# **EXPERIMENT 2**

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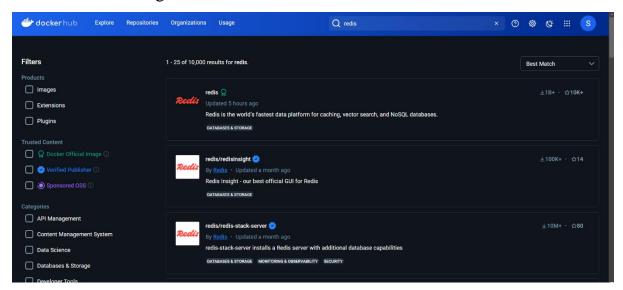
**SAP\_ID** - 500106865

**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

```
Microsoft Windows [Version 10.0.22631.4112]
(c) Microsoft Corporation. All rights reserved.
C:\Users\sujal>docker pull redis
Using default tag: latest
latest: Pulling from library/redis
a2318d6c47ec: Already exists ed7fd66f27f2: Pull complete
410a3d5b3155: Pull complete
9312cf3f6b3e: Pull complete
c39877ab23d0: Pull complete
01394ffc7248: Pull complete
4f4fb700ef54: Pull complete
5a03cb6163ab: Pull complete
Digest: sha256:eadf354977d428e347d93046bb1a5569d701e8deb68f090215534a99dbcb23b9
Status: Downloaded newer image for redis:latest
docker.io/library/redis:latest
C:\Users\sujal>
```

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

```
C:\Users\sujal>docker images

REPOSITORY TAG IMAGE ID CREATED SIZE

nginx latest 39286ab8a5e1 3 weeks ago 188MB

ubuntu latest edbfe74c4lf8 5 weeks ago 78.1MB

redis latest 590b81f2fea1 5 weeks ago 117MB

C:\Users\sujal>docker run redis

1:C 06 Sep 2024 06:27:30.163 * 0000000000000 Redis is starting 0000000000000

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 * Ready to accept connections tcp
```

### 3. Run Docker PS and Docker PS -a

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

#### 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
bd9a8e79cdc1 redis:latest "docker-entrypoint.s..."
cae3cd3fba7c redis "docker-entrypoint.s..."
8538536bc763 redis "docker-entrypoint.s..."

CREATED 11 seconds ago 12 minutes ago 14 minutes ago

STATUS Up 11 seconds Up 12 minutes Exited (0) 12 minutes ago

PORTS NAMES 6379/tcp my\_redis 6379/tcp suspicious\_wozniak magical\_hawking

C:\Users\sujal>