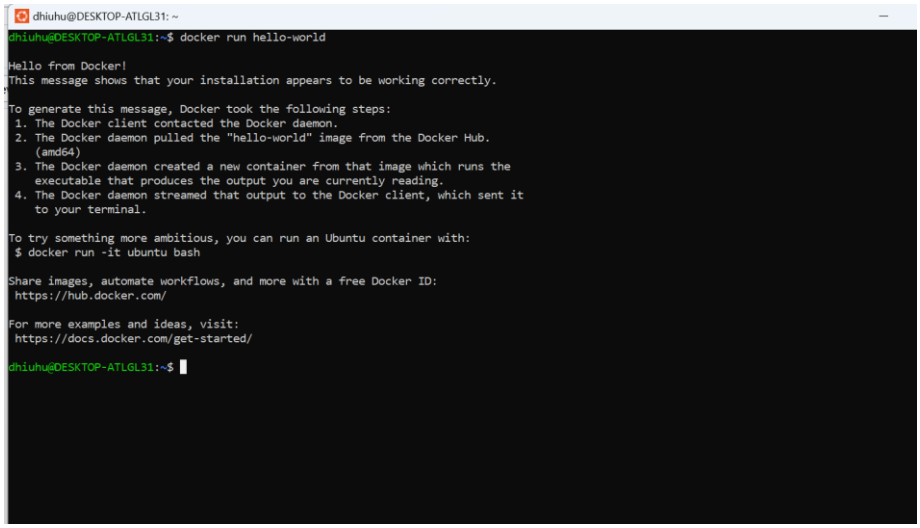
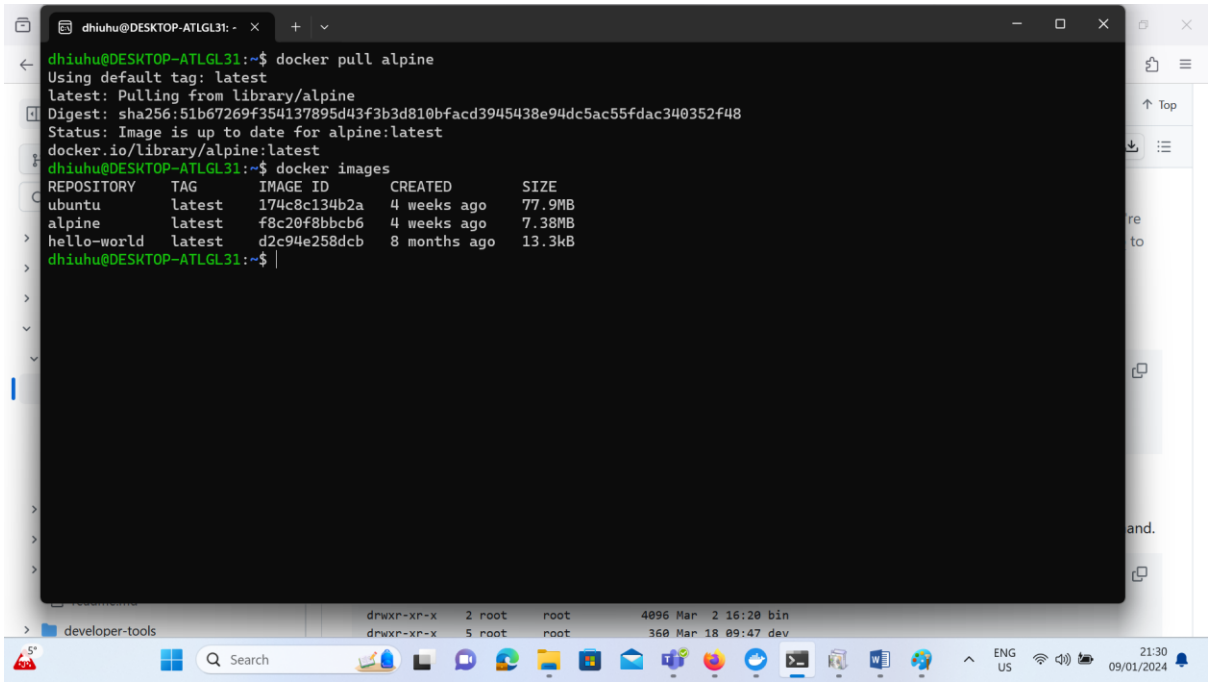
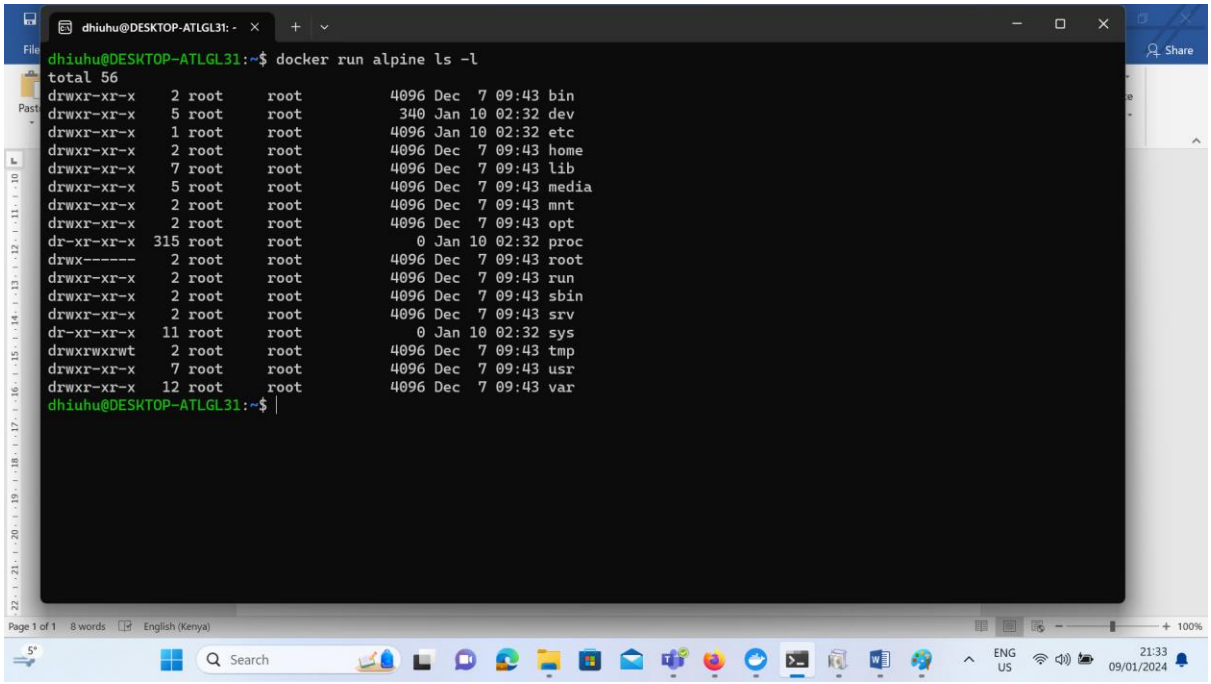
Setup

