

## Assignment -4

Assignment Date	29 octobar 2022
Student Name	Ganesh Kumar
Student Roll Number	812019205009
Maximum Marks	2 Marks

### Question 1:

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

The screenshot displays the Docker Playground interface. On the left, a sidebar shows a timer at 00:40:00, a 'CLOSE SESSION' button, and a list of instances with one instance named 'node1' at IP 192.168.0.18. The main panel shows details for the selected instance 'cdjps1v9\_cdjsnde3tccg00d5v69g', including its IP, memory usage (1.23%), CPU usage (0.63%), and an SSH command. Below this, there are 'DELETE' and 'EDITOR' buttons. The terminal window at the bottom shows the following commands and output:

```
[node1] (local) root@192.168.0.18 ~
$ 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@192.168.0.18 ~
$
```

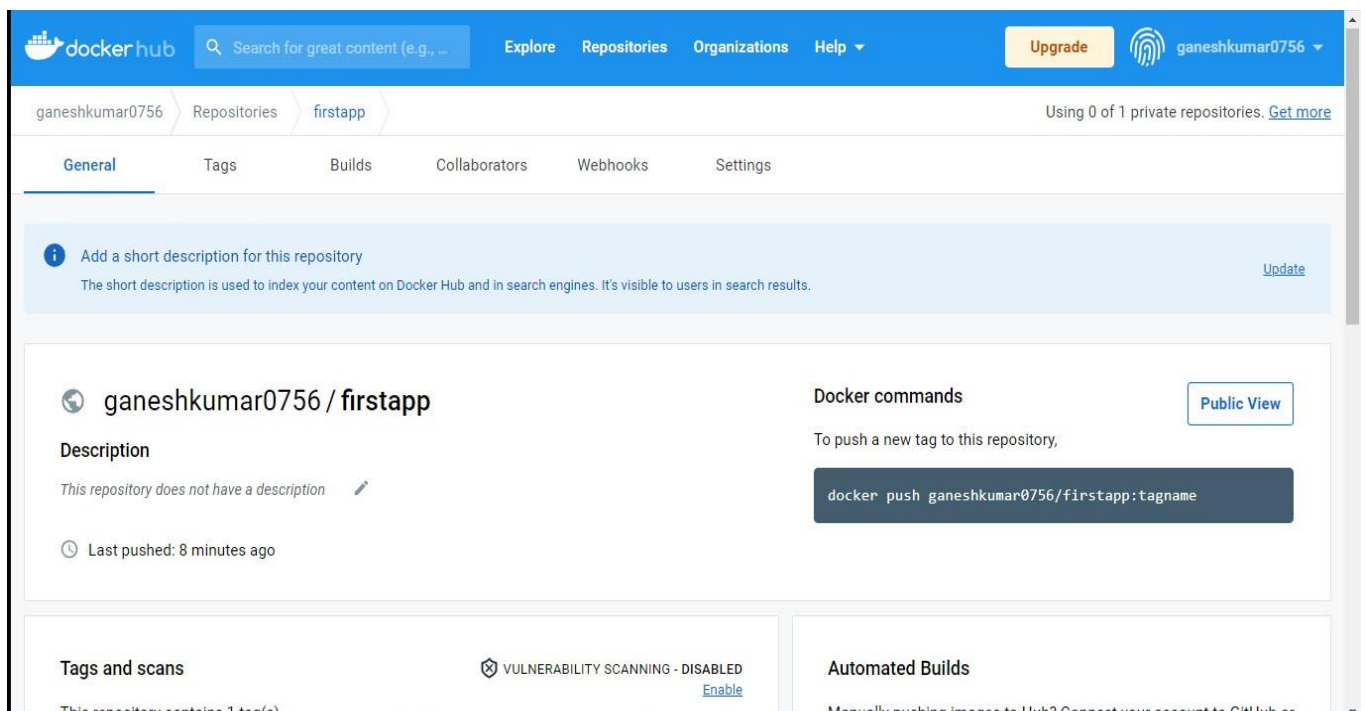
### Question 2:

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

The screenshot shows the Visual Studio Code interface. The Explorer sidebar on the left shows a project named 'DEMO APP' with files: static, templates, homepage.html, demoapp.py, Dockerfile, and requirements.txt. The main editor area has tabs for demoapp.py, Dockerfile, requirements.txt, and homepage.html. The requirements.txt file contains the text '1 flask'. The TERMINAL panel at the bottom shows the output of a 'docker push' command. The output indicates that the image 'ganeshkumar0756/firstapp' is being pushed to Docker Hub. It shows several layers being pushed, with some already existing. The push is successful, and the latest digest is 'sha256:ef63c4717de04324ad3f1cd23b8925d0fffc327c3ec1f2dff41274159c67904a' with a size of 2844. The status bar at the bottom shows 'Ln 1, Col 6', 'Spaces: 4', 'UTF-8', 'CRLF', 'pip requirements', 'Go Live', and a Docker icon.

```
requirements.txt
1 flask

53b8bfee7a0a: Pushed
5b3f1ed98915: Retrying in 1 second
6b183c62e3d7: Retrying in 3 seconds
882fd36bfd35: Retrying in 3 seconds
d1dec9917839: Retrying in 3 seconds
d38adf39e1dd: Waiting
4ed121b04368: Waiting
d9d07d703dd5: Waiting
dialing registry-1.docker.io:443 no HTTPS proxy: resolving host registry-1.docker.io: lookup registry-1.docker.io: no such host
PS E:\Demo app> docker push ganeshkumar0756/firstapp
Using default tag: latest
The push refers to repository [docker.io/ganeshkumar0756/firstapp]
4f6e29f7eeb4: Preparing
4f6e29f7eeb4: Pushed
222ccf063835: Layer already exists
6f6e69c2c592: Layer already exists
53b8bfee7a0a: Layer already exists
5b3f1ed98915: Pushed
6b183c62e3d7: Pushed
882fd36bfd35: Pushed
d1dec9917839: Pushed
d38adf39e1dd: Pushed
4ed121b04368: Pushed
d9d07d703dd5: Pushed
latest: digest: sha256:ef63c4717de04324ad3f1cd23b8925d0fffc327c3ec1f2dff41274159c67904a size: 2844
PS E:\Demo app>
```



**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:f54a58bciac5e1a25d796ae155dc228b3f0e11d040ae276b39c4bf2f13d8c4 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.

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