```
controlplane $ docker pull ubuntu:18.04
18.04: Pulling from library/ubuntu
72d9f18d70f3: Pull complete
Digest: sha256:a3765b4d74747b5e9bdd03205b3fbc4fa19a02781c185f97f24c8f4f84ed7bbf
Status: Downloaded newer image for ubuntu:18.04
docker.io/library/ubuntu:18.04
controlplane $ []
```

```
controlplane $ docker pull ubuntu:19.04

19.04: Pulling from library/ubuntu

4dc9c2fff018: Pull complete

0a4ccbb24215: Pull complete

c0f243bc6706: Pull complete

5ff1eaecba77: Pull complete

Digest: sha256:2adeae829bf27a3399a0e7db8ae38d5adb89bcaf1bbef378240bc0e6724e8344

Status: Downloaded newer image for ubuntu:19.04

docker.io/library/ubuntu:19.04
```

```
controlplane $ docker images
                     IMAGE ID
REPOSITORY
            TAG
                                   CREATED
                                                  SIZE
ubuntu 18.04 5d2df19066ac 3 weeks ago
                                                  63.1MB
hello-world latest feb5d9fea6a5
                                   17 months ago
                                                 13.3kB
ubuntu
           19.04
                    c88ac1f841b7
                                   3 years ago
                                                  70MB
controlplane \$ \sqcap
```

```
controlplane $ docker inspect c88ac1f841b7
        "Id": "sha256:c88ac1f841b72add46f5a8b0e77c2ad6864d47e5603686ea64375acd55e27906",
        "RepoTags": [
            "ubuntu:19.04"
        "RepoDigests": [
            "ubuntu@sha256:2adeae829bf27a3399a0e7db8ae38d5adb89bcaf1bbef378240bc0e6724e8344"
        "Parent": "",
        "Comment": "",
        "Created": "2020-01-16T01:20:46.938732934Z",
        "Container": "1d952a25729fba44399443aa7cb60e2452250fc4535b7135db02424006e304d5",
        "ContainerConfig": {
            "Hostname": "1d952a25729f",
            "Domainname": "",
            "User": "",
            "AttachStdin": false,
            "AttachStdout": false,
            "AttachStderr": false,
            "Tty": false,
```

```
"Container": "1d952a25729fba44399443aa7cb60e2452250fc4535b7135db02424006e304d5",
"ContainerConfig": {
    "Hostname": "1d952a25729f",
    "Domainname": "",
    "User": "",
    "AttachStdin": false,
    "AttachStdout": false,
    "AttachStderr": false,
    "Tty": false,
    "OpenStdin": false,
    "StdinOnce": false,
    "Env": [
        "PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin"
    ],
    "Cmd": [
        "/bin/sh",
       "-c",
        "#(nop) ",
        "CMD [\"/bin/bash\"]"
    "ArgsEscaped": true,
    "Image": "sha256:3f10343d1e6a81fe61be51ffa5c59be1744a5c22224c124f0e9bd3773c1270ba",
    "Volumes": null,
    "WorkingDir": "",
    "Entrypoint": null,
    "OnBuild": null,
```

```
controlplane $ docker inspect 5d2df19066ac
        "Id": "sha256:5d2df19066aca89df8e5317544a1cb599dc657830184762ff6fdefaaf708db65",
        "RepoTags": [
            "ubuntu:18.04"
        "RepoDigests": [
            "ubuntu@sha256:a3765b4d74747b5e9bdd03205b3fbc4fa19a02781c185f97f24c8f4f84ed7bbf"
        "Parent": "",
        "Comment": "",
        "Created": "2023-01-26T10:03:05.221824871Z",
        "Container": "c3de9a977075ecdaa59e911a35b9e722bef84c25567a3a0931bea346b24b93d6",
        "ContainerConfig": {
            "Hostname": "c3de9a977075",
            "Domainname": "",
            "User": "",
            "AttachStdin": false,
            "AttachStdout": false,
            "AttachStderr": false,
            "Tty": false,
            "OpenStdin": false,
            "StdinOnce": false,
            "Env": [
                "PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin"
```

```
controlplane $ docker run -d ubuntu:18.04
770a31213a91f47459e6199c06e1417506bc9742d13309d70def35bd46a69ec4
controlplane $ []
```

```
controlplane $ docker ps -a
CONTAINER ID
               IMAGE
                             COMMAND
                                           CREATED
                                                            STATUS
                                                                                       PORTS
                                                                                                 NAMES
              ubuntu:18.04
                            "/bin/bash"
                                                                                                 charming_snyder
770a31213a91
                                           46 seconds ago
                                                            Exited (0) 45 seconds ago
aadc91699cb5
              hello-world
                             "/hello"
                                           16 minutes ago
                                                            Exited (0) 16 minutes ago
                                                                                                 vigilant_thompson
              hello-world
                             "/hello"
                                                            Exited (0) 20 minutes ago
                                                                                                 bold_lumiere
56698e7fc395
                                           20 minutes ago
```

