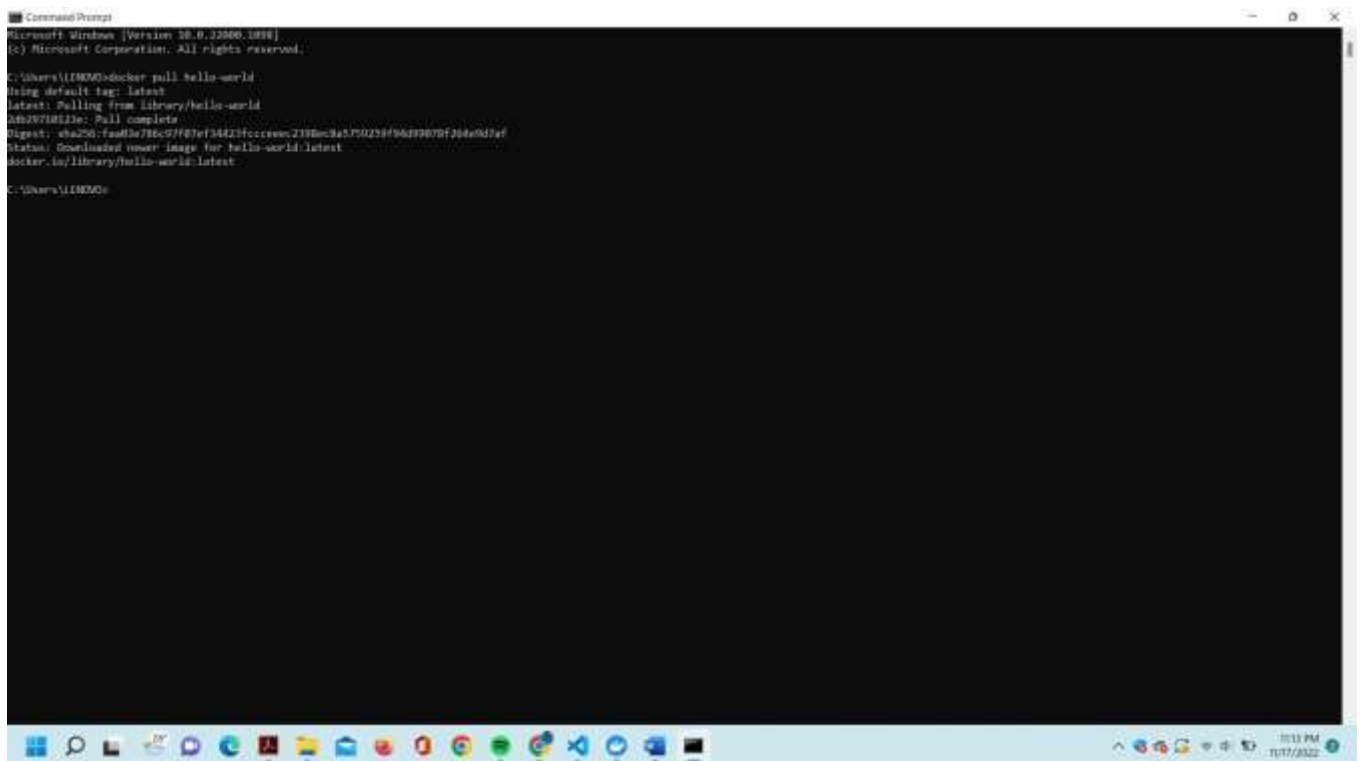


ASSIGNMENT 04

Assignment Date	20 November 2022
Team ID	PNT2022TMID46366
Maximum Marks	2 Marks

Question 1:

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

A screenshot of a Windows Command Prompt window titled "Command Prompt". The window shows the execution of the command "docker pull hello-world". The output text is as follows:
Microsoft Windows [Version 10.0.22000.1888]
(c) Microsoft Corporation. All rights reserved.