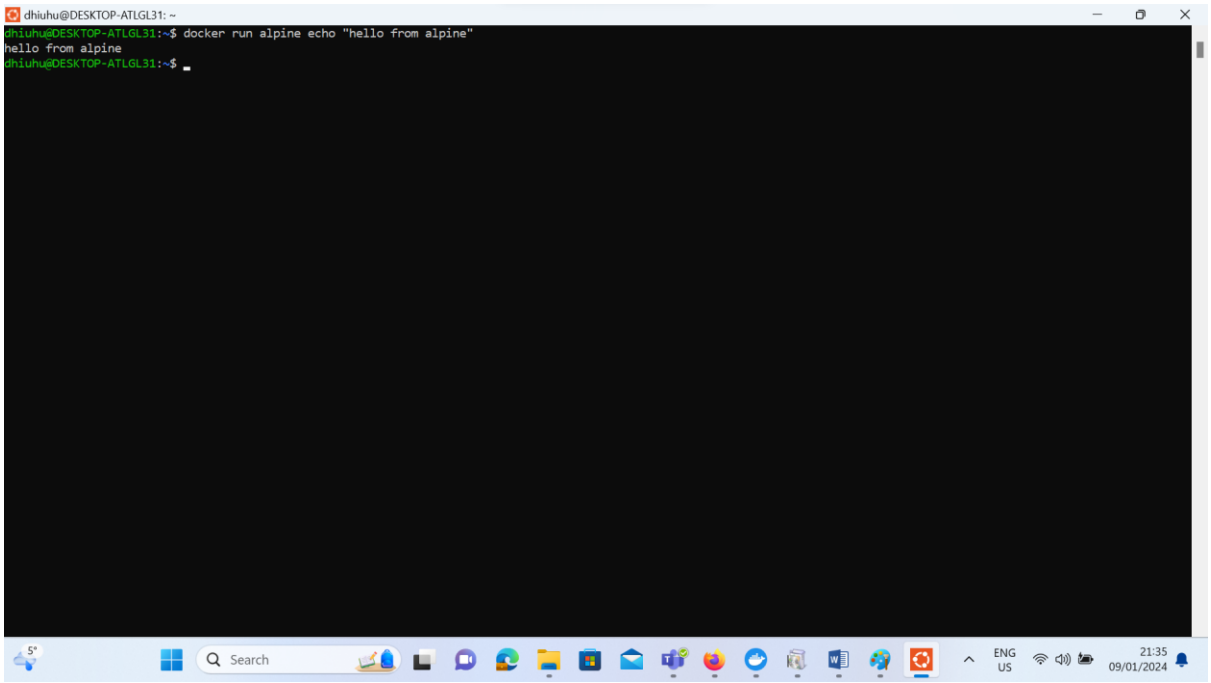


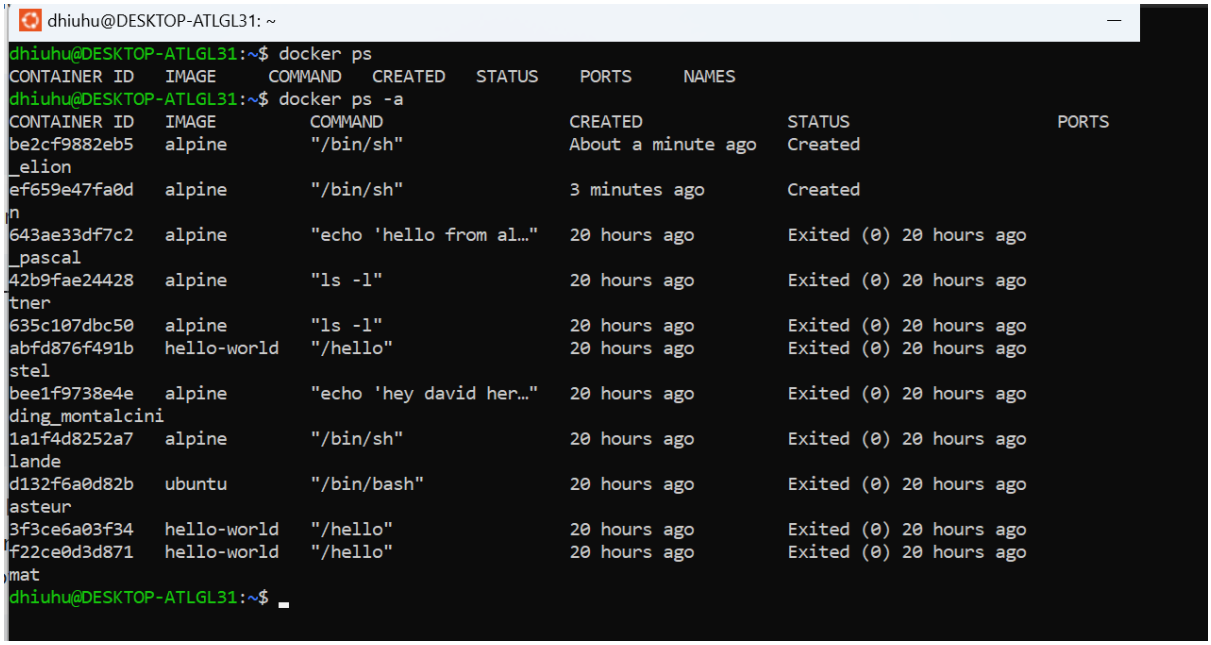
1.0 Running your first container

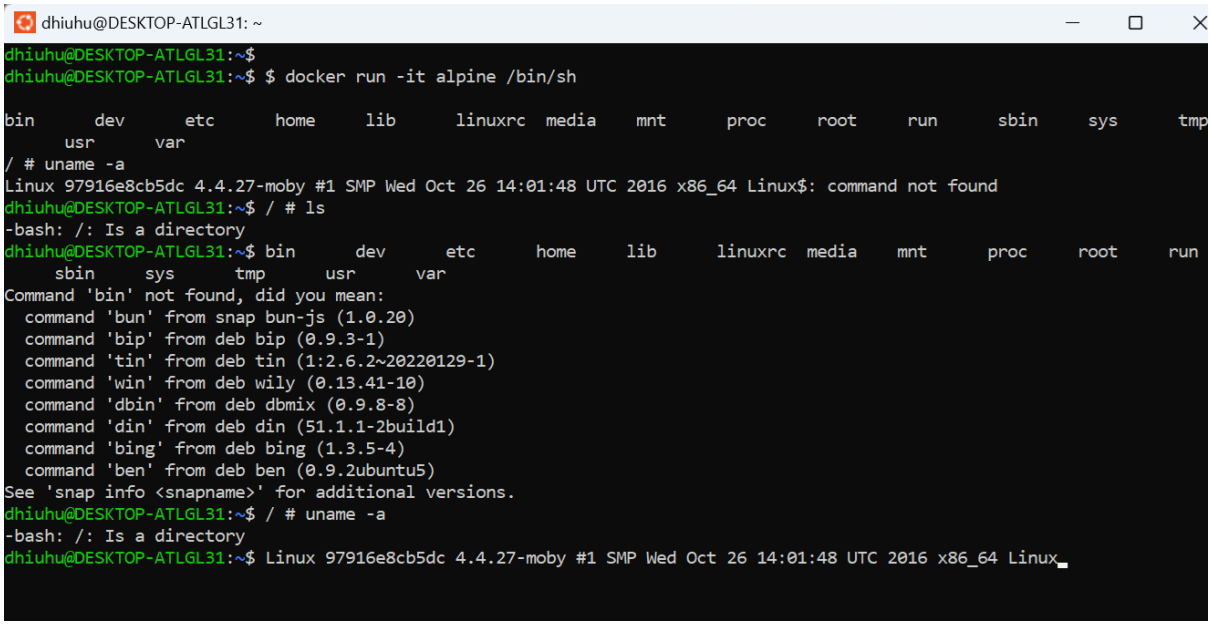


1.1 Docker Run


dhiuhu@DESKTOP-ATLGL31: -
dhiuhu@DESKTOP-ATLGL31:~$ docker run alpine ls -l
total 56
drwxr-xr-x 2 root root 4096 Dec 7 09:43 bin
drwxr-xr-x 5 root root 340 Jan 10 02:32 dev
drwxr-xr-x 1 root root 4096 Jan 10 02:32 etc
drwxr-xr-x 2 root root 4096 Dec 7 09:43 home
drwxr-xr-x 7 root root 4096 Dec 7 09:43 lib
drwxr-xr-x 5 root root 4096 Dec 7 09:43 media
drwxr-xr-x 2 root root 4096 Dec 7 09:43 mnt
drwxr-xr-x 2 root root 4096 Dec 7 09:43 opt
dr-xr-xr-x 315 root root 0 Jan 10 02:32 proc
drwx------ 2 root root 4096 Dec 7 09:43 root
drwxr-xr-x 2 root root 4096 Dec 7 09:43 run
drwxr-xr-x 2 root root 4096 Dec 7 09:43 sbin
drwxr-xr-x 2 root root 4096 Dec 7 09:43 srv
dr-xr-xr-x 11 root root 0 Jan 10 02:32 sys
drwxrwxrwt 2 root root 4096 Dec 7 09:43 tmp
drwxr-xr-x 7 root root 4096 Dec 7 09:43 usr
drwxr-xr-x 12 root root 4096 Dec 7 09:43 var
dhiuhu@DESKTOP-ATLGL31:~$
Page 1 of 1 8 words English (Kenya)
100%
Search
ENG US
21:33 09/01/2024

