UNIVERSIDAD
POLITÉCNICA
DE QUINTANA ROO

Formando Triunfadores

**Alumna:**

Bolaños Arias America del Pilar

**Materia:**

Sistemas operativos

**Grupo:**

27BV

1. Asumir el prompt de superusuario

```
┌──(america㉿kali)-[~]
└─$ sudo -i
[sudo] password for america:
┌──(root㉿kali)-[~]
└─#
```

2. Cambiar el password del superusuario

```
┌──(root㉿kali)-[~]
└─# sudo passwd root
New password:
Retype new password:
passwd: password updated successfully
```

3. Listar el directorio raíz

```
┌──(root㉿kali)-[~]
└─# ls -l /
total 68
lrwxrwxrwx   1 root root      7 Dec  4 04:24 bin → usr/bin
drwxr-xr-x   3 root root   4096 Dec  4 07:41 boot
drwxr-xr-x  17 root root   3420 Dec  4 09:18 dev
drwxr-xr-x 178 root root  12288 Dec  5 07:56 etc
drwxr-xr-x   3 root root   4096 Dec  4 07:39 home
lrwxrwxrwx   1 root root     33 Dec  4 04:25 initrd.img → boot/initrd.img-6.3
.0-kali1-amd64
lrwxrwxrwx   1 root root     33 Dec  4 04:25 initrd.img.old → boot/initrd.img
-6.3.0-kali1-amd64
lrwxrwxrwx   1 root root      7 Dec  4 04:24 lib → usr/lib
lrwxrwxrwx   1 root root      9 Dec  4 04:24 lib32 → usr/lib32
lrwxrwxrwx   1 root root      9 Dec  4 04:24 lib64 → usr/lib64
lrwxrwxrwx   1 root root     10 Dec  4 04:24 libx32 → usr/libx32
drwx------   2 root root  16384 Dec  4 04:24 lost+found
drwxr-xr-x   3 root root   4096 Dec  4 04:24 media
drwxr-xr-x   2 root root   4096 Dec  4 04:24 mnt
drwxr-xr-x   3 root root   4096 Dec  4 04:34 opt
dr-xr-xr-x 215 root root      0 Dec  4 08:49 proc
drwx------   4 root root   4096 Dec  5 07:55 root
drwxr-xr-x  32 root root    800 Dec  4 08:50 run
lrwxrwxrwx   1 root root      8 Dec  4 04:24 sbin → usr/sbin
drwxr-xr-x   3 root root   4096 Dec  4 04:37 srv
dr-xr-xr-x  13 root root      0 Dec  4 08:49 sys
drwxrwxrwt  13 root root   4096 Dec  5 07:55 tmp
drwxr-xr-x  16 root root   4096 Dec  4 04:29 usr
```

4. Cambiarse al directorio raíz

```
┌──(root㉿kali)-[~]
└─# cd /

┌──(root㉿kali)-[/]
└─#
```

5. Verificar el directorio actual

```
┌──(root㉿kali)-[/]
└─# pwd
/
```

6. Crear un directorio "prueba" en /home

```
┌──(root㉿kali)-[/]
└─# mkdir /home/prueba

┌──(root㉿kali)-[/]
└─# ls /home
america   prueba
```

7. Crear un archivo "test" en directorio /home/prueba

```
┌──(root㉿kali)-[/]
└─# touch /home/prueba/test

┌──(root㉿kali)-[/]
└─# ls /home/prueba
test
```

8. Verificar el usuario actual

```
┌──(root㉿kali)-[/]
└─# whoami
root
```

9. Mostrar el contenido del archivo /root/.bash_history

```
┌──(root㉿kali)-[/]
└─# cat /root/.bash_history
cat: /root/.bash_history: No such file or directory
```

10. Copiar el archivo "test" a /root

```
┌──(root㉿kali)-[/]
└─# cp /home/prueba/test /root/
```

11. Eliminar el archivo "test" de /home/prueba

```
┌──(root㉿kali)-[/]
└─# rm /home/prueba/test
```

12. Mover /root/test a la raíz

```
┌──(root㉿kali)-[/]
└─# mv /root/test /
```

13. Hacer un ping a [www.google.com](www.google.com)

```
└─# ping www.google.com
PING www.google.com (142.250.217.164) 56(84) bytes of data.
64 bytes from mia07s60-in-f4.1e100.net (142.250.217.164): icmp_seq=1 ttl=116 time=35.6 ms
64 bytes from mia07s60-in-f4.1e100.net (142.250.217.164): icmp_seq=2 ttl=116 time=37.4 ms
64 bytes from mia07s60-in-f4.1e100.net (142.250.217.164): icmp_seq=3 ttl=116 time=33.3 ms
64 bytes from mia07s60-in-f4.1e100.net (142.250.217.164): icmp_seq=4 ttl=116 time=38.1 ms
^C
--- www.google.com ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3008ms
rtt min/avg/max/mdev = 33.296/36.089/38.076/1.845 ms
```

