

EXPERIMENT 3

PART A

- 1. Search the images hello-world and centos**
- 2. Pull the searched images from the hub**
- 3. List all the images from the docker host**
- 4. Get the detailed information about the docker images**
- 5. Get the history of the docker images**
- 6. Save or backup docker images**

PART B

- 1. Run the container centos**
- 2. List all the containers and find the top process in the container**
- 3. Stop the container**
- 4. Remove the container**

```
Feb 6 23:03
anshi@anshi-VirtualBox: ~
anshi@anshi-VirtualBox: ~
anshi@anshi-VirtualBox:~$ sudo docker pull alpine
Using default tag: latest
latest: Pulling from library/alpine
Digest: sha256:56fa17d2a7e7f168a043a2712e63aed1f8543aeafdcee47c58dcffe38ed51099
Status: Image is up to date for alpine:latest
docker.io/library/alpine:latest
anshi@anshi-VirtualBox:~$ sudo docker search hello-world
NAME                DESCRIPTION                STARS     OFFICIAL
hello-world         Hello World! (an example of minimal Dockeriz... 2378      [OK]
rancher/hello-world This container image is no longer maintained... 6
okteto/hello-world                                     0
atlassian/hello-world                                 0
tutum/hello-world   Image to test docker deployments. Has Apache... 90
dockercloud/hello-world Hello World!                20
crccheck/hello-world Hello World web server in under 2.5 MB          25
koudaiii/hello-world                                     0
tsepotesting123/hello-world                             0
ppc64le/hello-world Hello World! (an example of minimal Dockeriz... 2
infrastructureascode/hello-world A tiny "Hello World" web server with a healt... 1
prajwalendra/hello-world                                     0
kevindockercompany/hello-world                             0
arm32v7/hello-world Hello World! (an example of minimal Dockeriz... 3
datawire/hello-world Hello World! Simple Hello World implementati... 1
uniplaces/hello-world                                     0
twistlocktest/hello-world                                 0
arm64v8/hello-world Hello World! (an example of minimal Dockeriz... 3
wjimenez5271/hello-world                                 0
ansibleplaybookbundle/hello-world Simple containerized application that tests ... 0
danfengliu/hello-world                                     0
lbadger/hello-world                                       0
swarna3005/hello-world                                     0
silver8642/hello-world                                     0
jensendw/hello-world                                     0
```

```
anshi@anshi-VirtualBox:~$ sudo docker search centos
NAME                DESCRIPTION                STARS     OFFICIAL
centos              DEPRECATED; The official build of CentOS.      7764      [OK]
centos/postgresql-10-centos7 PostgreSQL is an advanced Object-Relational ... 21
corpusops/centos    centos corpusops baseimage                      0
centos/httpd-24-centos8                                     3
centos/redis-5-centos8                                      0
centos/postgresql-96-centos7 PostgreSQL is an advanced Object-Relational ... 45
centos/postgresql-10-centos8                             0
centos/systemd      systemd enabled base container.                 115
centos/mariadb-102-centos7 MariaDB 10.2 SQL database server                 6
centos/mysql-56-centos7 MySQL 5.6 SQL database server                   23
centos/ruby-25-centos7 Platform for building and running Ruby 2.5 a... 3
centos/mariadb-103-centos8                                 2
centos/mysql-80-centos8                                    0
centos/mysql-57-centos7 MySQL 5.7 SQL database server                   95
centos/postgresql-12-centos8                             0
centos/mongodb-36-centos7 MongoDB NoSQL database server                   12
centos/redis-5-centos7 Redis in-memory data structure store, used a... 0
centos/nginx-112-centos7 Platform for running nginx 1.12 or building ... 16
centos/mariadb-101-centos7 MariaDB 10.1 SQL database server                 13
centos/httpd-24-centos7 Platform for running Apache httpd 2.4 or bui... 46
centos/postgresql-12-centos7 PostgreSQL is an advanced Object-Relational ... 5
centos/redis-32-centos7 Redis in-memory data structure store, used a... 6
centos/postgresql-94-centos7 PostgreSQL is an advanced Object-Relational ... 16
centos/nginx-116-centos7 Platform for running nginx 1.16 or building ... 3
centos/php-56-centos7 Platform for building and running PHP 5.6 ap... 34
```

```
anshi@anshi-VirtualBox:~$ sudo docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
hello-world   latest    74cc54e27dc4   2 weeks ago    10.1kB
alpine        latest    b0c9d60fc5e3   4 weeks ago    7.83MB
```

```
anshi@anshi-VirtualBox:~$ sudo docker inspect hello-world
```

```

      "StdinOnce": false,
      "Env": [
        "PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin"
      ],
      "Cmd": [
        "/hello"
      ],
      "Image": "",
      "Volumes": null,
      "WorkingDir": "/",
      "Entrypoint": null,
      "OnBuild": null,
      "Labels": null
    },
    "Architecture": "amd64",
    "Os": "linux",
    "Size": 10072,
    "GraphDriver": {
      "Data": {
        "MergedDir": "/var/lib/docker/overlay2/5ee60e42cb174861c5298fe42622623af6821e0adb15ba6f67f4568be3652a78/merged",
        "UpperDir": "/var/lib/docker/overlay2/5ee60e42cb174861c5298fe42622623af6821e0adb15ba6f67f4568be3652a78/diff",
        "WorkDir": "/var/lib/docker/overlay2/5ee60e42cb174861c5298fe42622623af6821e0adb15ba6f67f4568be3652a78/work"
      },
      "Name": "overlay2"
    },
    "RootFS": {
      "Type": "layers",
      "Layers": [
        "sha256:63a41026379f4391a306242eb0b9f26dc3550d863b7fdbb97d899f6eb89efe72"
      ]
    },
    "Metadata": {
      "LastTagTime": "0001-01-01T00:00:00Z"
    }
  }
}