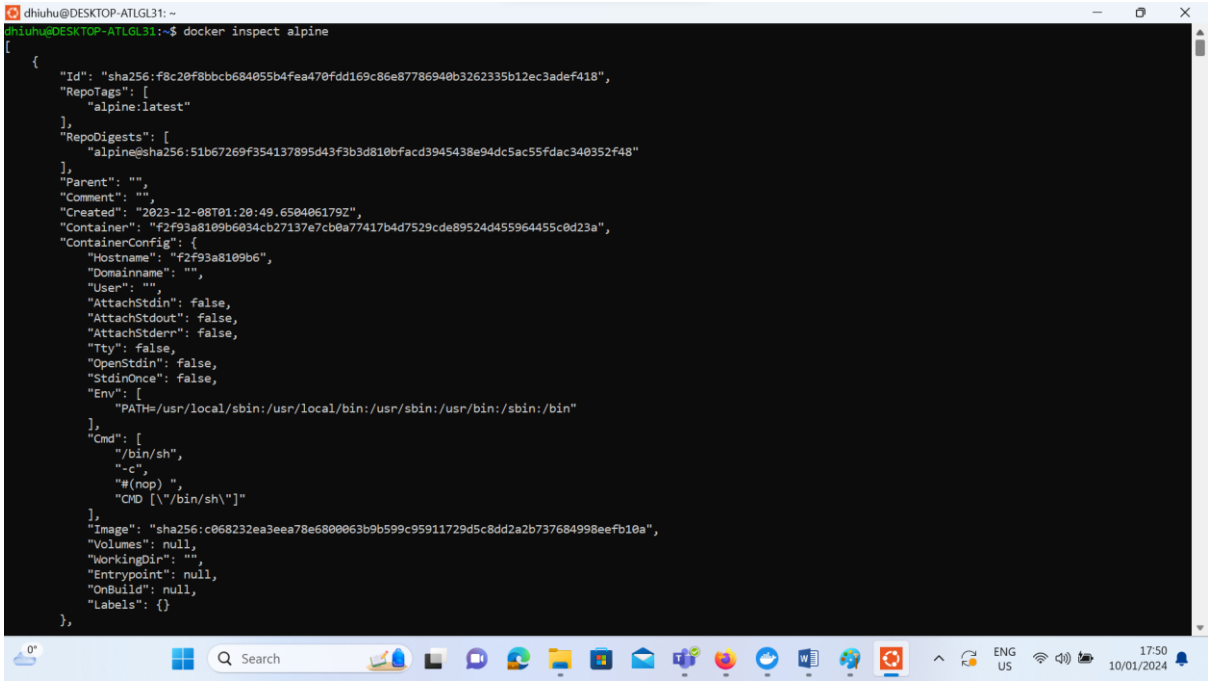

dhiuhu@DESKTOP-ATLGL31: ~
dhiuhu@DESKTOP-ATLGL31:~$ docker run alpine echo "hello from alpine"
hello from alpine
dhiuhu@DESKTOP-ATLGL31:~$
Search
ENG US
21:35 09/01/2024


dhiuhu@DESKTOP-ATLGL31: ~
dhiuhu@DESKTOP-ATLGL31:~$ docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
dhiuhu@DESKTOP-ATLGL31:~$ docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS
be2cf9882eb5 alpine "/bin/sh" About a minute ago Created
_elion
ef659e47fa0d alpine "/bin/sh" 3 minutes ago Created
n
643ae33df7c2 alpine "echo 'hello from al…" 20 hours ago Exited (0) 20 hours ago
_pascal
42b9fae24428 alpine "ls -l" 20 hours ago Exited (0) 20 hours ago
tner
635c107dbc50 alpine "ls -l" 20 hours ago Exited (0) 20 hours ago
abfd876f491b hello-world "/hello" 20 hours ago Exited (0) 20 hours ago
stel
bee1f9738e4e alpine "echo 'hey david her…" 20 hours ago Exited (0) 20 hours ago
ding_montalcini
1a1f4d8252a7 alpine "/bin/sh" 20 hours ago Exited (0) 20 hours ago
lande
d132f6a0d82b ubuntu "/bin/bash" 20 hours ago Exited (0) 20 hours ago
asteur
3f3ce6a03f34 hello-world "/hello" 20 hours ago Exited (0) 20 hours ago
f22ce0d3d871 hello-world "/hello" 20 hours ago Exited (0) 20 hours ago
mat
dhiuhu@DESKTOP-ATLGL31:~$


