

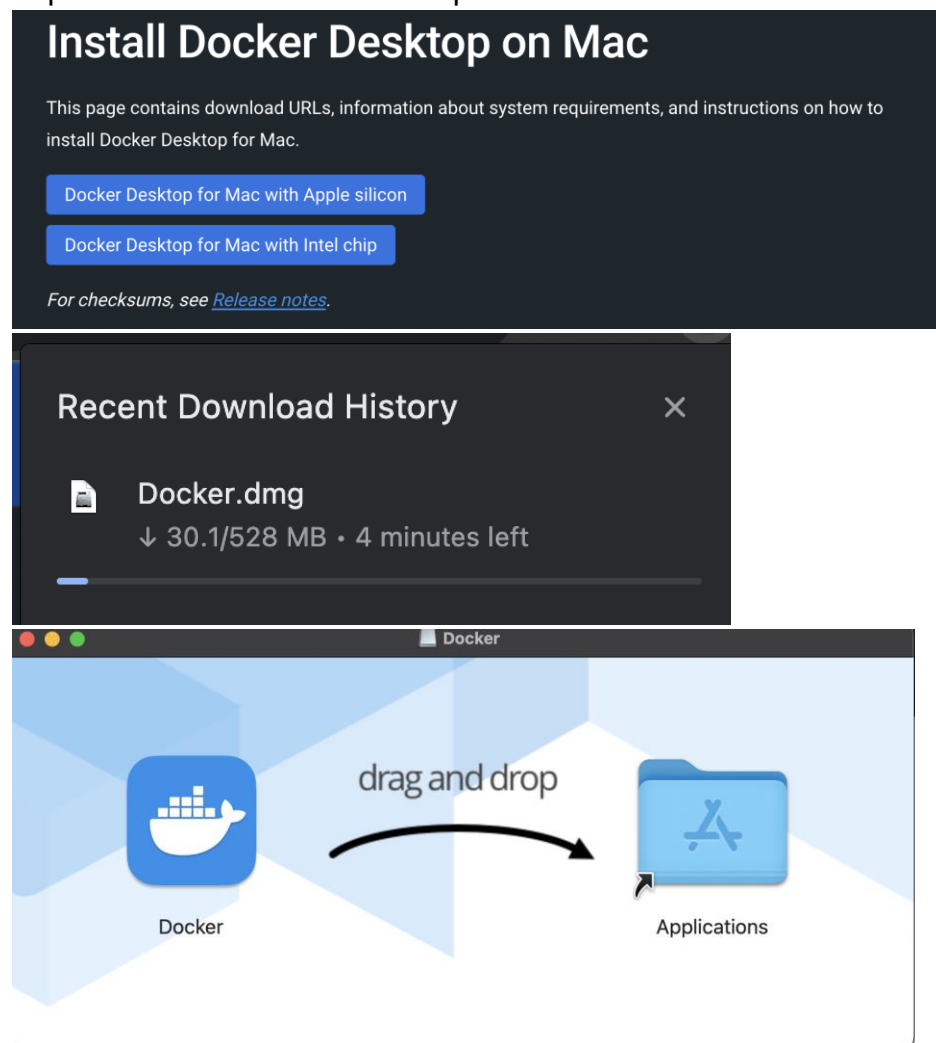
Practical-4

Aim: Introduction of Docker set-up and study of basic docker commands

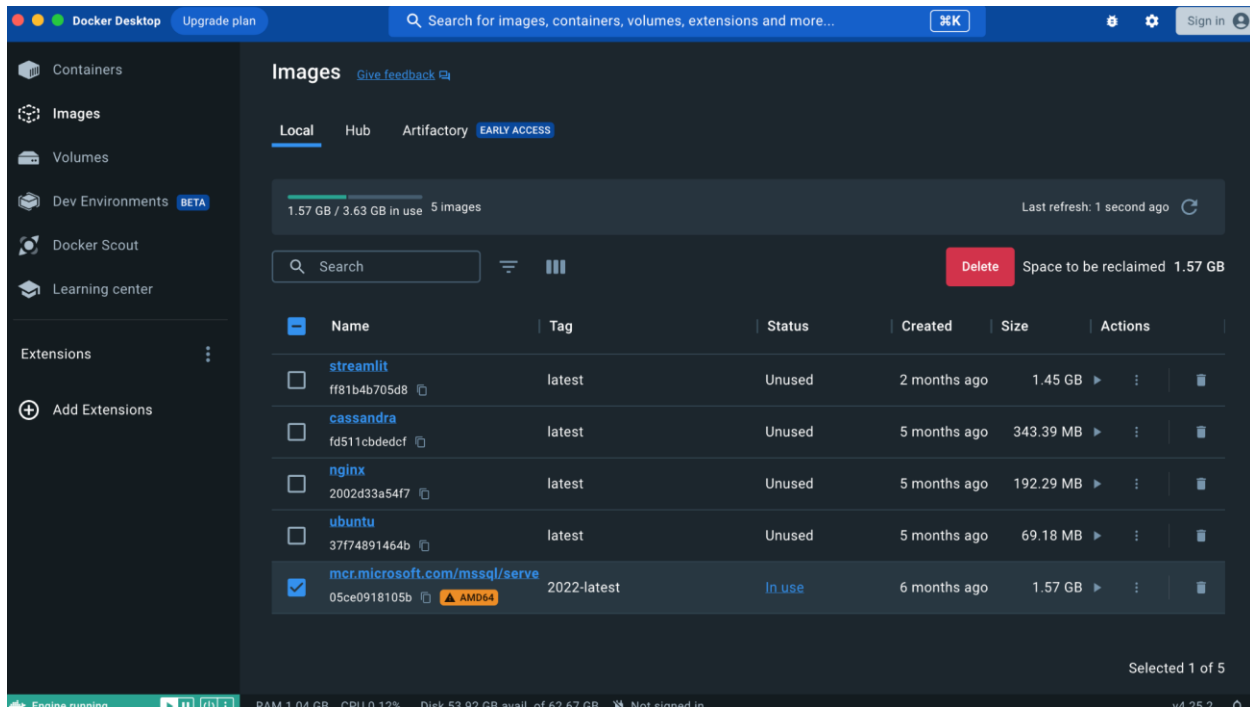
Setting up Docker on a Linux system and learning some basic Docker commands is a valuable skill for containerization and managing software applications. Perform the following tasks:

Task 1: Install the Docker Command Line Interface Tool from:

<https://docs.docker.com/desktop/>



Docker Desktop



Task 2: Hands-on on docker commands:

- Execute the different docker commands to work pull the image from the docker hub and run the image in your local system.
- Commands to run the container with the name of your choice

```
((base) arthjani@Arths-MacBook-Air ~ % docker run --name ng1 nginx
/docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
/docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
/docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf
/docker-entrypoint.sh: Sourcing /docker-entrypoint.d/15-local-resolvers.envsh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
/docker-entrypoint.sh: Configuration complete; ready for start up
2023/11/28 06:50:40 [notice] 1#1: using the "epoll" event method
2023/11/28 06:50:40 [notice] 1#1: nginx/1.25.1
2023/11/28 06:50:40 [notice] 1#1: built by gcc 12.2.0 (Debian 12.2.0-14)
2023/11/28 06:50:40 [notice] 1#1: OS: Linux 6.4.16-linuxkit
2023/11/28 06:50:40 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1048576:1048576
2023/11/28 06:50:40 [notice] 1#1: start worker processes