14. Mostrar la configuración de red del servidor

```
┌──(root㉿kali)-[/]
└─# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 10.0.2.15  netmask 255.255.255.0  broadcast 10.0.2.255
        inet6 fe80::a00:27ff:fe56:4c22  prefixlen 64  scopeid 0x20<link>
        ether 08:00:27:56:4c:22  txqueuelen 1000  (Ethernet)
        RX packets 1039  bytes 116223 (113.4 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 1092  bytes 100608 (98.2 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
        inet6 ::1  prefixlen 128  scopeid 0x10<host>
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 4  bytes 240 (240.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 4  bytes 240 (240.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

## 15. Usar el comando netstat

```
┌──(root㉿kali)-[/]
└─# netstat
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
udp        0      0 10.0.2.15:bootpc         10.0.2.2:bootps         ESTABLISHED
Active UNIX domain sockets (w/o servers)
Proto RefCnt Flags       Type       State         I-Node   Path
unix  3      [ ]         STREAM     CONNECTED     20599
unix  3      [ ]         STREAM     CONNECTED     20967    /run/user/1000/bus
unix  3      [ ]         STREAM     CONNECTED     19874
unix  2      [ ]         DGRAM      CONNECTED     17229
unix  3      [ ]         STREAM     CONNECTED     20980
unix  3      [ ]         STREAM     CONNECTED     18279
unix  3      [ ]         STREAM     CONNECTED     20650
unix  3      [ ]         STREAM     CONNECTED     20519    /run/user/1000/at-spi/bus_0
unix  3      [ ]         STREAM     CONNECTED     20698
unix  3      [ ]         STREAM     CONNECTED     19680    /run/user/1000/bus
unix  3      [ ]         STREAM     CONNECTED     19739    @/tmp/.ICE-unix/865
unix  3      [ ]         STREAM     CONNECTED     17480    /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED     19801    @/tmp/.X11-unix/X0
unix  3      [ ]         STREAM     CONNECTED     19635
unix  3      [ ]         STREAM     CONNECTED     19470
unix  3      [ ]         STREAM     CONNECTED     18378
unix  3      [ ]         STREAM     CONNECTED     19135    /run/user/1000/pipewire-0
unix  3      [ ]         STREAM     CONNECTED     20895    @/tmp/.X11-unix/X0
unix  3      [ ]         STREAM     CONNECTED     20573
unix  3      [ ]         STREAM     CONNECTED     19250    @/tmp/.X11-unix/X0
unix  2      [ ]         DGRAM      CONNECTED     17488
unix  3      [ ]         DGRAM      CONNECTED     13862
unix  3      [ ]         DGRAM      CONNECTED     18091
unix  3      [ ]         STREAM     CONNECTED     18448
unix  3      [ ]         STREAM     CONNECTED     19378    /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED     19854    /run/dbus/system_bus_socket
unix  3      [ ]         STREAM     CONNECTED     20590
unix  3      [ ]         STREAM     CONNECTED     20092
unix  3      [ ]         STREAM     CONNECTED     20640
unix  3      [ ]         STREAM     CONNECTED     245518
unix  3      [ ]         STREAM     CONNECTED     20954
unix  3      [ ]         STREAM     CONNECTED     19775
unix  3      [ ]         STREAM     CONNECTED     17198
unix  3      [ ]         STREAM     CONNECTED     20962    /run/user/1000/bus
unix  3      [ ]         STREAM     CONNECTED     19922
unix  3      [ ]         STREAM     CONNECTED     20526
unix  3      [ ]         STREAM     CONNECTED     19937
unix  3      [ ]         STREAM     CONNECTED     19439
unix  3      [ ]         STREAM     CONNECTED     241129   /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED     19747    /run/user/1000/bus
unix  3      [ ]         STREAM     CONNECTED     19658
unix  3      [ ]         STREAM     CONNECTED     18373    /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED     17175
unix  3      [ ]         STREAM     CONNECTED     20552    /run/user/1000/bus
```

## 16. Usar el comando top

