

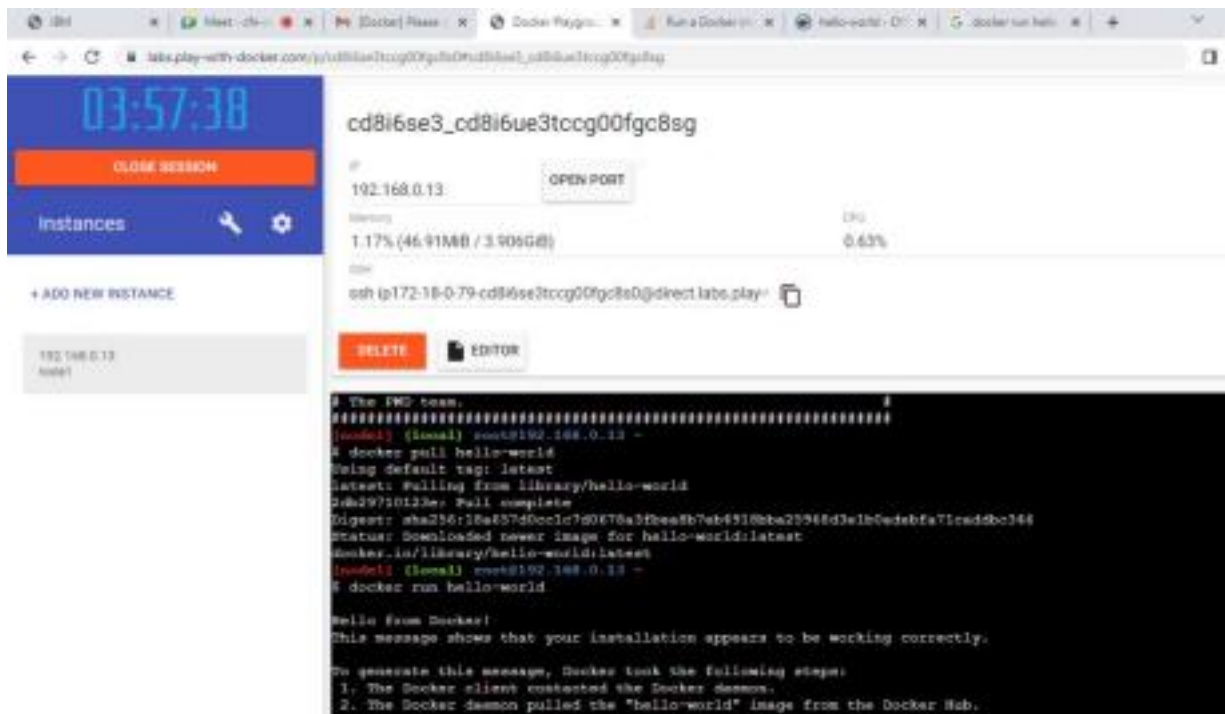
Assignment-4

| | |
|---------------------|------------------|
| Assignment Date | 02 November 2022 |
| Student Name | Guhan P |
| Student Roll Number | 920819104011 |
| Maximum Marks | 2 Marks |

Question-1:

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

Docker Playground:



The screenshot displays the Docker Playground web interface. On the left, a sidebar shows a timer at 03:57:38, a 'CLOSE SESSION' button, and an 'Instances' section with a '+ ADD NEW INSTANCE' button. The main area shows a container named 'cd8i6se3_cd8i6ue3tccg00fgc8sg' with IP '192.168.0.13', CPU usage of 1.17%, and memory usage of 46.91MB. Below this, a terminal window shows the following commands and output:

```
# The FWD team.
#####
[root@] (local) root@192.168.0.13 -
# docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
3da29710123e: Pull complete
Digest: sha256:18a457d0cc1c7d0478a3fbee8b7eb4918bba25968d3e1b0edebfa71caddb0344
Status: Downloaded newer image for hello-world:latest
docker.io/library/hello-world:latest
[root@] (local) root@192.168.0.13 -
# docker run hello-world

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
1. The Docker client contacted the Docker daemon.
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
```

Question 2:

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


[illegible][illegible]

The screenshot shows the Visual Studio Code interface with the 'Images' view open. The 'Images' sidebar on the left contains a search bar and a 'No images found' message. The main editor area displays a list of images. The first image is 'johannes' with a size of 1.2 MB. The 'Images' view is currently empty, showing a search bar and a 'No images found' message.

Question 3:

Create a IBM container registry and deploy helloworld app or

jobportalapp.

Container Registry

Quick start

Namespaces 2

Repositories 1

Images 1

Trash 0

Settings

Repositories

Location

Tokyo

Search

Create

| | Name | Image count | Namespace | Last updated | |
|-----------------------------------|---|-------------|-----------|--------------|-------------|
| <div><div></div><div></div></div> | <div>ins</div> <div>public/team08/ins</div> | 1 | team08 | 404 days ago | <div></div> |

Items per page: 25

1-1 of 1 item

1

1 of 1 page

Question 4:

Create a Kubernetes cluster in IBM cloud and deploy helloworld image or jobportal image and also expose the same app to run in nodeport.

The screenshot displays the IBM Cloud Kubernetes Dashboard for a cluster named 'team20-cluster'. The top navigation bar includes the cluster name, status (Active), and a 'Deployments' button. The left sidebar lists various Kubernetes resources: Overview, Workloads, Services, Ingresses, Config Maps, Persistent Volume Claims, and Secrets.

The main content area shows the cluster overview with four summary cards:

- Nodes: 1 of 1 available
- Pods: 0 of 0 available
- Cluster Status: Normal
- Endpoint Status: Unknown

Below these cards is a 'Details' section with the following information:

- Cluster ID: `team20-cluster`
- Version: 1.24.1-1.34.0
- Endpoint: `team20-cluster`
- Endpoint URL: `team20-cluster`
- Endpoint Port: `80`
- Endpoint Protocol: `HTTP`

The bottom section, titled 'Workloads > Deployments', shows a table of deployments:

| Name | Images | Labels | Pods | Created |
|-----------------------|--------------------|--------------------------------------|------|--------------|
| <code>helloapp</code> | <code>nginx</code> | <code>team20-cluster/helloapp</code> | 2/2 | 1 minute ago |