```

Error response from daemon: No such image: centos:latest

```

anshi@anshi-VirtualBox:~$ sudo docker history hello-world
IMAGE          CREATED          CREATED BY          SIZE      COMMENT
74cc54e27dc4   2 weeks ago     CMD ["/hello"]      0B        buildkit.dockerfile.v0
<missing>      2 weeks ago     COPY hello / # buildkit 10.1kB    buildkit.dockerfile.v0

```

```

anshi@anshi-VirtualBox:~$ sudo docker save -o hello-world.tar hello-world
anshi@anshi-VirtualBox:~$ sudo docker load -i hello-world.tar
Loaded image: hello-world:latest
anshi@anshi-VirtualBox:~$

```

```

anshi@anshi-VirtualBox:~$ sudo docker ps -a
CONTAINER ID   IMAGE     COMMAND                  CREATED          STATUS          PORTS          NAMES
6223657d041c   centos    "/bin/bash"             55 seconds ago   Up 54 seconds             mycentos
b3c11d827df7   alpine    "/bin/sh"               6 days ago       Exited (0) 6 days ago      trusting_chaum
dcf2d07dbda4   hello-world "/hello"               6 days ago       Exited (0) 6 days ago      silly_kilby
6475b2dc9e4a   hello-world "/hello"               7 days ago       Exited (0) 7 days ago      youthful_hodgkin
anshi@anshi-VirtualBox:~$

```

6475b2dc9e4a hello-world /hello 7 days ago Exited (0) 7 days ago youthful_hodgkin

```

anshi@anshi-VirtualBox:~$ sudo docker stop mycentos
mycentos
anshi@anshi-VirtualBox:~$ sudo docker rm mycentos
mycentos
anshi@anshi-VirtualBox:~$ sudo docker rm -f mycentos
Error response from daemon: No such container: mycentos
anshi@anshi-VirtualBox:~$

```

