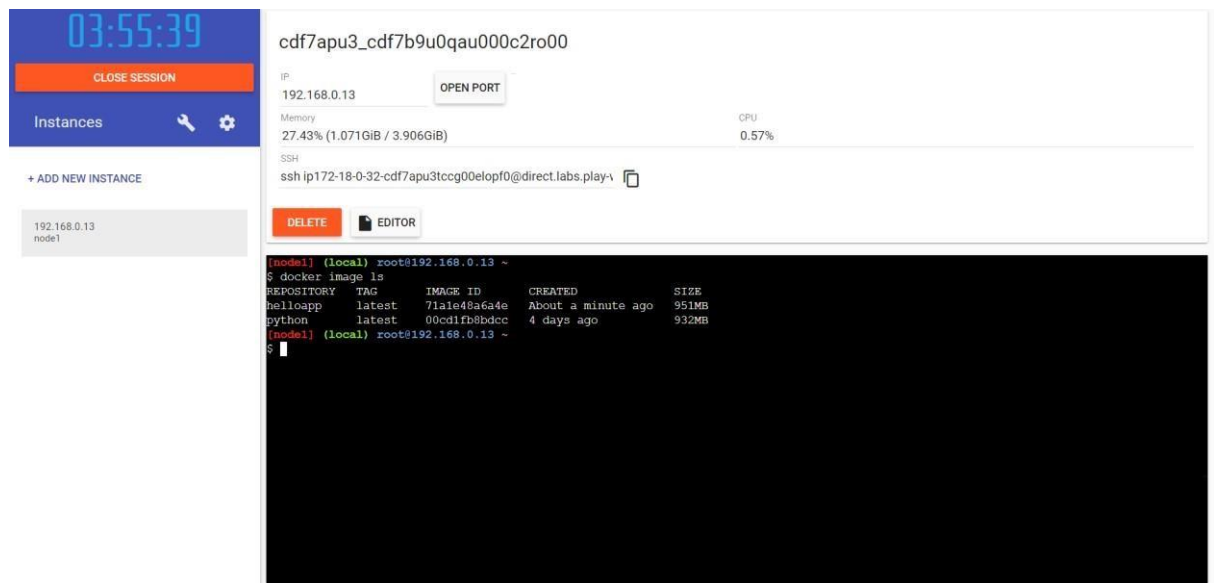


## Assignment -4

### Cloud Application Development

Assignment Date	29 October 2022
Student Name	SUBBU KUTTY B
Student Roll Number	711619104049

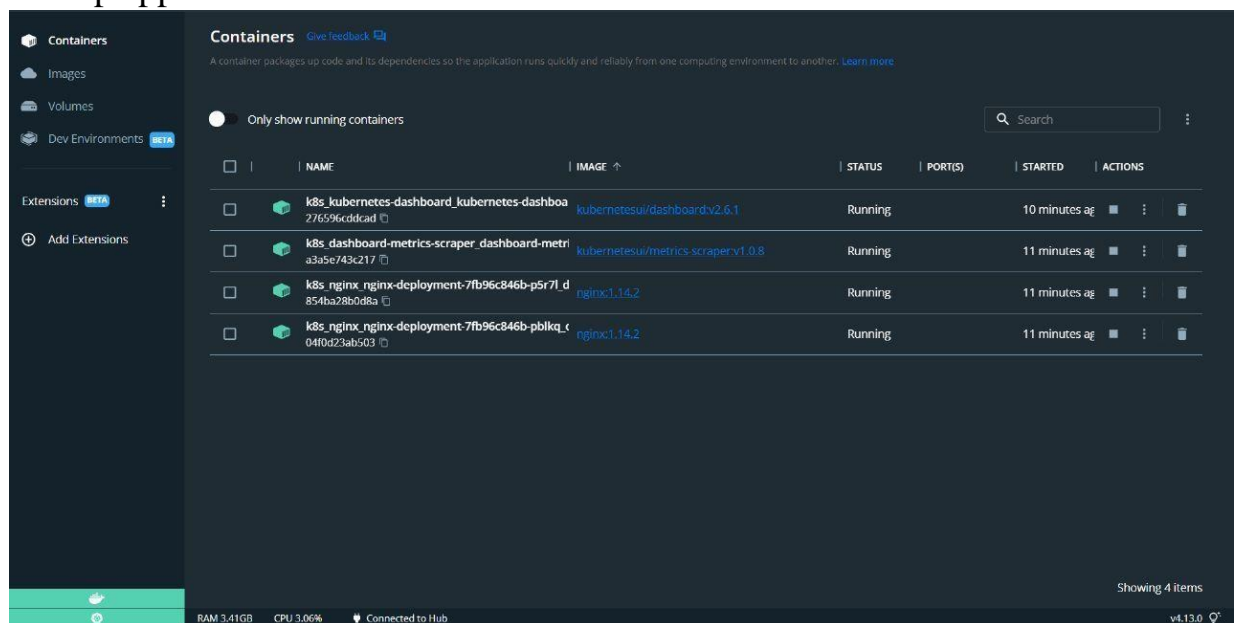
1. Pull an image from Docker hub and run it in docker playground.



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 an 'Instances' section with a '+ ADD NEW INSTANCE' button. Below this, a list of instances shows '192.168.0.13 node1'. The main panel displays details for a container named 'cdf7apu3\_cdf7b9u0qau000c2ro00'. It shows the IP '192.168.0.13', memory usage '27.43% (1.071GiB / 3.906GiB)', and CPU usage '0.57%'. There's an 'OPEN PORT' button and an SSH command: 'ssh ip172-18-0-32-cdf7apu3tccg00elopf0@direct.labs.play-'. Below this are 'DELETE' and 'EDITOR' buttons. The terminal 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    71a1e48a6ade   About a minute ago   951MB
python        latest    00cd1fb8bdcc   4 days ago       932MB
```

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



The screenshot shows the Docker Desktop interface. On the left, there's a sidebar with 'Containers', 'Images', 'Volumes', and 'Dev Environments'. The main panel shows a list of running containers. The table has columns for NAME, IMAGE, STATUS, PORT(S), STARTED, and ACTIONS. The containers listed are:

NAME	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
k8s_kubernetes-dashboard_kubernetes-dashboa-276596cddkad	kubernetes/dashboard-v2.6.1	Running		10 minutes ago	
k8s_dashboard-metrics-scraper_dashboard-metri-a3a5e743c217	kubernetes/metrics-scraper-v1.0.8	Running		11 minutes ago	
k8s_nginx_nginx-deployment-7fb96c846b-p5r7l-d-854ba28b0d8a	nginx:1.14.2	Running		11 minutes ago	
k8s_nginx_nginx-deployment-7fb96c846b-pblkq-c-04f0d23ab503	nginx:1.14.2	Running		11 minutes ago	

At the bottom, there's a status bar showing 'RAM 3.41GB', 'CPU 3.06%', and 'Connected to Hub'. The bottom right corner shows 'Showing 4 items' and 'v1.13.0'.

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.