```
┌──(root㉿kali)-[/]
└─# top
top - 07:03:32 up  4:14,  2 users,  load average: 0.01, 0.06, 0.07
Tasks: 154 total,   1 running, 153 sleeping,   0 stopped,   0 zombie
%Cpu(s):  0.9 us,  0.9 sy,  0.0 ni, 98.3 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
MiB Mem :   1967.1 total,    662.3 free,    808.8 used,    676.8 buff/cache
MiB Swap:    976.0 total,    976.0 free,      0.0 used.   1158.3 avail Mem

    PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM     TIME+ COMMAND
    611 root      20   0  498692 179388  74176 S   1.3   8.9   2:23.54 Xorg
 116448 america   20   0  453364 109692  90032 S   0.7   5.4   0:02.29 qterminal
    941 america   20   0  218320   3072   2688 S   0.3   0.2   1:04.37 VBoxClient
    997 america   20   0  475160  47932  35336 S   0.3   2.4   0:45.80 xfwm4
   1067 america   20   0  426516  38804  22488 S   0.3   1.9   1:08.85 panel-13-cpugra
   1072 america   20   0  424092  27852  20644 S   0.3   1.4   0:46.15 panel-15-genmon
  96505 root      20   0       0      0      0 I   0.3   0.0   0:00.99 kworker/0:0-mm_percpu_wq
      1 root      20   0   20840  12744   9416 S   0.0   0.6   0:02.98 systemd
      2 root      20   0       0      0      0 S   0.0   0.0   0:00.06 kthreadd
      3 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 rcu_gp
      4 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 rcu_par_gp
      5 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 slub_flushwq
      6 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 netns
      8 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/0:0H-events_highpri
     10 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 mm_percpu_wq
     11 root      20   0       0      0      0 I   0.0   0.0   0:00.00 rcu_tasks_kthread
     12 root      20   0       0      0      0 I   0.0   0.0   0:00.00 rcu_tasks_rude_kthread
     13 root      20   0       0      0      0 I   0.0   0.0   0:00.00 rcu_tasks_trace_kthread
     14 root      20   0       0      0      0 S   0.0   0.0   0:03.50 ksoftirqd/0
     15 root      20   0       0      0      0 I   0.0   0.0   0:10.62 rcu_preempt
     16 root      rt   0       0      0      0 S   0.0   0.0   0:00.26 migration/0
     17 root     -51   0       0      0      0 S   0.0   0.0   0:00.00 idle_inject/0
     19 root      20   0       0      0      0 S   0.0   0.0   0:00.00 cpuhp/0
     20 root      20   0       0      0      0 S   0.0   0.0   0:00.00 cpuhp/1
     21 root     -51   0       0      0      0 S   0.0   0.0   0:00.00 idle_inject/1
     22 root      rt   0       0      0      0 S   0.0   0.0   0:00.78 migration/1
     23 root      20   0       0      0      0 S   0.0   0.0   0:03.15 ksoftirqd/1
     25 root       0 -20       0      0      0 I   0.0   0.0   0:01.75 kworker/1:0H-kblockd
     28 root      20   0       0      0      0 S   0.0   0.0   0:00.02 kdevtmpfs
     29 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 inet_frag_wq
     30 root      20   0       0      0      0 S   0.0   0.0   0:00.00 kauditd
     31 root      20   0       0      0      0 S   0.0   0.0   0:00.02 khungtaskd
     32 root      20   0       0      0      0 S   0.0   0.0   0:00.00 oom_reaper
     34 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 writeback
     35 root      20   0       0      0      0 S   0.0   0.0   0:00.98 kcompactd0
     36 root      25   5       0      0      0 S   0.0   0.0   0:00.00 ksmd
     37 root      39  19       0      0      0 S   0.0   0.0   0:01.53 khugepaged
     38 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kintegrityd
     39 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kblockd
     40 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 blkcg_punt_bio
     41 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 tpm_dev_wq
     42 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 edac-poller
```

## 17. Usar el comando traceroute

```
┌──(root㉿kali)-[~]
└─# traceroute www.google.com
traceroute to www.google.com (192.178.50.68), 30 hops max, 60 byte packets
 1  10.0.2.2 (10.0.2.2)  0.582 ms  0.491 ms  0.442 ms

 2  * * *
 3  * * *
 4  * * *
 5  * * *
 6  * * *
 7  *


 * *
 8  * * *
 9  * * *
10  * * *
11  * * *
12  * * *
13  * * *
14  * * *
15  * * *
16  * * *
17  * * *
```

## 18. Usar el comando nslookup

```
┌──(root㉿kali)-[~]
└─# nslookup www.google.com
Server:         192.168.1.254
Address:        192.168.1.254#53

Non-authoritative answer:
Name:   www.google.com
Address: 192.178.50.68
Name:   www.google.com
Address: 2607:f8b0:4008:806::2004
```