controlplane \$ docker run -i -t -d --name ubuntu1 ubuntu:18.04 b0773f18cc9a99cbfa9c15b8437e8e1c53695d0dd24546b9af5aa00ad827c5b6 controlplane \$ \Bigcap\$

controlplane \$ docker ps -a								
CONTAINER ID IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES			
b0773f18cc9a ubuntu	u:18.04 "/bin/bash"	About a minute ago	Up About a minute		ubuntu1			
770a31213a91 ubuntu	u:18.04 "/bin/bash"	4 minutes ago	Exited (0) 4 minutes ago		charming_snyder			
aadc91699cb5 hello-	world "/hello"	19 minutes ago	Exited (0) 19 minutes ago		vigilant_thompson			
56698e7fc395 hello-	world "/hello"	24 minutes ago	Exited (0) 24 minutes ago		bold_lumiere			
controlplane \$ [								

controlplane \$ docker exec -it ubuntu1 /bin/bash root@b0773f18cc9a:/#  $\square$ 

```
controlplane $ docker exec -it ubuntu1 /bin/bash
root@b0773f18cc9a:/# echo "Hello world from ubuntu1" > hello-world.txt
root@b0773f18cc9a:/# vi hello-world.txt
bash: vi: command not found
root@b0773f18cc9a:/# cat hello-world.txt
Hello world from ubuntu1
root@b0773f18cc9a:/# exit
exit
controlplane $ []
```

controlplane \$ docker run -i -t -d --name ubuntu2 ubuntu:19.04 896d6c9769bc03cd6fdfb545ad85a970261fc445b67d1fe80bafa4cb23f6573e controlplane \$ \Bigcap\$

```
controlplane $ docker ps -a
CONTAINER ID
              IMAGE
                             COMMAND
                                          CREATED
                                                          STATUS
                                                                                               NAMES
                                                                                     PORTS
              ubuntu:19.04 "/bin/bash"
                                          48 seconds ago
896d6c9769bc
                                                          Up 47 seconds
                                                                                               ubuntu2
b0773f18cc9a
                            "/bin/bash"
                                                          Up 6 minutes
             ubuntu:18.04
                                          6 minutes ago
                                                                                               ubuntu1
                            "/bin/bash"
770a31213a91
                                                          Exited (0) 9 minutes ago
                                                                                               charming snyder
             ubuntu:18.04
                                          9 minutes ago
              hello-world
                            "/hello"
                                          25 minutes ago
                                                          Exited (0) 24 minutes ago
                                                                                               vigilant_thompson
aadc91699cb5
56698e7fc395
              hello-world
                            "/hello"
                                          29 minutes ago
                                                          Exited (0) 29 minutes ago
                                                                                               bold lumiere
controlplane \ \square
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
896d6c9769bc	ubuntu:19.04	"/bin/bash"	About a minute ago	Up About a minute		ubuntu2
b0773f18cc9a	ubuntu:18.04	"/bin/bash"	7 minutes ago	Up 7 minutes		ubuntu1
controlplane \$	П					