dhiuhu@DESKTOP-ATLGL31: ~
dhiuhu@DESKTOP-ATLGL31:~$
dhiuhu@DESKTOP-ATLGL31:~$ $ docker run -it alpine /bin/sh
bin dev etc home lib linuxrc media mnt proc root run sbin sys tmp
usr var
/ # uname -a
Linux 97916e8cb5dc 4.4.27-moby #1 SMP Wed Oct 26 14:01:48 UTC 2016 x86_64 Linux$: command not found
dhiuhu@DESKTOP-ATLGL31:~$ / # ls
-bash: /: Is a directory
dhiuhu@DESKTOP-ATLGL31:~$ bin dev etc home lib linuxrc media mnt proc root run
sbin sys tmp usr var
Command 'bin' not found, did you mean:
command 'bun' from snap bun-js (1.0.20)
command 'bip' from deb bip (0.9.3-1)
command 'tin' from deb tin (1:2.6.2~20220129-1)
command 'win' from deb wily (0.13.41-10)
command 'dbin' from deb dbmix (0.9.8-8)
command 'din' from deb din (51.1.1-2build1)
command 'bing' from deb bing (1.3.5-4)
command 'ben' from deb ben (0.9.2ubuntu5)
See 'snap info <snapname>' for additional versions.
dhiuhu@DESKTOP-ATLGL31:~$ / # uname -a
-bash: /: Is a directory
dhiuhu@DESKTOP-ATLGL31:~$ Linux 97916e8cb5dc 4.4.27-moby #1 SMP Wed Oct 26 14:01:48 UTC 2016 x86_64 Linux