2023/11/28 06:50:40 [notice] 1#1: start worker process 29
```

- Command to list all the images and containers

```

(base) arthjani@Arths-MacBook-Air ~ % docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
streamlit     latest   ff81b4b705d8   7 weeks ago   1.46GB
cassandra     latest   fd511cbdedcf   4 months ago  343MB
nginx         latest   2002d33a54f7   4 months ago  192MB
ubuntu        latest   37f74891464b   5 months ago  69.2MB
(base) arthjani@Arths-MacBook-Air ~ %

```

```

(base) arthjani@Arths-MacBook-Air ~ % docker ps -a
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS          NAMES
7cb4a8681cc3   nginx    "/docker-entrypoint..." 3 minutes ago  Up 3 minutes  80/tcp         nostalgic_lalande
(base) arthjani@Arths-MacBook-Air ~ %

```

- Command to delete the specified image and containers

```

(base) arthjani@Arths-MacBook-Air ~ % docker image rm ubuntu
Untagged: ubuntu:latest
Untagged: ubuntu@sha256:0bced47fffa3361afa981854fcabcd4577cd43cebbb808cea2b1f33a3dd7f508
Deleted: sha256:37f74891464b2067aacbde60d9e2888e002af047a0d5dfc0b06b701928e0b473
Deleted: sha256:c5ca84f245d30117a9a2720cb4297cedf3642816471d4d699f4d77e39e13a39c

(base) arthjani@Arths-MacBook-Air ~ % docker container rm ng1
ng1

```

- Delete all the containers

```

(base) arthjani@Arths-MacBook-Air ~ % docker container prune
WARNING! This will remove all stopped containers.
Are you sure you want to continue? [y/N] y
Total reclaimed space: 0B
(base) arthjani@Arths-MacBook-Air ~ %

```