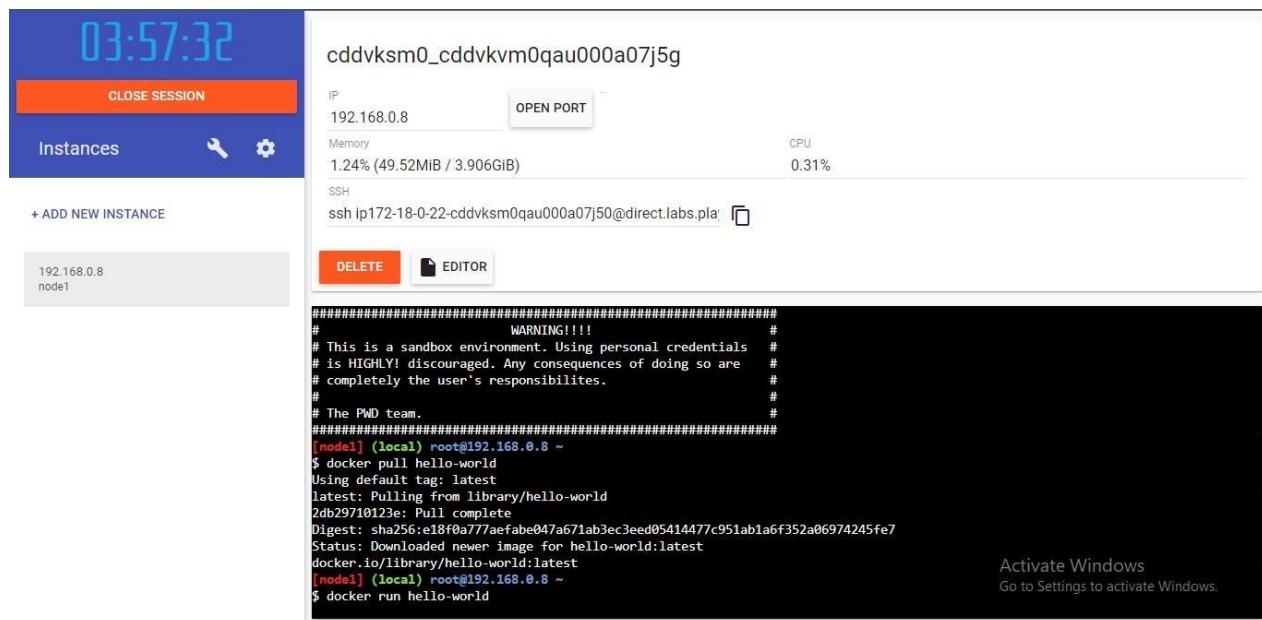


ASSIGNMENT 4

TEAM ID	PNT2022TMID49997
PROJECT NAME	Personal Expenses Tracker Application

Question 1:

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



03:57:32

CLOSE SESSION

cddvksm0_cddvkvm0qau000a07j5g

IP: 192.168.0.8 OPEN PORT

Memory: 1.24% (49.52MiB / 3.906GiB) CPU: 0.31%

Instances 🔧 ⚙️

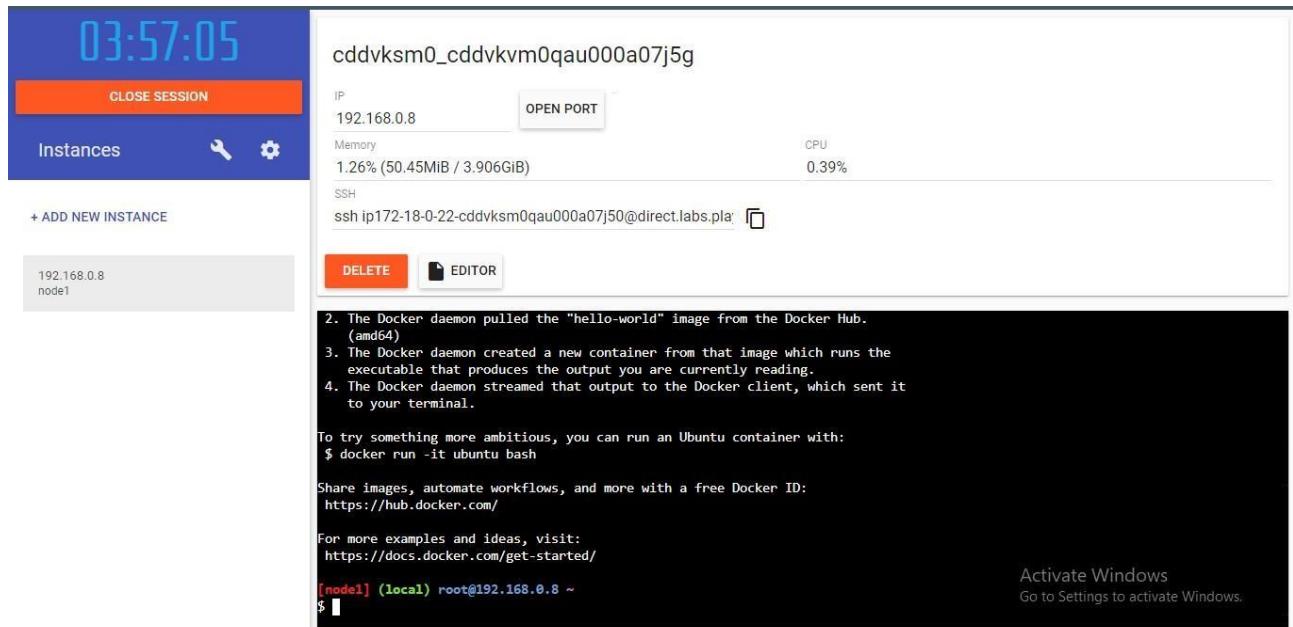
+ ADD NEW INSTANCE

192.168.0.8 node1

DELETE EDITOR

```
#####
#           WARNING!!!!          #
# This is a sandbox environment. Using personal credentials      #
# is HIGHLY! discouraged. Any consequences of doing so are      #
# completely the user's responsibilites.                         #
#                                                               #
# The PWD team.                                                 #
#####
[node1] (local) root@192.168.0.8 ~
$ docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
2db29710123e: Pull complete
Digest: sha256:e18f0a777afeb047a671ab3ec3eed05414477c951ab1a6f352a06974245fe7
Status: Downloaded newer image for hello-world:latest
docker.io/library/hello-world:latest
[node1] (local) root@192.168.0.8 ~
$ docker run hello-world
```

Activate Windows
Go to Settings to activate Windows.



Question 2:

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

DOCKERFILE:

```
1  FROM python:3.8-buster
2
3  WORKDIR /app
4
5  COPY requirements.txt /app/
6
7  RUN pip install -r requirements.txt
8
9  COPY . /app/
10
11 RUN cp .env.dev.sample .env
12
13 EXPOSE 8000
14
15 RUN chmod +x entrypoint.sh
16
17 CMD ["sh", "entrypoint.sh"]
```

DEPLOYMENT OF JOBPORTAL APPLICATION:

The screenshot shows the Docker Desktop application interface. On the left, there's a sidebar with icons for Containers, Images, Volumes, and Dev Environments (BETA). Below that is an 'Extensions' section with a 'BETA' badge and an 'Add Extensions' button. The main area is titled 'Containers' with a 'Give feedback' link. It contains a brief description: 'A container packages up code and its dependencies so the application runs quickly and reliably from one computing environment to another.' A 'Learn more' link is also present. There are filters for 'Only show running containers' and a search bar. At the bottom, it says 'Showing 2 items'. The table lists two containers:

	NAME	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
<input type="checkbox"/>	agitated_neumann 918d20882039	icr.io/helloapp/ibm:latest	Exited (137)	49160:8080	49160:8080
<input type="checkbox"/>	jolly_turing b62c0712bdd3	jobportalapplication:latest	Running	1234:8000	4 minutes ago

At the very bottom, there's a footer with resource usage information: 'RAM 3.06GB CPU 0.57%' and 'Connected to Hub', along with the version 'v4.13.0'.

OUTPUT:

The image shows a job search interface with a blue header bar containing a person icon and the text "Find Jobs". Below the header are eight job listing cards arranged in two rows of four. Each card includes a small thumbnail image, the job title, a brief description, and an "Apply" button.

Job Title	Description	Action
Web Developer	Web Developer at Motive Company.	Apply
Android Developer	Android Developer at Believe Company.	Apply
IoS Developer	IoS Developer at Norway P&L Company.	Apply
Pen Tester	Pen Tester at AGC company.	Apply
Computer & Information Research Scientist	Computer & Information Research Scientist at GPSM company.	Apply
Computer & Information Systems Manager (CISM)	Computer & Information Systems Manager (CISM) at HYT company.	Apply
Computer Hardware Engineer	Computer Hardware Engineer at 7Tech company.	Apply
Big Data Engineer	Big Data Engineer at SMGT company.	Apply

Question 3:

Create a IBM container registry and deploy helloworld app or jobportapp.

IBM CONTAINER REGISTRY DEPLOYMENT:

The screenshot shows the IBM Container Registry interface. On the left, a sidebar menu includes 'Quick start', 'Namespaces' (1), 'Repositories' (1), 'Images' (1), 'Trash' (0), and 'Settings'. The main area is titled 'Images' and shows a table with one item. The table columns are 'Repository@digest', 'Tags', 'Manifest type', 'Created', 'Size', and 'Security status'. The item listed is 'helloapp@ibm@sha256:a3d35518ea7f...', with a 'latest' tag, Docker manifest type, created '1 day ago', and a size of '352 MB'. The 'Security status' row shows a red warning icon and '20 issues'. Navigation controls at the bottom allow for item selection, page navigation, and search.

OUTPUT:



Question 4:

Create a Kubernetes cluster in IBM cloud and deploy hello world image or job portal image and also expose the same app to run in node port.

CREATING KUBERNETES CLUSTER IN IBM CLOUD AND EXPOSING NODEPORT:

The screenshot shows the 'Worker nodes' section of the IBM Cloud Kubernetes cluster management interface. It displays a single worker node entry:

Name	Status	Worker pool	Zone	Private IP	Public IP	Version
0000008c	Normal	default	Milan 01	10.144.187.51	159.122.179.68	1.23.12_1549

Below the table, it says 'Items per page: 25' and '1–1 of 1 item'.

OUTPUT:

The screenshot shows a job search results page with the following job listings:

- Web Developer**
Web Developer at Motive Company.
[Apply](#)
- Android Developer**
Android Developer at Believe Company.
[Apply](#)
- iOS Developer**
iOS Developer at Norway P&L Company.
[Apply](#)
- Pen Tester**
Pen Tester at AGC company.
[Apply](#)
- Computer & Information Research Scientist**
Computer & Information Research Scientist at GPSM company.
[Apply](#)
- Computer & Information Systems Manager (CISM)**
Computer & Information Systems Manager (CISM) at HYT company.
[Apply](#)
- Computer Hardware Engineer**
Computer Hardware Engineer at 7Tech company.
[Apply](#)
- Big Data Engineer**
Big Data Engineer at SMGT company.
[Apply](#)