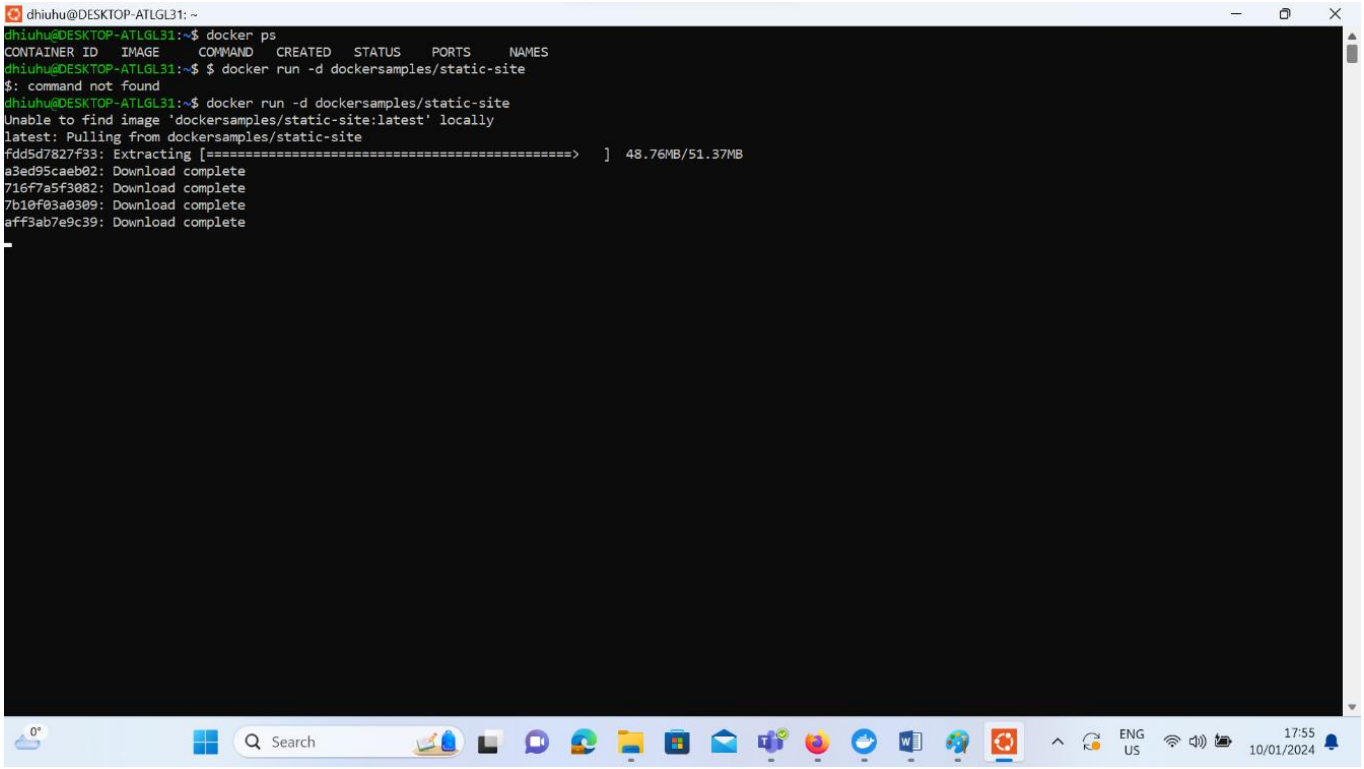
1.2 Terminology

Images

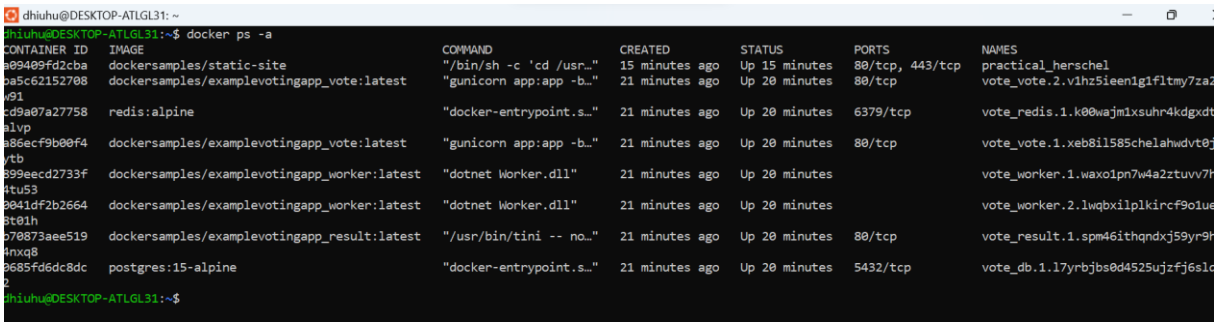


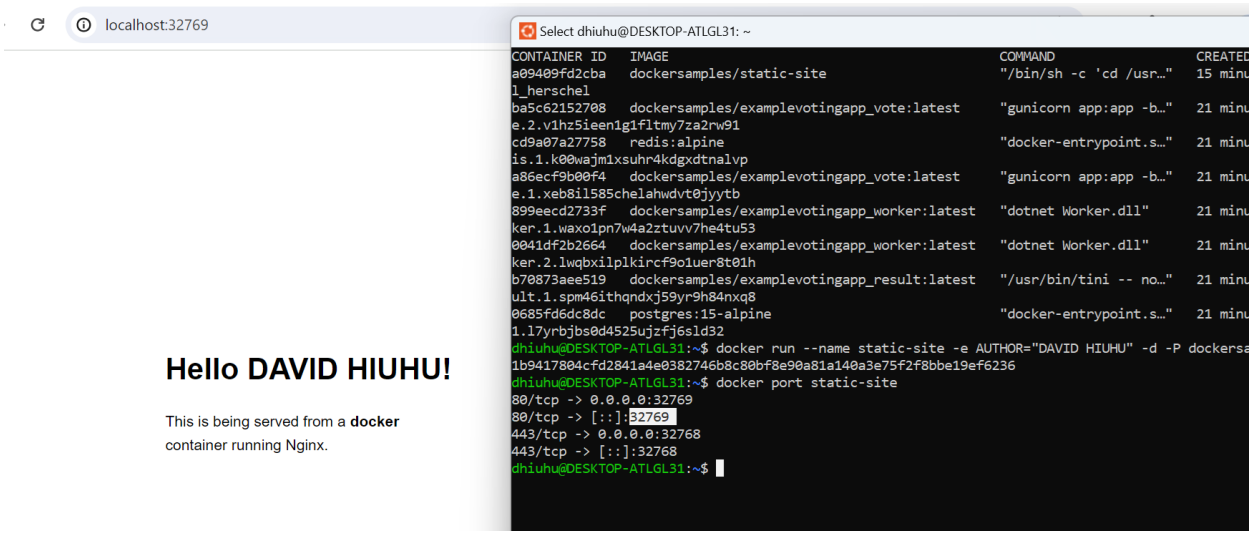
2.0 Webapps with Docker

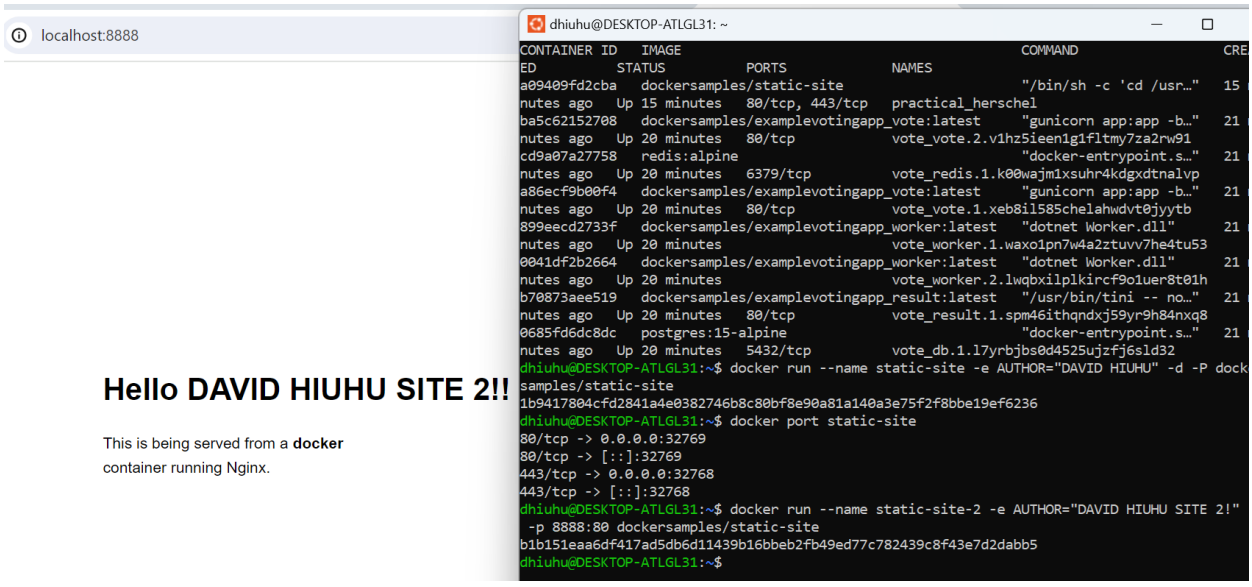
2.1 Run a static website in a container



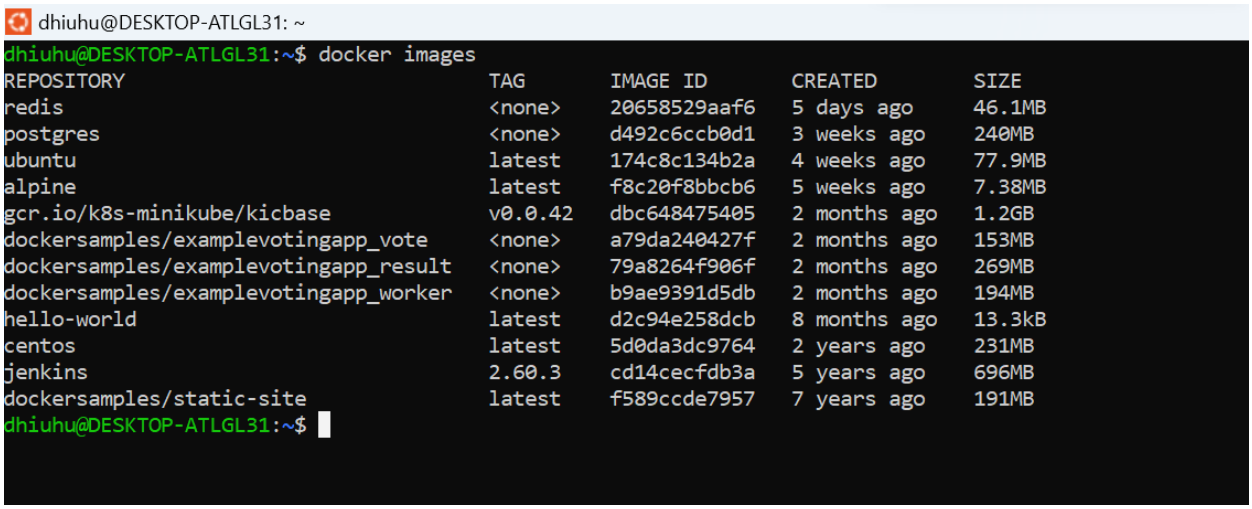

```
dhiuhu@DESKTOP-ATLGL31: ~
dhiuhu@DESKTOP-ATLGL31:~$ docker ps -a
CONTAINER ID   IMAGE                      COMMAND                  CREATED              STATUS                     POR
54025d258d7d   dockersamples/static-site  "/bin/sh -c 'cd /usr…"   37 seconds ago       Created
424eb798d032   dockersamples/static-site  "/bin/sh -c 'cd /usr…"   About a minute ago   Created
ec34a2401dc4   dockersamples/static-site  "/bin/sh -c 'cd /usr…"   4 minutes ago        Created
7fd34f808eea   dockersamples/static-site  "/bin/sh -c 'cd /usr…"   20 minutes ago       Created
735da6b94986   dockersamples/static-site  "/bin/sh -c 'cd /usr…"   30 minutes ago       Created
1ef6db66b1ff   dockersamples/static-site  "/bin/sh -c 'cd /usr…"   35 minutes ago       Created
be2cf9882eb5   alpine                     "/bin/sh"                49 minutes ago       Created
ef659e47fa0d   alpine                     "/bin/sh"                51 minutes ago       Created
643ae33df7c2   alpine                     "echo 'hello from al…"   21 hours ago         Exited (0) 21 hours ago
42b9fae24428   alpine                     "ls -l"                  21 hours ago         Exited (0) 21 hours ago
635c107dbc50   alpine                     "ls -l"                  21 hours ago         Exited (0) 21 hours ago
abfd876f491b   hello-world                "/hello"                 21 hours ago         Exited (0) 21 hours ago
bee1f9738e4e   alpine                     "echo 'hey david her…"   21 hours ago         Exited (0) 21 hours ago
dhiuhu@DESKTOP-ATLGL31:~$
    musing_lalande
d132f6a0d82b   ubuntu                     "/bin/bash"              21 hours ago         Exited (0) 21 hours ago
3f3ce6a03f34   hello-world                "/hello"                 21 hours ago         Exited (0) 21 hours ago
dhiuhu@DESKTOP-ATLGL31:~$
dhiuhu@DESKTOP-ATLGL31:~$
```