C:\Users\LENOVO>docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
2db29718121e: Pull complete
Digest: sha256:faa03a7f0707e3442fccc0c238b0c8a5750239f96d7907f204e0d7ef
Status: Downloaded newer image for hello-world:latest
docker.io/library/hello-world:latest

C:\Users\LENOVO>
The taskbar at the bottom of the screen shows various application icons, including the Start button, File Explorer, Microsoft Edge, and several other programs. The system tray on the right indicates the time as 10:11 PM on 10/17/2022.

Question 2:

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

FROM helloworld:latest

WORKDIR ~/Desktop/

```
ADD . helloworld/
```

WORKDIR ~/Desktop/htmlfile

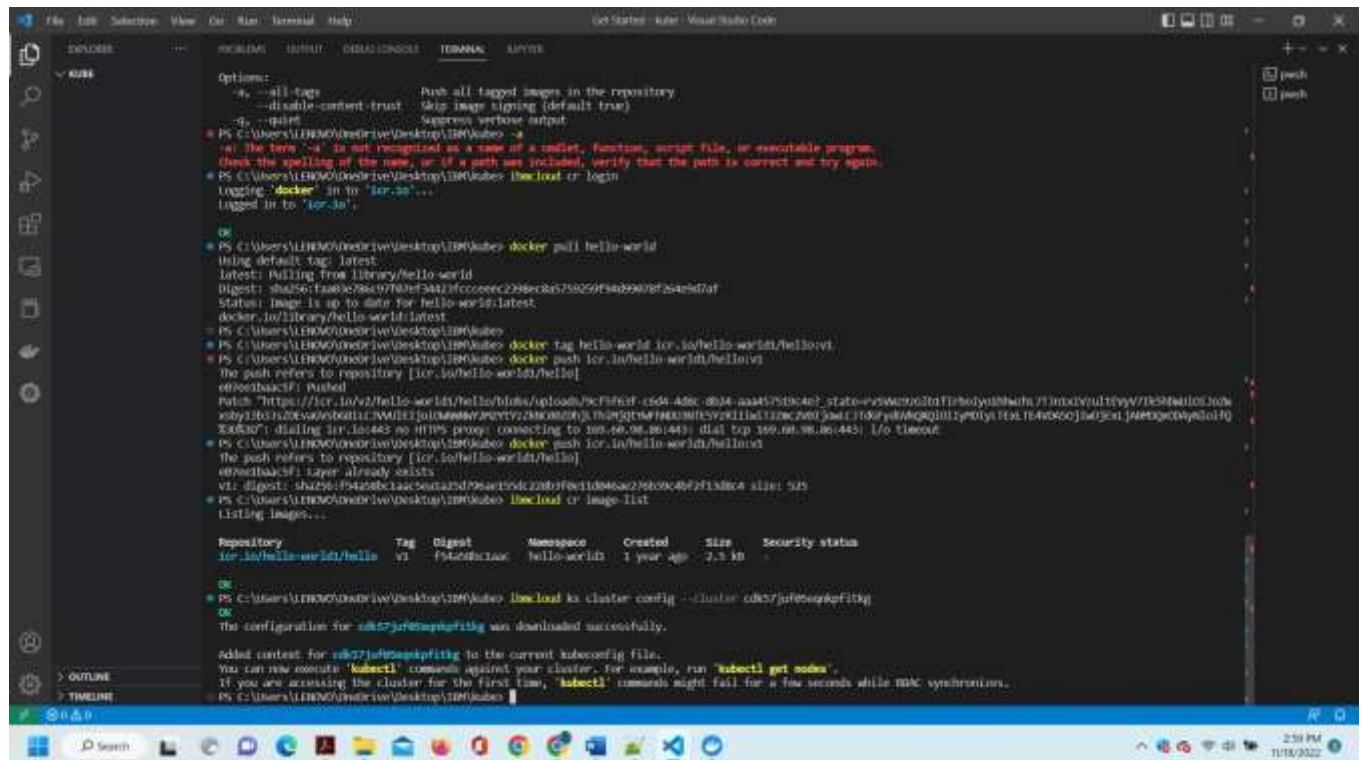
RUN `pip install -r requirements`

RUN `chmod +x app.sh`

CMD `["/bin/sh","app.sh"]`

Question 3:

