

Assignment -4

Cloud Application Development

Assignment Date	1 November 2022
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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 a container 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%. An SSH command is provided: 'ssh ip172-18-0-32-cdf7apu3tccg00elopf0@direct.labs.play-'. Below this, there are 'DELETE' and 'EDITOR' buttons. A terminal window at the bottom shows the command 'docker image ls' and its output:

```
[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 00cd1fb8bdcc 4 days ago 932MB  
[node1] (local) root@192.168.0.13 ~  
$
```

2. Create docker file for hello app application and deploy it in DockerDesktop application.

The screenshot shows the Docker Desktop interface. The left sidebar has options for 'Containers', 'Images', 'Volumes', and 'Dev Environments'. The main area is titled 'Containers' and shows a list of running containers. The table has columns for NAME, IMAGE, STATUS, PORT(S), STARTED, and ACTIONS. There are four containers listed, all with a status of 'Running'.

	NAME	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
<input type="checkbox"/>	k8s_kubernetes-dashboard_kubernetes-dashboa 276596cddcad	kubernetes/dashboard:v2.6.1	Running		10 minutes ag	■ ⋮ 🗑
<input type="checkbox"/>	k8s_dashboard-metrics-scraper_dashboard-metri a3a5e743c217	kubernetes/metrics-scraper:v1.0.8	Running		11 minutes ag	■ ⋮ 🗑
<input type="checkbox"/>	k8s_nginx_nginx-deployment-7fb96c846b-p5r7l d 854ba28b0d8a	nginx:1.14.2	Running		11 minutes ag	■ ⋮ 🗑
<input type="checkbox"/>	k8s_nginx_nginx-deployment-7fb96c846b-pblkq c 04f0d23ab503	nginx:1.14.2	Running		11 minutes ag	■ ⋮ 🗑

Showing 4 items

RAM 3.41GB CPU 3.06% Connected to Hub v4.13.0

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.

