

Despliegue aplicaciones web - Anton Blagodarnyy

Tarea 1 _ Tema 2

1-Instalacion:

1.-Actualizamos el servidor.

```
ubuntu@ubuntuserver2204: ~$ sudo apt update
Hit:1 http://in.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://in.archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu jammy-backports InRelease [127 kB]
Get:4 http://in.archive.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Get:5 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [2,174 kB]
Get:6 http://in.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [371 kB]
Get:7 http://in.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [2,677 kB]
Get:8 http://in.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [464 kB]
Get:9 http://in.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1,177 kB]
Get:10 http://in.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [287 kB]
Get:11 http://in.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [43.6 kB]
Get:12 http://in.archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [11.4 kB]
Get:13 http://in.archive.ubuntu.com/ubuntu jammy-security/main amd64 Packages [1,952 kB]
Get:14 http://in.archive.ubuntu.com/ubuntu jammy-security/main Translation-en [312 kB]
Get:15 http://in.archive.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [2,608 kB]
Get:16 http://in.archive.ubuntu.com/ubuntu jammy-security/restricted Translation-en [451 kB]
Get:17 http://in.archive.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [956 kB]
Get:18 http://in.archive.ubuntu.com/ubuntu jammy-security/universe Translation-en [203 kB]
Get:19 http://in.archive.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [37.6 kB]
Get:20 http://in.archive.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [8,260 B]
Fetched 14.1 MB in 20s (704 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
22 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ubuntuserver2204:~$
```

2.-Instalamos varios paquetes que permiten a apt usar paquetes a través de HTTPS.

```
ubuntu@ubuntuserver2204:~$ sudo apt install apt-transport-https ca-certificates curl software-properties-common
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
ca-certificates is already the newest version (20240203-22.04.1).
ca-certificates set to manually installed.
software-properties-common is already the newest version (0.99.22.9).
software-properties-common set to manually installed.
The following packages were automatically installed and are no longer required:
  libflashrom1 libftdi1-2
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  libcurl4
The following NEW packages will be installed:
  apt-transport-https
The following packages will be upgraded:
  curl libcurl4
2 upgraded, 1 newly installed, 0 to remove and 20 not upgraded.
Need to get 484 kB of archives.
After this operation, 170 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://in.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 apt-transport-https all 2.4.13 [1,510 B]
Get:2 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 curl amd64 7.81.0-1ubuntu1.19 [194 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libcurl4 amd64 7.81.0-1ubuntu1.19 [289 kB]
Fetched 484 kB in 2s (211 kB/s)
Selecting previously unselected package apt-transport-https.
(Reading database ... 111186 files and directories currently installed.)
Preparing to unpack .../apt-transport-https_2.4.13_all.deb ...
Unpacking apt-transport-https (2.4.13) ...
Preparing to unpack .../curl_7.81.0-1ubuntu1.19_amd64.deb ...
Unpacking curl (7.81.0-1ubuntu1.19) over (7.81.0-1ubuntu1.18) ...
Preparing to unpack .../libcurl4_7.81.0-1ubuntu1.19_amd64.deb ...
Unpacking libcurl4:amd64 (7.81.0-1ubuntu1.19) over (7.81.0-1ubuntu1.18) ...
Setting up apt-transport-https (2.4.13) ...
Setting up libcurl4:amd64 (7.81.0-1ubuntu1.19) ...
Setting up curl (7.81.0-1ubuntu1.19) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.8) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ubuntuserver2204:~$
```

3.-Agregamos la clave GPG del repositorio oficial de docker

```
ubuntu@ubuntu2204: ~$ curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -
Warning: apt-key is deprecated. Manage keyring files in trusted.gpg.d instead (see apt-key(8)).
OK
ubuntu@ubuntu2204: ~$
```

