

Assignment -4

Assignment Date	05 November 2022
Student Name	Ragul R
Student Roll Number	812019205030
Maximum Marks	2 Marks

Question 1:

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

The screenshot shows the Docker Playground interface in a web browser. The browser tabs include 'Docker Please', 'Docker Playgrou...', 'Docker Instal...', 'IBM', 'IBM-Project-437', 'IBM-Project-151', 'Manual installa...', and 'Docker Hub'. The address bar shows the URL: https://labs.play-with-docker.com/p/cdlqip60qau000cghct0#cdlqip60_cdlqitu0qau000cghcu0.

On the left sidebar, there is a digital clock showing '03:58:33', a 'CLOSE SESSION' button, and an 'Instances' section with a '+ ADD NEW INSTANCE' button. Below this, a list of instances shows '192.168.0.28' with the name 'node1'.

The main panel displays the instance details for 'cdlqip60_cdlqitu0qau000cghcu0'. It shows the IP address '192.168.0.28', memory usage '1.14% (45.59MiB / 3.906GiB)', and CPU usage '0.70%'. There are buttons for 'OPEN PORT', 'DELETE', and 'EDITOR'. The SSH command is 'ssh ip172-18-0-28-cdlqip60qau000cghct0@direct.labs.play-'. Below this is a terminal window showing the following commands and output:

```
#####  
# WARNING!!!!  
# This is a sandbox environment. Using personal credentials  
# is HIGHLY discouraged. Any consequences of doing so are  
# completely the user's responsibilities.  
#  
# The FWD team.  
#####  
[node1] (local) root@192.168.0.28 ~  
$ docker pull hello-world  
Using default tag: latest  
latest: Pulling from library/hello-world  
2db29710123e: Pull complete  
Digest: sha256:e18f0a777aefabe047a671ab3ec3eed05414477c951ab1a6f352a06974245fe7  
Status: Downloaded newer image for hello-world:latest  
docker.io/library/hello-world:latest  
[node1] (local) root@192.168.0.28 ~  
$
```

The Windows taskbar at the bottom shows the search bar, task view, and several application icons. The system tray on the right indicates '26°C Cloudy', 'ENG IN', and the time '6:53 PM 11/9/2022'.

Question 2:

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

The screenshot shows the Docker Hub interface for a repository named 'demoapp12345' under the user 'ragulr123'. The page includes a search bar, navigation tabs (General, Tags, Builds, Collaborators, Webhooks, Settings), and a description section. A 'Docker commands' box shows the command 'docker push ragulr123/demoapp12345:tagname'. The 'Tags and scans' section indicates that vulnerability scanning is disabled. The 'Automated Builds' section explains how to connect GitHub or Bitbucket for automatic builds. The Windows taskbar at the bottom shows the time as 6:50 PM on 11/9/2022.

Wasm is a fast, light alternative to Linux containers – try it out today in the [Docker+Wasm Technical Preview](#)

docker hub Search Docker Hub Explore Repositories Organizations Help Upgrade ragulr123

ragulr123 Repositories demoapp12345 Using 0 of 1 private repositories. [Get more](#)

General Tags Builds Collaborators Webhooks Settings

Add a short description for this repository
The short description is used to index your content on Docker Hub and in search engines. It's visible to users in search results. [Update](#)

ragulr123 / demoapp12345

Description
This repository does not have a description [✎](#)
Last pushed: a few seconds ago