```
controlplane $ docker exec -it ubuntu2 /bin/bash
root@896d6c9769bc:/# ls -al
total 56
drwxr-xr-x 1 root root 4096 Feb 22 12:57 .
drwxr-xr-x 1 root root 4096 Feb 22 12:57 ...
-rwxr-xr-x 1 root root 0 Feb 22 12:57 .dockereny
lrwxrwxrwx 1 root root 7 Jan 14 2020 bin -> usr/bin
drwxr-xr-x 2 root root 4096 Apr 16 2019 boot
drwxr-xr-x 5 root root 360 Feb 22 12:57 dev
drwxr-xr-x 1 root root 4096 Feb 22 12:57 etc
drwxr-xr-x 2 root root 4096 Apr 16 2019 home
lrwxrwxrwx 1 root root 7 Jan 14 2020 lib -> usr/lib
lrwxrwxrwx 1 root root 9 Jan 14 2020 lib32 -> usr/lib32
lrwxrwxrwx 1 root root 9 Jan 14 2020 lib64 -> usr/lib64
lrwxrwxrwx 1 root root 10 Jan 14 2020 libx32 -> usr/libx32
drwxr-xr-x 2 root root 4096 Jan 14 2020 media
drwxr-xr-x 2 root root 4096 Jan 14 2020 mnt
drwxr-xr-x 2 root root 4096 Jan 14 2020 opt
dr-xr-xr-x 229 root root 0 Feb 22 12:57 proc
drwx----- 2 root root 4096 Jan 14 2020 root
drwxr-xr-x 1 root root 4096 Jan 16 2020 run
lrwxrwxrwx 1 root root 8 Jan 14 2020 sbin -> usr/sbin
drwxr-xr-x 2 root root 4096 Jan 14 2020 srv
dr-xr-xr-x 13 root root
                          0 Feb 22 12:57 svs
drwxrwxrwt 2 root root 4096 Jan 14 2020 tmp
drwxr-xr-x 1 root root 4096 Jan 14 2020 usr
drwxr-xr-x 1 root root 4096 Jan 14 2020 var
root@896d6c9769bc:/# echo "Hello-world from ubuntu2!" > hello-world.txt
root@896d6c9769bc:/# cat hello-world.txt
Hello-world from ubuntu2!
root@896d6c9769bc:/# exit
exit
```

```
controlplane $ docker stop ubuntu2
ubuntu2
controlplane $ docker ps
CONTAINER ID
              TMAGE
                             COMMAND
                                          CREATED
                                                          STATUS
                                                                         PORTS
                                                                                   NAMES
              ubuntu:18.04
                             "/bin/bash"
                                          10 minutes ago
                                                          Up 10 minutes
b0773f18cc9a
                                                                                   ubuntu1
controlplane \$ \sqcap
controlplane $ docker ps -a
CONTAINER ID
              IMAGE
                            COMMAND
                                         CREATED
                                                        STATUS
                                                                                  PORTS
                                                                                           NAMES
                           "/bin/bash"
                                        5 minutes ago
                                                        Exited (0) 52 seconds ago
896d6c9769bc
              ubuntu:19.04
                                                                                           ubuntu2
b0773f18cc9a
                            "/bin/bash"
                                        11 minutes ago Up 11 minutes
              ubuntu:18.04
                                                                                           ubuntu1
770a31213a91
                            "/bin/bash"
                                                        Exited (0) 14 minutes ago
                                                                                           charming snyder
              ubuntu:18.04
                                        14 minutes ago
             hello-world
                            "/hello"
                                        29 minutes ago
                                                        Exited (0) 29 minutes ago
                                                                                           vigilant thompson
aadc91699cb5
                                                        Exited (0) 34 minutes ago
                                        34 minutes ago
56698e7fc395
              hello-world
                            "/hello"
                                                                                           bold lumiere
controlplane $ \Bar
controlplane $ docker start ubuntu2
ubuntu2
controlplane $ docker ps
CONTAINER ID
                                                  CREATED
                                                                                       PORTS
                 TMAGE
                                  COMMAND
                                                                     STATUS
                                                                                                   NAMES
                ubuntu:19.04
                                  "/bin/bash"
                                                  6 minutes ago
896d6c9769bc
                                                                     Up 5 seconds
                                                                                                   ubuntu2
b0773f18cc9a
                                                                     Up 12 minutes
                 ubuntu:18.04
                                  "/bin/bash"
                                                  12 minutes ago
                                                                                                   ubuntu1
controlplane $ \square
 controlplane $ docker stop ubuntu1
ubuntu1
 controlplane $ docker stop ubuntu2
```

ubuntu2

```
controlplane $ docker rm ubuntu1
ubuntu1
controlplane $ docker rm ubuntu2
ubuntu2
```