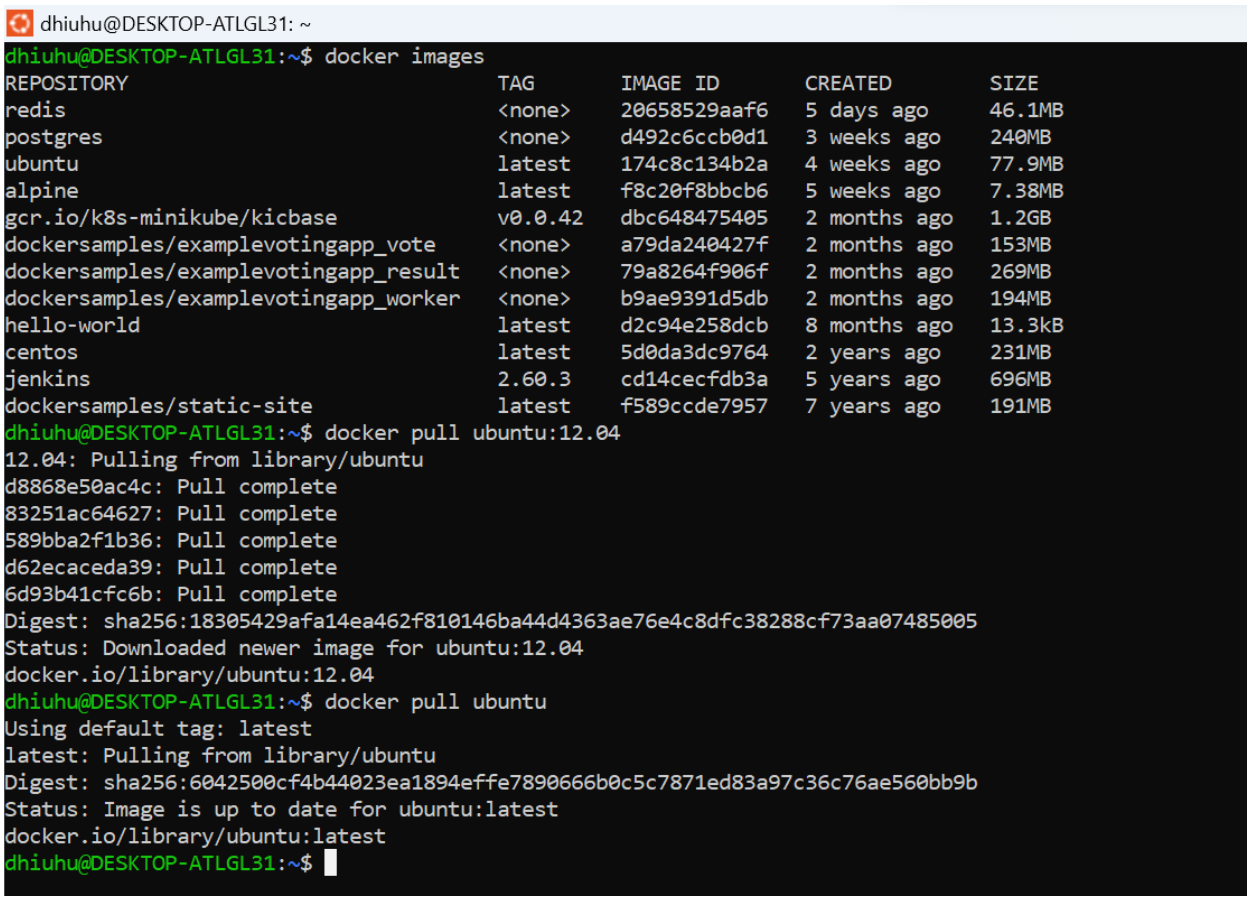






2.2 Docker Images


dhiuhu@DESKTOP-ATLGL31: ~
dhiuhu@DESKTOP-ATLGL31:~$ docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
redis <none> 20658529aaf6 5 days ago 46.1MB
postgres <none> d492c6ccb0d1 3 weeks ago 240MB
ubuntu latest 174c8c134b2a 4 weeks ago 77.9MB
alpine latest f8c20f8bbcb6 5 weeks ago 7.38MB
gcr.io/k8s-minikube/kicbase v0.0.42 dbc648475405 2 months ago 1.2GB
dockersamples/examplevotingapp_vote <none> a79da240427f 2 months ago 153MB
dockersamples/examplevotingapp_result <none> 79a8264f906f 2 months ago 269MB
dockersamples/examplevotingapp_worker <none> b9ae9391d5db 2 months ago 194MB
hello-world latest d2c94e258dcb 8 months ago 13.3kB
centos latest 5d0da3dc9764 2 years ago 231MB
jenkins 2.60.3 cd14cecfdb3a 5 years ago 696MB
dockersamples/static-site latest f589ccde7957 7 years ago 191MB
dhiuhu@DESKTOP-ATLGL31:~$


dhiuhu@DESKTOP-ATLGL31: ~
dhiuhu@DESKTOP-ATLGL31:~$ docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
redis <none> 20658529aaf6 5 days ago 46.1MB
postgres <none> d492c6ccb0d1 3 weeks ago 240MB
ubuntu latest 174c8c134b2a 4 weeks ago 77.9MB
alpine latest f8c20f8bbcb6 5 weeks ago 7.38MB
gcr.io/k8s-minikube/kicbase v0.0.42 dbc648475405 2 months ago 1.2GB
dockersamples/examplevotingapp_vote <none> a79da240427f 2 months ago 153MB
dockersamples/examplevotingapp_result <none> 79a8264f906f 2 months ago 269MB
dockersamples/examplevotingapp_worker <none> b9ae9391d5db 2 months ago 194MB
hello-world latest d2c94e258dcb 8 months ago 13.3kB
centos latest 5d0da3dc9764 2 years ago 231MB
jenkins 2.60.3 cd14cecfdb3a 5 years ago 696MB
dockersamples/static-site latest f589ccde7957 7 years ago 191MB
dhiuhu@DESKTOP-ATLGL31:~$ docker pull ubuntu:12.04
12.04: Pulling from library/ubuntu
d8868e50ac4c: Pull complete
83251ac64627: Pull complete
589bba2f1b36: Pull complete
d62ecaceda39: Pull complete
6d93b41cfc6b: Pull complete
Digest: sha256:18305429afa14ea462f810146ba44d4363ae76e4c8dfc38288cf73aa07485005
Status: Downloaded newer image for ubuntu:12.04
docker.io/library/ubuntu:12.04
dhiuhu@DESKTOP-ATLGL31:~$ docker pull ubuntu
Using default tag: latest
latest: Pulling from library/ubuntu
Digest: sha256:6042500cf4b44023ea1894effe7890666b0c5c7871ed83a97c36c76ae560bb9b
Status: Image is up to date for ubuntu:latest
docker.io/library/ubuntu:latest
dhiuhu@DESKTOP-ATLGL31:~$