EXPERIMENT 2

Name – Sujal Bhandari
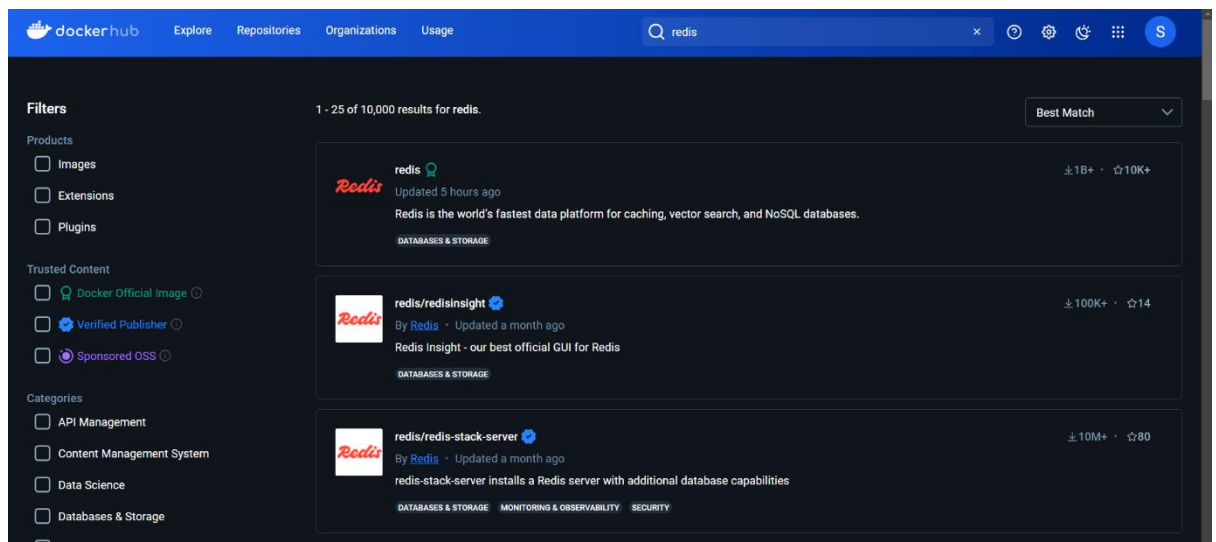
SAP_ID – 500106865

Roll_No – R2142220181

AIM: Working with Docker (Basic Commands)

Steps to Complete:

1. Search a Redis image on Docker Hub

2. Run Docker Container of Redis Image in background

```
C:\Users\sujal>docker images
REPOSITORY      TAG       IMAGE ID        CREATED        SIZE
nginx           latest    39286ab8a5e1    3 weeks ago    188MB
ubuntu          latest    edbfe74c41f8    5 weeks ago    78.1MB
redis           latest    590b81f2fea1    5 weeks ago    117MB

C:\Users\sujal>
```

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redis        latest   590b81f2fea1   5 weeks ago  117MB

C:\Users\sujal>docker run redis
1:C 06 Sep 2024 06:27:30.163 * oO0OoO00oO00o Redis is starting oO00oO00oO00o
1:C 06 Sep 2024 06:27:30.163 * Redis version=7.4.0, bits=64, commit=00000000, modified=0, pid=1, just started
1:C 06 Sep 2024 06:27:30.163 # Warning: no config file specified, using the default config. In order to specify a config
file use redis-server /path/to/redis.conf
1:M 06 Sep 2024 06:27:30.163 * monotonic clock: POSIX clock_gettime
1:M 06 Sep 2024 06:27:30.164 * Running mode=standalone, port=6379.
1:M 06 Sep 2024 06:27:30.164 * Server initialized
1:M 06 Sep 2024 06:27:30.164 * Ready to accept connections tcp
```

3. Run Docker PS and Docker PS –a

```
C:\Users\sujal>docker ps
CONTAINER ID   IMAGE    COMMAND               CREATED        STATUS         PORTS      NAMES
cae3cd3fba7c   redis    "docker-entrypoint.s…" 5 minutes ago  Up 5 minutes   6379/tcp   suspicious_wozniak

C:\Users\sujal>docker ps -a
CONTAINER ID   IMAGE    COMMAND               CREATED        STATUS               PORTS      NAMES
cae3cd3fba7c   redis    "docker-entrypoint.s…" 5 minutes ago  Up 5 minutes         6379/tcp   suspicious_wozni
ak
8538536bc763   redis    "docker-entrypoint.s…" 8 minutes ago  Exited (0) 6 minutes ago        magical_hawking

C:\Users\sujal>
```

4. Run Docker Container and take its console

```
C:\Users\sujal>docker exec -it cae sh
# redis-cli
127.0.0.1:6379> ping
PONG
127.0.0.1:6379> exit
# exit

C:\Users\sujal>
```

5. Create a Docker Volume and connect it

```
C:\Users\sujal>docker volume create new_vol
new_vol

C:\Users\sujal>docker volume ls
DRIVER      VOLUME NAME
local       3ca22a6712ce53eb5b9077dfec765f68665cad6cec5e9a26a2e5e5b3356c84a7
local       533f4746350c27488a5f730d3fcb33c43a522d37f050ce82958468bfdffb98c2
local       new_vol

C:\Users\sujal>
```

```
C:\Users\sujal>docker run -d --name my_redis -v new_vol:/data redis:latest
bd9a8e79cdc12fb0439177368c631cc661fece3232421aa404603ee3c22764f2

C:\Users\sujal>docker ps -a
CONTAINER ID   IMAGE          COMMAND                  CREATED          STATUS                    PORTS       NAMES
bd9a8e79cdc1   redis:latest   "docker-entrypoint.s…"   11 seconds ago   Up 11 seconds             6379/tcp    my_redis
cae3cd3fba7c   redis          "docker-entrypoint.s…"   12 minutes ago   Up 12 minutes             6379/tcp    suspicious_wozniak
8538536bc763   redis          "docker-entrypoint.s…"   14 minutes ago   Exited (0) 12 minutes ago             magical_hawking

C:\Users\sujal>
```