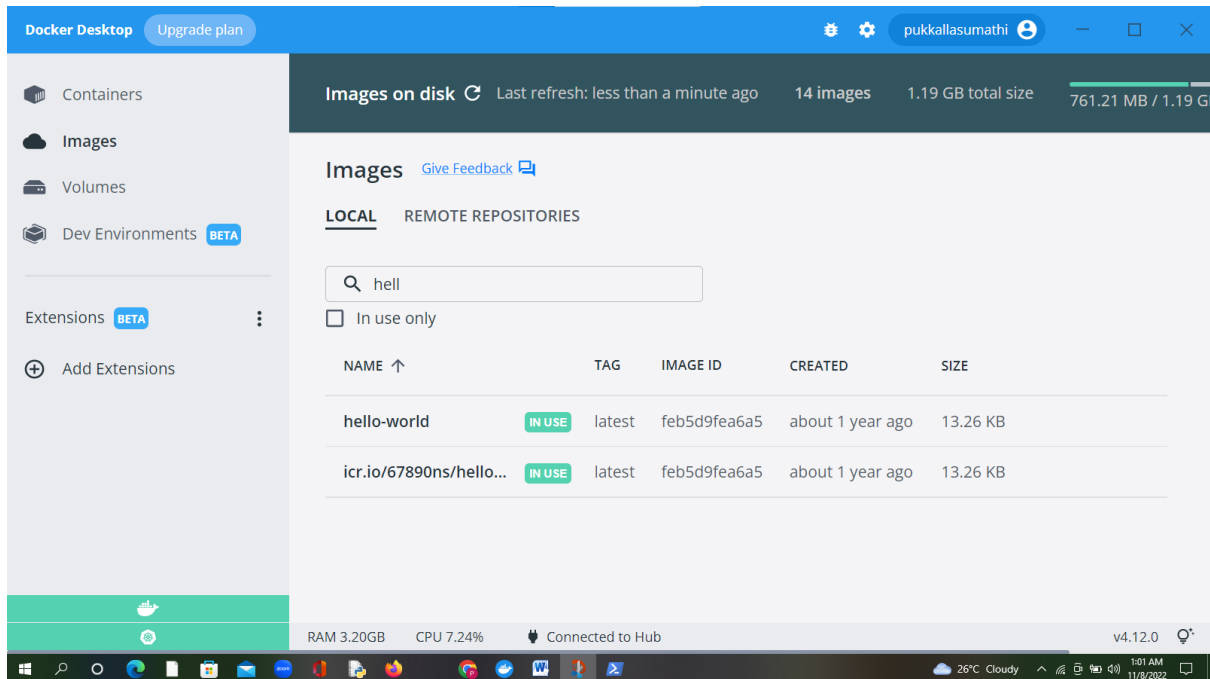
Status: Image is up to date for hello-world:latest

☐ In use only

NAME	TAG	IMAGE ID	CREATED	SIZE	
hello-world	latest	feb5d9fea6a5	about 1 year ago	13.26 KB	<div><div></div><div>RUN</div></div>

RAM 3.18GB CPU 12.42% Connected to Hub

v4.12.0



Question 2:

Create a docker file for the job portal application and deploy it in Docker desktop application.

```
FROM helloworld:sk
WORKDIR ~/Desktop/
ADD . helloworld/
WORKDIR~/Desktop/IBMproj
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.

```
PS C:\WINDOWS\system32> docker tag hello-world icr.io/67890ns/hello-world
PS C:\WINDOWS\system32> docker push icr.io/67890ns/hello-world
Using default tag: latest
The push refers to repository [icr.io/67890ns/hello-world]
e07ee1baac5f: Mounted from 54321ns/hello-world
latest: digest: sha256:f54a58bc1aac5ea1a25d796ae155dc228b3f0e11d046ae276b39c4bf2f13d8c4 size: 525
PS C:\WINDOWS\system32> ibmcloud cr image-list
Listing images...
```

Question 4:

Create a kubernetes cluster in IBM cloud and deploy helloworld images or jobportal image and also expose the same app to run in nodeport.

cloud.ibm.com/kubernetes/clusters/cd8lp0f0evr5ednqom0/nodes

IBM Cloud Catalog Manage Pukkalla Sumathi's Acc...

Clusters / mycluster-free Normal Expires in 12 days Add tags Help Kubernetes dashboard Actions...

Overview Worker nodes Worker pools DevOps New

Pool: Filter... Search Add +

Name	Status	Worker pool	Zone	Private IP	Public IP	Version
00000047	Normal	default	Milan 01	10.144.222.221	159.122.183.82	1.23.12_1548

Items per page: 25 1-1 of 1 item 1 1 of 1 page

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cloud.ibm.com/kubernetes/clusters/cd8lp0f0evr5ednqom0/nodes

IBM Cloud Catalog Manage Pukkalla Sumathi's Acc...

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Overview Worker nodes Worker pools DevOps New

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Name	Status	Worker pool	Zone	Private IP	Public IP	Version
00000047	Normal	default	Milan 01	10.144.222.221	159.122.183.82	1.23.12_1548

ID
kube-cd8lp0f0evr5ednqom0-myclusterfr-default-00000047

Status	Flavor	Private VLAN	Public VLAN
--	Free - 2 vCPUs 4GB RAM	2218181	2218179

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