4.-Agregamos el repositorio de docker a las fuentes de apt

```
ubuntu@ubuntu2204: ~$ sudo add-apt-repository "deb [arch=amd64] https://download.docker.com/linux/ubuntu focal stable"
Repository: 'deb [arch=amd64] https://download.docker.com/linux/ubuntu focal stable'
Description:
Archive for codename: focal components: stable
More info: https://download.docker.com/linux/ubuntu
Adding repository.
Press [ENTER] to continue or Ctrl-c to cancel.
Adding deb entry to /etc/apt/sources.list.d/archive_uri-https_download_docker_com_linux_ubuntu-jammy.list
Adding disabled deb-src entry to /etc/apt/sources.list.d/archive_uri-https_download_docker_com_linux_ubuntu-jammy.list
Get:1 https://download.docker.com/linux/ubuntu focal InRelease [57.7 kB]
Hit:2 http://in.archive.ubuntu.com/ubuntu jammy InRelease
Get:3 http://in.archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Get:4 https://download.docker.com/linux/ubuntu focal/stable amd64 Packages [51.8 kB]
Hit:5 http://in.archive.ubuntu.com/ubuntu jammy-backports InRelease
Get:6 http://in.archive.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Fetched 366 kB in 1s (496 kB/s)
Reading package lists... Done
W: https://download.docker.com/linux/ubuntu/dists/focal/InRelease: Key is stored in legacy trusted.gpg keyring (/etc/apt/trusted.gpg), see the DEPRECATION section in apt-key(8) for details.
ubuntu@ubuntu2204: ~$
```

5.-Nos aseguramos que vamos a instalar del repositorio de docker oficial y ni del default de ubuntu.

```
ubuntu@ubuntu-server2204:~$ apt-cache policy docker-ce
docker-ce:
  Installed: (none)
  Candidate: 5:27.3.1-1-ubuntu.20.04-focal
  Version table:
   5:27.3.1-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:27.3.0-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:27.2.1-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:27.2.0-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:27.1.2-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:27.1.1-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:27.1.0-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:27.0.3-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:27.0.2-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:27.0.1-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:26.1.4-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:26.1.3-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:26.1.2-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:26.1.1-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:26.1.0-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:26.0.2-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:26.0.1-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:26.0.0-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:25.0.5-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:25.0.4-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:25.0.3-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:25.0.2-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:25.0.1-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:25.0.0-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:24.0.9-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:24.0.8-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
   5:24.0.7-1-ubuntu.20.04-focal 500
      https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
```

