

## Assignment -4

### IBM Cloud - Docker – Kubernetes

Assignment Date	19 September 2022
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Maximum Marks	2 Marks

#### Question:

1. Pull an Image from docker hub and run it in docker playground.
2. Create a docker file for the job portal / flask application and deploy it in Docker desktop application.
3. Create a IBM container registry and push docker image of flask application or job portal app.
4. Create a Kubernetes cluster in IBM cloud and deploy flask application image or job portal image and also expose the same app to run in nodeport.

The screenshot shows the Docker Desktop interface. On the left, there's a sidebar with 'Containers', 'Images', 'Volumes', and 'Dev Environments'. The main area is titled 'Containers' and shows a table with one running container named 'agitated\_colden' (ID: 1bae66b0249c) using the 'docker/getting-started:latest' image. A terminal window is open, showing the command 'C:\Users\Lenovo>docker run -d -p 80:80 docker/getting-started' and its output, which includes pulling the image and starting the container.

NAME	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
agitated_colden 1bae66b0249c	docker/getting-started:latest	Running	80:80	30 seconds ago	[Stop] [Restart] [Logs]

The screenshot shows the Docker Desktop interface with three exited containers listed in the 'Containers' tab. The containers are 'agitated\_colden', 'funny\_driscoll', and 'vigilant\_kalam'. The 'agitated\_colden' container is highlighted. The status of all containers is 'Exited'.

NAME	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
agitated_colden 1bae66b0249c	docker/getting-started:latest	Exited	80:80		[Stop] [Restart] [Logs]
funny_driscoll fcca883835e8	hello:latest	Exited	3000:5000		[Stop] [Restart] [Logs]
vigilant_kalam cb99ce95e479	job_portal:latest	Exited (127)	5000:5000		[Stop] [Restart] [Logs]

Containers

Images

Volumes

Dev Environments BETA

Extensions BETA

Add Extensions

Images on disk

Last refresh: 33 minutes ago3 images28.78 MB total size1.11 GB / 28.78 MB in useClean up

Images [Give feedback](#)

LOCALREMOTE REPOSITORIES

☐ In use only

NAME ↑		TAG	IMAGE ID	CREATED	SIZE
docker/getting-started	IN USE	latest	cb90f98fd791	7 months ago	28.78 MB
hello	IN USE	latest	08342bcd504	24 minutes ago	951.39 MB
job_portal	IN USE	latest	0e3805d0ca48	22 minutes ago	131.27 MB

RAM 3.30GBCPU 0.00%Connected to Hubv4.13.1

Kubernetes

Clusters

Reservations

Helm catalog

Container Registry

Kubernetes clusters

Resource group: Filter...Location: Filter...SearchCreate cluster +

Name	State	Location	Worker count	Created	Version	Infrastructure
mycluster-free	Normal	Amsterdam 03	1	Expires in 16 days	1.24.7_1542	Classic

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