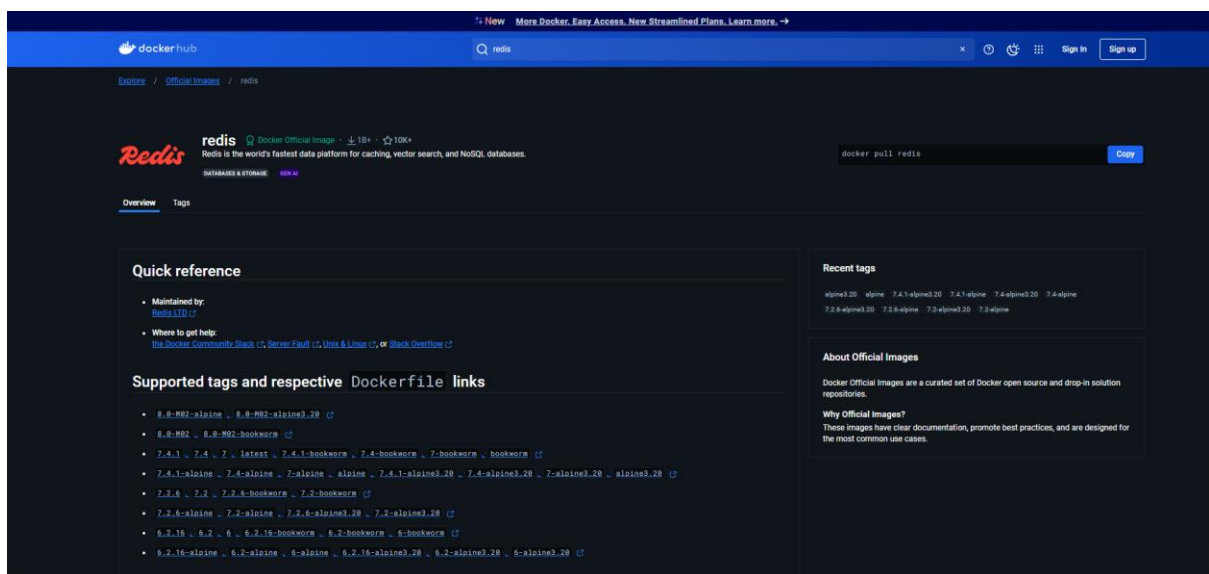Name : Akshit Bhutani
Roll no : R2142220021
SAP : 500105013
Batch : B1 DevOps

EXPERIMENT – 2

Introduction to Docker

Aim: Working with Docker — Basic Commands

Step 1: Finding a Redis Image on Docker Hub

Step 2 : Pulling redis image on local machine to use it offline

docker pull redis

This command will pull the redis image from docker hub

```
HP 15@LAPTOP-PL8DJA30 MINGW64 ~/Desktop/Sem5/Docker
$ docker pull redis
Using default tag: latest
latest: Pulling from library/redis
2d429b9e73a6: Pull complete
92ef1eccbb9f: Pull complete
5e00ad97561c: Pull complete
8f865c3d417c: Pull complete
74c736b00471: Pull complete
928f5dbb5007: Pull complete
4f4fb700ef54: Pull complete
6fd0c1bf3b91: Pull complete
Digest: sha256:af0be38eb8e43191bae9b03fe5c928803930b6f93e2dde3a7ad1165c04b1ce22
Status: Downloaded newer image for redis:latest
docker.io/library/redis:latest

What's Next?
  View a summary of image vulnerabilities and recommendations → docker scout qui
ckview redis
```

Step 3: Run Docker Container of Redis Image in background

docker run -d —name

```
HP 15@LAPTOP-PL8DJA30 MINGW64 ~/Desktop/Sem5/Docker
$ docker run -d --name Akshit_redis redis
46c957b0d43c5e9ba67fc9239b841d054270a3b9b609c65e720879a5379ca069
```

Step 4: Run Docker PS and Docker PS —a

docker ps -a

Use of docker ps is to provide a list of Docker containers on the machine. docker ps shows only running containers by default.

To view all containers -a flag is used with docker ps.

```
HP 15@LAPTOP-PL8DJA30 MINGW64 ~/Desktop/Sem5/Docker
$ docker ps
CONTAINER ID    IMAGE       COMMAND                  CREATED          STATUS
   PORTS        NAMES
46c957b0d43c    redis       "docker-entrypoint.s…"   42 seconds ago   Up 41 seconds
   6379/tcp     Akshit_redis

HP 15@LAPTOP-PL8DJA30 MINGW64 ~/Desktop/Sem5/Docker
$ docker ps -a
CONTAINER ID    IMAGE       COMMAND                  CREATED          STATUS
           PORTS        NAMES
46c957b0d43c    redis       "docker-entrypoint.s…"   3 minutes ago    Up 3 minutes
           6379/tcp     Akshit_redis
713262d3d545    ubuntu      "/bin/bash"              2 months ago     Exited (255) 9
 minutes ago                 elastic_dijkstra
```

Step 5: Run Docker Container and take its console

To view running docker containers — use docker ps

To take its console i.e. enter inside container use

<h3 align="center">docker exec -it <container name/ID> /bin/bash</h3>

```
C:\Users\HP 15>docker exec -it Akshit_redis /bin/bash
root@46c957b0d43c:/data# ls -a
.  ..
root@46c957b0d43c:/data# _
```

Step 5: Exit console

```
root@46c957b0d43c:/data# exit
exit

C:\Users\HP 15>
```

Step 6: Stop container

```
HP 15@LAPTOP-PL8DJA30 MINGW64 ~/Desktop/Sem5/Docker
$ docker stop Akshit_redis
Akshit_redis

HP 15@LAPTOP-PL8DJA30 MINGW64 ~/Desktop/Sem5/Docker
$ docker ps
CONTAINER ID    IMAGE       COMMAND     CREATED     STATUS      PORTS       NAMES

HP 15@LAPTOP-PL8DJA30 MINGW64 ~/Desktop/Sem5/Docker
$ |
```

Step 7: Delete container

```
HP 15@LAPTOP-PL8DJA30 MINGW64 ~/Desktop/Sem5/Docker
$ docker rm Akshit_redis
Akshit_redis

HP 15@LAPTOP-PL8DJA30 MINGW64 ~/Desktop/Sem5/Docker
$ docker ps -a
CONTAINER ID    IMAGE       COMMAND         CREATED         STATUS
    PORTS       NAMES
713262d3d545    ubuntu      "/bin/bash"     2 months ago    Exited (255) 19 minutes ag
o               elastic_dijkstra
```