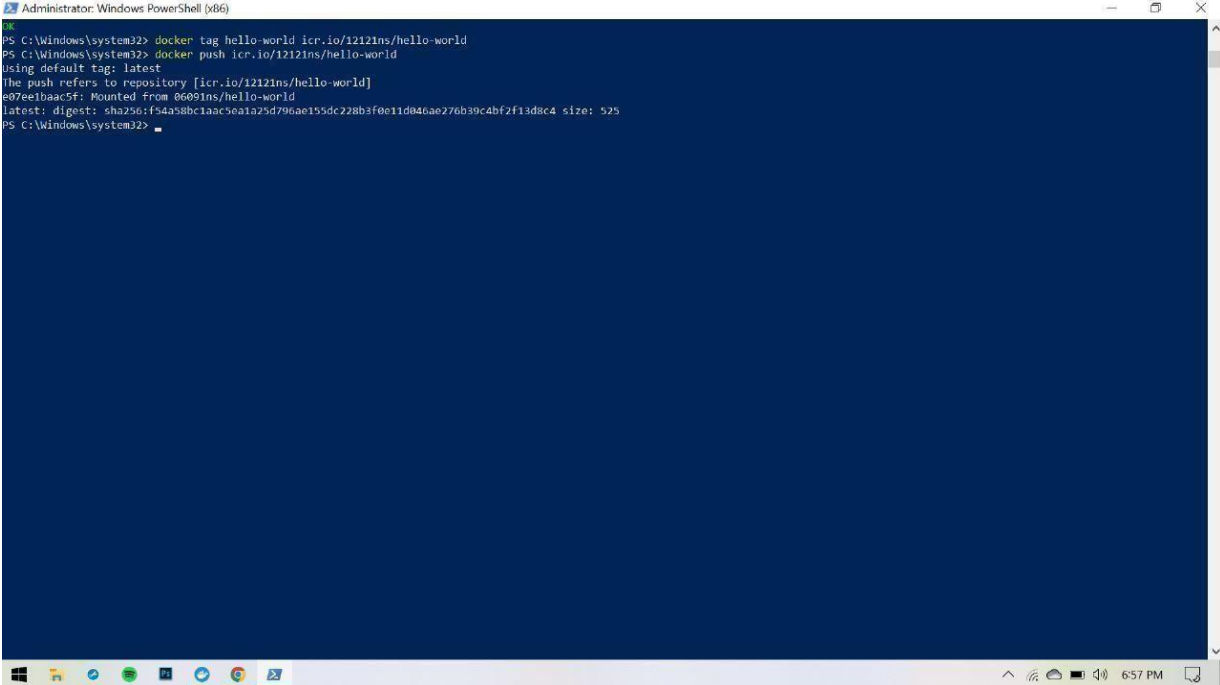
Docker commands [Public View](#)
To push a new tag to this repository,
`docker push ragulr123/demoapp12345:tagname`

Tags and scans [VULNERABILITY SCANNING - DISABLED](#) [Enable](#)
This repository is empty. When it's not empty, you'll see a list of the most recent tags here.

Automated Builds
Manually pushing images to Hub? Connect your account to GitHub or Bitbucket to automatically build and tag new images whenever your code is updated, so you can focus your time on creating.
Available with Pro, Team and Business subscriptions.

Type here to search 26°C Cloudy 6:50 PM 11/9/2022

Question 3: Create a IBM container registry and deploy helloworld app or jobportalapp.



```
Administrator: Windows PowerShell (x86)
PS C:\Windows\system32> docker tag hello-world icr.io/12121ns/hello-world
PS C:\Windows\system32> docker push icr.io/12121ns/hello-world
Using default tag: latest
The push refers to repository [icr.io/12121ns/hello-world]
e07ee1baac5f: Mounted from 06091ns/hello-world
latest: digest: sha256:f54a58b1aac5ea1a25d796ae155dc228b3f0e11d840ae276b39cabf2f13d8c4 size: 525
PS C:\Windows\system32>
```

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 Clusters management interface. The top navigation bar includes the IBM Cloud logo, a search bar, and user account information. The main header shows the cluster name 'mycluster-free' with a status of 'Normal' and an expiration notice 'Expires in 29 days'. A sidebar on the left provides navigation options: Overview, Worker nodes (selected), Worker pools, and DevOps (marked as 'New'). The central area features a table of worker nodes. One node is listed with ID '0000002e', status 'Normal', worker pool 'default', zone 'Milan 01', private IP '10.144.216.178', public IP '159.122.186.57', and version '1.24.7_1543'. Below the table, pagination indicates '1 of 1 item'.

<input type="checkbox"/>	Name	Status	Worker pool	Zone	Private IP	Public IP	Version
<input type="checkbox"/>	0000002e	Normal	default	Milan 01	10.144.216.178	159.122.186.57	1.24.7_1543