

## Assignment -3

### Cloud Application Development

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1. Pull an image from Docker hub and run it in docker playground.

The screenshot shows the Docker Playground interface. On the left, there's a sidebar with a clock showing 03:55:39, a 'CLOSE SESSION' button, and a list of instances. The main area displays details for an instance named 'cdf7apu3\_cdf7b9u0qau000c2ro00'. It shows the IP address 192.168.0.13, memory usage at 27.43% (1.071GiB / 3.906GiB), and CPU usage at 0.57%. Below this, there's a terminal window with the following content:

```
[node1] (local) root@192.168.0.13 ~
$ docker image ls
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
helloapp      latest    71a1e48a6a4e   About a minute ago   951MB
python        latest    00cd1fb8bdec   4 days ago         932MB
[node1] (local) root@192.168.0.13 ~
$
```

2. Create docker file for helloapp application and deploy it in Docker Desktop application.

The screenshot shows the Docker Desktop interface. The left sidebar has a 'Containers' tab selected. The main area displays a list of containers. The first container, 'objective\_hypatia', is in an 'Exited' state. The other four containers are in a 'Running' state. The bottom status bar shows 'RAM 4.22GB', 'CPU 3.84%', and 'Connected to Hub'.

NAME	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
objective_hypatia	ganeshmgk/helloapp:latest	Exited	5000:5000		
k8s_POD_hello-7c8d8b575-kr8vj_default_73ae83a	k8s.gcr.io/pause:3.8	Running		26 minutes ago	
k8s_nginx_hello-7c8d8b575-kr8vj_default_73ae83	nginx:latest	Running		25 minutes ago	
k8s_POD_hello-7c8d8b575-5rt7s_default_01e4deb	k8s.gcr.io/pause:3.8	Running		21 minutes ago	
k8s_nginx_hello-7c8d8b575-5rt7s_default_01e4de	nginx:latest	Running		21 minutes ago	

3. Create IBM container for registry and deploy helloworld app

4. Create a Kubernetes cluster in IBM cloud and deploy helloworld.  
And also expose the same app to run in nodeport.