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



```
Options:
  -a, --all-tags          Push all tagged images in the repository.
  --disable-content-trust Skip image signing (default true)
  -q, --quiet             Suppress verbose output

PS C:\Users\LEHNO\OneDrive\Desktop\IBM\kubes> docker pull hello-world
Using default tag: latest
Digest: sha256:f4a8c38a97f0ef3441fccc0ec238e6a575059f94d990f824e6d7af
Status: Image is up to date for hello-world:latest
docker.io/library/hello-world:latest

PS C:\Users\LEHNO\OneDrive\Desktop\IBM\kubes> docker tag hello-world icr.io/hello-world/hellov1
PS C:\Users\LEHNO\OneDrive\Desktop\IBM\kubes> docker push icr.io/hello-world/hellov1
The push refers to repository [icr.io/hello-world/hello]
e09e0baacf1: pushed
Push: https://icr.io/v2/hello-world/hello/blobs/uploads/9cf3f63f-c5d4-4d8c-8034-aad5759c4e1f; state=vsWm90G2tdTlrhdyu0h9uH7Jrmx0yulTeyyV7R59h4u0Ck0u
x0y3R01u00v0y0b0L11Nw0H1j0u0www0m0v0v23w000t31u0w0t0w0F0u0H0u0C0v0k1l0L310w020d1100y0k0A0q0l0L15m0y0F0L104000010w0j0u1j0M0g0C04y0d01Q
X003070 Dialing icr.io:443 so HTTPS proxy connecting to 100.66.96.30(443): dial tcp 100.66.96.30(443): i/o timeout
PS C:\Users\LEHNO\OneDrive\Desktop\IBM\kubes> docker push icr.io/hello-world/hello
The push refers to repository [icr.io/hello-world/hello]
e09e0baacf1: layer already exists
v1: digest: sha256:f4a8c38a97f0ef3441fccc0ec238e6a575059f94d990f824e6d7af:152
PS C:\Users\LEHNO\OneDrive\Desktop\IBM\kubes> docker image ls
Listing images...

Repository          Tag    Digest              Namespace    Created    Size    Security status
icr.io/hello-world/hello v1     f4a8c38a97f0ef3441fccc0ec238e6a575059f94d990f824e6d7af hello-world 1 year ago 2.3 kB

PS C:\Users\LEHNO\OneDrive\Desktop\IBM\kubes> docker load ks cluster config --cluster c0857jrf0m0q0pf0t0g
The configuration for c0857jrf0m0q0pf0t0g was downloaded successfully.

Added content for c0857jrf0m0q0pf0t0g to the current kubeconfig file.
You can now execute 'kubectl' commands against your cluster. For example, run 'kubectl get nodes'.
If you are accessing the cluster for the first time, 'kubectl' commands might fail for a few seconds while RBAC synchronizes.
PS C:\Users\LEHNO\OneDrive\Desktop\IBM\kubes>
```

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 cluster 'mycluster-nta' is shown with a status of 'Preparing master, workers...' and an expiration notice of 'Expires in 30 days'. The 'Worker nodes' tab is selected, showing a table of nodes. The table has columns for Name, Status, Worker pool, Zone, Private IP, Public IP, and Version. One node is listed with the name '000000e9', status 'Provisioning - Master is deploying', and version '1.24.7_1543'. The interface also includes a search bar, a filter dropdown, and a table with pagination controls.

Name	Status	Worker pool	Zone	Private IP	Public IP	Version
000000e9	Provisioning - Master is deploying	default	Milan 01	10.144.183.160	169.51.194.160	1.24.7_1543