6.-Instalamos docker.

```
ubuntu@ubuntu-server2204:~$ sudo apt install docker-ce
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  libflashromd libfdt1-2
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  containerd.io docker-buildx-plugin docker-ce-cli docker-ce-rootless-extras docker-compose-plugin
  libbtdl7 libslirp0 pigz slirp4netns
Suggested packages:
  aufs-tools cgroupfs-mount | cgroup-lite
The following NEW packages will be installed:
  containerd.io docker-buildx-plugin docker-ce docker-ce-cli docker-ce-rootless-extras
  docker-compose-plugin libbtdl7 libslirp0 pigz slirp4netns
0 upgraded, 10 newly installed, 0 to remove and 20 not upgraded.
Need to get 123 MB of archives.
After this operation, 442 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 https://download.docker.com/linux/ubuntu focal/stable amd64 containerd.io amd64 1.7.23-1 [29.5 M
B]
Get:2 http://in.archive.ubuntu.com/ubuntu jammy/universe amd64 pigz amd64 2.6-1 [63.6 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 libbtdl7 amd64 2.4.6-15build2 [39.6 kB]
Get:4 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 libslirp0 amd64 4.6.1-1build1 [61.5 kB]
Get:5 http://in.archive.ubuntu.com/ubuntu jammy/universe amd64 slirp4netns amd64 1.0.1-2 [20.2 kB]
Get:6 https://download.docker.com/linux/ubuntu focal/stable amd64 docker-buildx-plugin amd64 0.17.1-1-
ubuntu.20.04-focal [30.3 MB]
Get:7 https://download.docker.com/linux/ubuntu focal/stable amd64 docker-ce-cli amd64 5:27.3.1-1-ubunt
u.20.04-focal [15.0 MB]
Get:8 https://download.docker.com/linux/ubuntu focal/stable amd64 docker-ce amd64 5:27.3.1-1-ubuntu.20
.04-focal [25.6 MB]
Get:9 https://download.docker.com/linux/ubuntu focal/stable amd64 docker-ce-rootless-extras amd64 5:27
.3.1-1-ubuntu.20.04-focal [9,597 kB]
Get:10 https://download.docker.com/linux/ubuntu focal/stable amd64 docker-compose-plugin amd64 2.29.7-1-
ubuntu.20.04-focal [12.6 MB]
Fetched 123 MB in 2min 18s (946 kB/s)
Selecting previously unselected package pigz.
(Reading database ... 111190 files and directories currently installed.)
Preparing to unpack .../0-pigz_2.6-1_amd64.deb ...
Unpacking pigz (2.6-1) ...
Selecting previously unselected package containerd.io.
Preparing to unpack .../1-containerd.io_1.7.23-1_amd64.deb ...
Unpacking containerd.io (1.7.23-1) ...
Selecting previously unselected package docker-buildx-plugin.
Preparing to unpack .../2-docker-buildx-plugin_0.17.1-1-ubuntu.20.04-focal_amd64.deb ...
Unpacking docker-buildx-plugin (0.17.1-1-ubuntu.20.04-focal) ...
Selecting previously unselected package docker-ce-cli.
Preparing to unpack .../3-docker-ce-cli_5%3a27.3.1-1-ubuntu.20.04-focal_amd64.deb ...
Unpacking docker-ce-cli (5:27.3.1-1-ubuntu.20.04-focal) ...
Selecting previously unselected package docker-ce.
Preparing to unpack .../4-docker-ce_5%3a27.3.1-1-ubuntu.20.04-focal_amd64.deb ...
Unpacking docker-ce (5:27.3.1-1-ubuntu.20.04-focal) ...
Selecting previously unselected package docker-ce-rootless-extras.
Preparing to unpack .../5-docker-ce-rootless-extras_5%3a27.3.1-1-ubuntu.20.04-focal_amd64.deb ...
Unpacking docker-ce-rootless-extras (5:27.3.1-1-ubuntu.20.04-focal) ...
Selecting previously unselected package docker-compose-plugin.
Preparing to unpack .../6-docker-compose-plugin_2.29.7-1-ubuntu.20.04-focal_amd64.deb ...
Unpacking docker-compose-plugin (2.29.7-1-ubuntu.20.04-focal) ...
Selecting previously unselected package libbtdl7:amd64.
Preparing to unpack .../7-libbtdl7_2.4.6-15build2_amd64.deb ...
```

7.-Comprobamos que se ha instalado correctamente.

```
ubuntu@ubuntu2204: ~$ sudo systemctl status docker
● docker.service - Docker Application Container Engine
   Loaded: loaded (/lib/systemd/system/docker.service; enabled; vendor preset: enabled)
   Active: active (running) since Thu 2024-11-21 10:19:40 UTC; 1min 50s ago
 TriggeredBy: ● docker.socket
    Docs: https://docs.docker.com
   Main PID: 2885 (dockerd)
     Tasks: 9
    Memory: 22.1M
       CPU: 293ms
    CGroup: /system.slice/docker.service
            └─2885 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock

Nov 21 10:19:39 ubuntu2204 dockerd[2885]: time="2024-11-21T10:19:39.940971902Z" level=info msg=>
Nov 21 10:19:39 ubuntu2204 dockerd[2885]: time="2024-11-21T10:19:39.943617567Z" level=info msg=>
Nov 21 10:19:40 ubuntu2204 dockerd[2885]: time="2024-11-21T10:19:40.054982225Z" level=info msg=>
Nov 21 10:19:40 ubuntu2204 dockerd[2885]: time="2024-11-21T10:19:40.420248718Z" level=info msg=>
Nov 21 10:19:40 ubuntu2204 dockerd[2885]: time="2024-11-21T10:19:40.436974424Z" level=warning m>
Nov 21 10:19:40 ubuntu2204 dockerd[2885]: time="2024-11-21T10:19:40.437000074Z" level=warning m>
Nov 21 10:19:40 ubuntu2204 dockerd[2885]: time="2024-11-21T10:19:40.437021044Z" level=info msg=>
Nov 21 10:19:40 ubuntu2204 dockerd[2885]: time="2024-11-21T10:19:40.437114465Z" level=info msg=>
Nov 21 10:19:40 ubuntu2204 dockerd[2885]: time="2024-11-21T10:19:40.470179506Z" level=info msg=>
Nov 21 10:19:40 ubuntu2204 systemd[1]: Started Docker Application Container Engine.
lines 1-22/22 (END)
```