```
controlplane $ docker ps -a
CONTAINER ID
                             COMMAND
                                           CREATED
                                                            STATUS
              IMAGE
                                                                                        PORTS
                                                                                                 NAMES
770a31213a91
                             "/bin/bash"
                                           17 minutes ago
                                                            Exited (0) 17 minutes ago
                                                                                                 charming_snyder
              ubuntu:18.04
              hello-world
                             "/hello"
                                                            Exited (0) 33 minutes ago
                                                                                                 vigilant thompson
                                           33 minutes ago
aadc91699cb5
56698e7fc395
              hello-world
                                           37 minutes ago
                                                            Exited (0) 37 minutes ago
                                                                                                 bold lumiere
                              "/hello"
controlplane $ docker ps -a
CONTAINER ID
               IMAGE
                              COMMAND
                                           CREATED
                                                            STATUS
                                                                                        PORTS
                                                                                                  NAMES
                                                            Exited (0) 17 minutes ago
                                                                                                  charming snyder
770a31213a91
               ubuntu:18.04
                            "/bin/bash"
                                           17 minutes ago
aadc91699cb5
               hello-world
                             "/hello"
                                           33 minutes ago
                                                            Exited (0) 33 minutes ago
                                                                                                  vigilant thompson
              hello-world
                              "/hello"
                                           37 minutes ago
                                                            Exited (0) 37 minutes ago
                                                                                                  bold lumiere
56698e7fc395
controlplane $
controlplane $
controlplane $ docker rm 770a31213a91
770a31213a91
controlplane $ docker rm aadc91699cb5
aadc91699cb5
controlplane $ docker rm 56698e7fc395
56698e7fc395
controlplane $ docker ps -a
CONTAINER ID IMAGE
                        COMMAND
                                  CREATED STATUS
                                                      PORTS
                                                                NAMES
controlplane \$ \ \square
```

```
controlplane $ docker images
REPOSITORY
              TAG
                        IMAGE ID
                                       CREATED
                                                        SIZE
ubuntu
             18.04
                        5d2df19066ac
                                       3 weeks ago
                                                        63.1MB
hello-world
             latest
                        feb5d9fea6a5
                                        17 months ago
                                                        13.3kB
ubuntu
              19.04
                        c88ac1f841b7
                                        3 years ago
                                                        70MB
controlplane \$ \sqcap
```

controlplane \$ docker rmi feb5d9fea6a5

Untagged: hello-world:latest

Untagged: hello-world@sha256:6e8b6f026e0b9c419ea0fd02d3905dd0952ad1feea67543f525c73a0a790fefb

Deleted: sha256:feb5d9fea6a5e9606aa995e879d862b825965ba48de054caab5ef356dc6b3412 Deleted: sha256:e07ee1baac5fae6a26f30cabfe54a36d3402f96afda318fe0a96cec4ca393359

controlplane \$ docker rmi 5d2df19066ac

Untagged: ubuntu:18.04

Untagged: ubuntu@sha256:a3765b4d74747b5e9bdd03205b3fbc4fa19a02781c185f97f24c8f4f84ed7bbf

Deleted: sha256:5d2df19066aca89df8e5317544a1cb599dc657830184762ff6fdefaaf708db65 Deleted: sha256:475a54c2a93de61ab1a000184b41b5c5370eef3842486f6c185cd9a001ff1a92

controlplane \$ docker rmi c88ac1f841b7

Untagged: ubuntu:19.04

Untagged: ubuntu@sha256:2adeae829bf27a3399a0e7db8ae38d5adb89bcaf1bbef378240bc0e6724e8344

Deleted: sha256:c88ac1f841b72add46f5a8b0e77c2ad6864d47e5603686ea64375acd55e27906
Deleted: sha256:abdb7d8268875cb246b29336cdc3e26a820e646829f852fa9c4420466398c1e6
Deleted: sha256:f7968871e4c6f0b9babd441ec117f6d7e43dd6a0ef75459170e84ca66707fe7b
Deleted: sha256:18a328936bc497aecff04c40fa53db558d31faac2f4edce2068d5e219758fbaa
Deleted: sha256:873cbe4bd21ee6f6ea264cfc50c0b35b0c3a00e2be3f82b30884c3b9da5db2db

```
controlplane $ docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
controlplane $ []

controlplane $ docker system prune -fa
Total reclaimed space: 0B
controlplane $ []
```