Creating Your First Container

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Using Docker

$ docker version

(check whether docker is available in Google Cloud Shell VM or not)

$ docker image ls

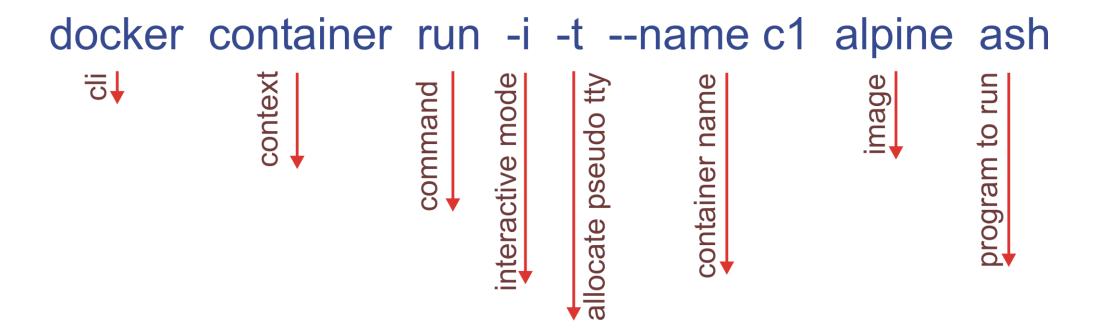*(it will show docker images)*

```
vipinkg@cloudshell:~$ docker version
Client: Docker Engine - Community
 Version:           19.03.8
 API version:       1.39 (downgraded from 1.40)
 Go version:        go1.12.17
 Git commit:        afacb8b7f0
 Built:             Wed Mar 11 01:26:02 2020
 OS/Arch:           linux/amd64
 Experimental:      false

Server: Docker Engine - Community
 Engine:
  Version:          18.09.6
  API version:      1.39 (minimum version 1.12)
  Go version:       go1.10.8
  Git commit:       481bc77
  Built:            Sat May  4 01:59:36 2019
  OS/Arch:          linux/amd64
  Experimental:     false
vipinkg@cloudshell:~$
vipinkg@cloudshell:~$ docker image ls
REPOSITORY          TAG                 IMAGE ID
vipinkg@cloudshell:~$
vipinkg@cloudshell:~$ docker container ls
CONTAINER ID        IMAGE               COMMAND
vipinkg@cloudshell:~$
vipinkg@cloudshell:~$ docker container ls -a
CONTAINER ID        IMAGE               COMMAND
vipinkg@cloudshell:~$
```

Using Docker

$ ifconfig
(check IP address)

```
vipinkg@cloudshell:~$ ifconfig
docker0: flags=4099<UP,BROADCAST,MULTICAST>  mtu 1500
        inet 172.18.0.1  netmask 255.255.0.0  broadcast 172.18.255.255
        ether 02:42:24:42:ae:42  txqueuelen 0  (Ethernet)
        RX packets 0  bytes 0 (0.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 0  bytes 0 (0.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 172.17.0.2  netmask 255.255.0.0  broadcast 172.17.255.255
        ether 02:42:ac:11:00:02  txqueuelen 0  (Ethernet)
        RX packets 1199  bytes 235374 (229.8 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 926  bytes 204499 (199.7 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
        inet 127.0.0.1  netmask 255.0.0.0
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 2380  bytes 394360 (385.1 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 2380  bytes 394360 (385.1 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

vipinkg@cloudshell:~$ _
```

Creating Your First Container

docker container run -i -t --name c1 alpine ash

cli ↓

context ↓

command ↓

interactive mode ↓

allocate pseudo tty ↓

container name ↓

image ↓

program to run ↓

$ docker container run -i -t --name c1 alpine ash
(It will create container "c1" in interactive mode & allocate pseudo tty)
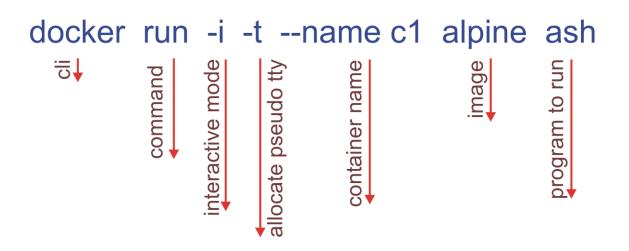
List Containers

$ docker container ls

(run this command in other terminal. It will show running containers)

$ docker container ls -a

(run this command in other terminal. It will show all including stopped containers)

Older Commands for Creating & Listing Containers

docker run -i -t --name c1 alpine ash

cli ↓

command ↓

interactive mode ↓

allocate pseudo tty ↓

container name ↓

image ↓

program to run ↓

$ docker run -i -t --name c1 alpine ash
(it will create container "c1" in interactive mode & allocate pseudo tty)

$ docker ps
(run this command in other terminal. it will show running containers)

$ docker ps -a
(run this command in other terminal. it will show all including stopped containers)