8.-Agregamos al usuario al grupo de docker para poder utilizarlo sin sudo.

```
ubuntu@ubuntu2204: ~$ sudo usermod -aG docker ${USER}
ubuntu@ubuntu2204: ~$ su - ${USER}
Password:
ubuntu@ubuntu2204: ~$ groups
ubuntu adm cdrom sudo dip plugdev lxd docker
ubuntu@ubuntu2204: ~$ |
```


2-Uso de imagenes.

1.-Descargamos y ejecutamos la imagen de hello-world.

```
ubuntu@ubuntuserver2204: ~$ docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
c1ec31eb5944: Pull complete
Digest: sha256:305243c734571da2d100c8c8b3c3167a098cab6049c9a5b066b6021a60fcb966
Status: Downloaded newer image for hello-world:latest

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
    (amd64)
 3. The Docker daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker daemon streamed that output to the Docker client, which sent it
    to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
https://hub.docker.com/

For more examples and ideas, visit:
https://docs.docker.com/get-started/

ubuntu@ubuntuserver2204:~$ |
```

2.-Mostramos la imagen del sistema y borramos la imagen hello-world.

```
ubuntu@ubuntuserver2204:~$ docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED          STATUS          PORTS          NAMES
89b4cfc59b5d   hello-world  "/hello"                4 minutes ago    Exited (0) 4 minutes ago           funny_bose

ubuntu@ubuntuserver2204:~$ docker rm 89b4cfc59b5d
89b4cfc59b5d

ubuntu@ubuntuserver2204:~$ docker image ls
REPOSITORY    TAG       IMAGE ID       CREATED          SIZE
hello-world   latest   d2c94e258dcb   19 months ago   13.3kB

ubuntu@ubuntuserver2204:~$ docker rm
"docker rm" requires at least 1 argument.
See 'docker rm --help'.

Usage:  docker rm [OPTIONS] CONTAINER [CONTAINER...]

Remove one or more containers
ubuntu@ubuntuserver2204:~$ docker rm d2c94e258dcb
Error response from daemon: No such container: d2c94e258dcb
ubuntu@ubuntuserver2204:~$ docker rmi d2c94e258dcb
Untagged: hello-world:latest
Untagged: hello-world@sha256:305243c734571da2d100c8c8b3c3167a098cab6049c9a5b066b6021a60fcb966
Deleted: sha256:d2c94e258dcb3c5ac2798d32e1249e42ef01cba4841c2234249495f87264ac5a
Deleted: sha256:ac28800ec8bb38d5c35b49d45a6ac4777544941199075dff8c4eb63e093aa81e

ubuntu@ubuntuserver2204:~$ docker image ls
REPOSITORY    TAG       IMAGE ID       CREATED          SIZE
ubuntu@ubuntuserver2204:~$ docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED          STATUS          PORTS          NAMES
ubuntu@ubuntuserver2204:~$ |
```

3.-Descargamos y ejecutamos la imagen de ubuntu.

```
ubuntu@ubuntu2204: ~$ docker run --name demo-1 ubuntu echo "Hello World"
Unable to find image 'ubuntu:latest' locally
latest: Pulling from library/ubuntu
afad30e59d72: Pull complete
Digest: sha256:278628f08d4979fb9af9ead44277dbc9c92c2465922310916ad0c46ec9999295
Status: Downloaded newer image for ubuntu:latest
Hello World
ubuntu@ubuntu2204: ~$ docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS
d99c9b5ef760	ubuntu	"echo 'Hello World'"	17 seconds ago	Exited (0) 16 seconds ago	
demo-1					

```
ubuntu@ubuntu2204: ~$
```

4.-Iniciamos un nuevo contenedor llamado demo-2 basado en la imagen de ubuntu. /bin/bash
Ejecuta una serie de comandos, un echo y sleep infinity, este ultimo mantiene el contenedor activo.

```
ubuntu@ubuntu2204: ~$ docker run -d --name demo-2 ubuntu /bin/bash -c "echo 'Hello World'; sleep infinity"
814f9243897fdcc62a6045162246d976b81d2cd66dbefc30d193dccd42829ec
ubuntu@ubuntu2204: ~$ docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS
814f9243897f	ubuntu	"/bin/bash -c 'echo ...'"	18 seconds ago	Up 17 seconds	
demo-2					
fda0e9c9dad5	ubuntu	"echo 'Hello World'"	43 seconds ago	Exited (0) 42 seconds ago	
demo-1					

```
ubuntu@ubuntu2204: ~$
```

5.-Detenemos el contenedor.

```
ubuntu@ubuntu2204: ~$ docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORT
814f9243897f	ubuntu	"/bin/bash -c 'echo ..."	About a minute ago	Up About a minute	
fda0e9c9dad5	ubuntu	"echo 'Hello World'"	2 minutes ago	Exited (0) 2 minutes ago	

```
ubuntu@ubuntu2204: ~$ docker stop 814f9243897f
814f9243897f
ubuntu@ubuntu2204: ~$ docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS
814f9243897f	ubuntu	"/bin/bash -c 'echo ..."	2 minutes ago	Exited (137) 1 second ago	
fda0e9c9dad5	ubuntu	"echo 'Hello World'"	2 minutes ago	Exited (0) 2 minutes ago	

```
ubuntu@ubuntu2204: ~$ |
```

6.-Lo volvemos a inicializar.

```
ubuntu@ubuntu2204: ~$ docker ps -a
```

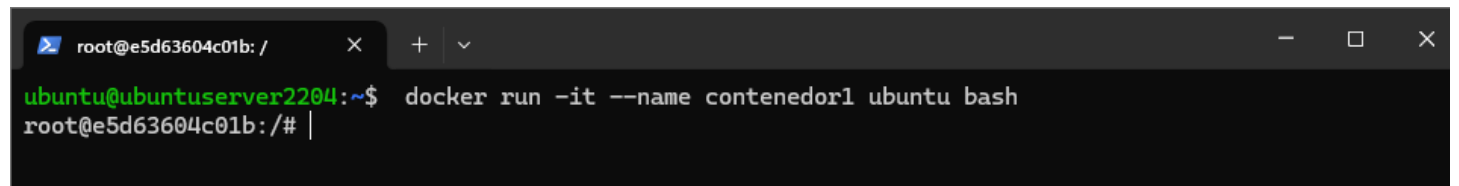
CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORT
814f9243897f	ubuntu	"/bin/bash -c 'echo ..."	3 minutes ago	Exited (137) About a minute ago	
fda0e9c9dad5	ubuntu	"echo 'Hello World'"	3 minutes ago	Exited (0) 3 minutes ago	

```
ubuntu@ubuntu2204: ~$ docker start 814f9243897f
814f9243897f
ubuntu@ubuntu2204: ~$ docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS
814f9243897f	ubuntu	"/bin/bash -c 'echo ..."	3 minutes ago	Up 1 second	
fda0e9c9dad5	ubuntu	"echo 'Hello World'"	3 minutes ago	Exited (0) 3 minutes ago	

```
ubuntu@ubuntu2204: ~$ |
```


7.-Iniciamos una terminal interactiva de bash de un contenedor.



```
root@e5d63604c01b: /  
ubuntu@ubuntuserver2204:~$ docker run -it --name contenedor1 ubuntu bash  
root@e5d63604c01b:/#
```