

Question 1

1.Display the content of the /etc/passwd file.

```
jorge@jorge-VirtualBox:~$ pwd
jorge@jorge-VirtualBox:~$ cd lab5
jorge@jorge-VirtualBox:~/lab5$ cat -n /etc/passwd
 1 root:x:0:0:root:/root:/bin/bash
 2 daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
 3 bin:x:2:2:bin:/bin:/usr/sbin/nologin
 4 sys:x:3:3:sys:/dev:/usr/sbin/nologin
 5 sync:x:4:65534:sync:/bin:/bin/sync
 6 games:x:5:60:games:/usr/games:/usr/sbin/nologin
 7 man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
 8 lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
 9 mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
10 news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
11 uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
12 proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
13 www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
14 backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
15 list:x:38:38:Mail List Manager:/var/list:/usr/sbin/nologin
16 irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
17 gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
18 nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
19 systemd-network:x:100:102:systemd Network Management,,:/run/systemd:/usr/sbin/nologin
20 systemd-resolve:x:101:103:systemd Resolver,,:/run/systemd:/usr/sbin/nologin
21 systemd-timesync:x:102:104:systemd Time Synchronization,,:/run/systemd:/usr/sbin/nologin
22 messagebus:x:103:106:/nonexistent:/usr/sbin/nologin
23 syslog:x:104:107:/home/syslog:/usr/sbin/nologin
24 _apt:x:105:65534:/nonexistent:/usr/sbin/nologin
25 tss:x:106:111:TPM software stack,,:/var/lib/tpm:/bin/false
26 uidd:x:107:114:/run/uidd:/usr/sbin/nologin
27 tcpdump:x:108:115:/nonexistent:/usr/sbin/nologin
28 avahi-autoipd:x:109:115:Avahi autoip daemon,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
29 usbmuxd:x:110:46:usbmux daemon,,:/var/lib/usbmux:/usr/sbin/nologin
30 rtkit:x:111:117:RealtimeKit,,:/proc:/usr/sbin/nologin
31 dnsmasq:x:112:65534:dnsmasq,,:/var/lib/misc:/usr/sbin/nologin
32 cups-pk-helper:x:113:120:user for cups-pk-helper service,,:/home/cups-pk-helper:/usr/sbin/nologin
33 speech-dispatcher:x:114:29:Speech Dispatcher,,:/run/speech-dispatcher:/bin/false
34 avahi:x:115:121:Avahi mDNS daemon,,:/var/run/avahi-daemon:/usr/sbin/nologin
35 kernoops:x:116:65534:Kernel Oops Tracking Daemon,,:/usr/sbin/nologin
36 saned:x:117:123:/var/lib/saned:/usr/sbin/nologin
37 nn-ovpn:x:118:124:NetworkManager OpenVPN,,:/var/lib/ovpn/chroot:/usr/sbin/nologin
38 hplip:x:119:7:HPLIP system user,,:/run/hplip:/bin/false
39 whoopsie:x:120:125:/nonexistent:/bin/false
40 colord:x:121:126:colord colour management daemon,,:/var/lib/colord:/usr/sbin/nologin
41 geoclue:x:122:127:/var/lib/geoclue:/usr/sbin/nologin
42 pulse:x:123:128:PulseAudio daemon,,:/var/run/pulse:/usr/sbin/nologin
43 gnom-initial-setup:x:124:65534:/run/gnome-initial-setup:/bin/false
```

2.Display the content of the /etc/passwd file in reverse order.

```
jorge@jorge-VirtualBox:~/lab5$ tac /etc/passwd
vboxadd:x:998:1:/var/run/vboxadd:/bin/false
flatpak:x:127:135:Flatpak system-wide installation helper,,:/nonexistent:/usr/sbin/nologin
systemd-coredump:x:999:999:systemd Core Dumper:/usr/sbin/nologin
jorge:x:1000:1000:jorge:/home/jorge:/bin/bash
sssd:x:126:131:SSSD system user,,:/var/lib/sss:/usr/sbin/nologin
gdm:x:125:130:Gnome Display Manager:/var/lib/gdm3:/bin/false
gnome-initial-setup:x:124:65534:/run/gnome-initial-setup:/bin/false
pulse:x:123:128:PulseAudio daemon,,:/var/run/pulse:/usr/sbin/nologin
geoclue:x:122:127:/var/lib/geoclue:/usr/sbin/nologin
colord:x:121:126:colord colour management daemon,,:/var/lib/colord:/usr/sbin/nologin
whoopsie:x:120:125:/nonexistent:/bin/false
hplip:x:119:7:HPLIP system user,,:/run/hplip:/bin/false
nn-ovpn:x:118:124:NetworkManager OpenVPN,,:/var/lib/ovpn/chroot:/usr/sbin/nologin
saned:x:117:123:/var/lib/saned:/usr/sbin/nologin
kernoops:x:116:65534:Kernel Oops Tracking Daemon,,:/usr/sbin/nologin
avahi:x:115:121:Avahi mDNS daemon,,:/var/run/avahi-daemon:/usr/sbin/nologin
speech-dispatcher:x:114:29:Speech Dispatcher,,:/run/speech-dispatcher:/bin/false
cups-pk-helper:x:113:120:user for cups-pk-helper service,,:/home/cups-pk-helper:/usr/sbin/nologin
dnsmasq:x:112:65534:dnsmasq,,:/var/lib/misc:/usr/sbin/nologin
rtkit:x:111:117:RealtimeKit,,:/proc:/usr/sbin/nologin
usbmuxd:x:110:46:usbmux daemon,,:/var/lib/usbmux:/usr/sbin/nologin
avahi-autoipd:x:109:115:Avahi autoip daemon,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
tcpdump:x:108:115:/nonexistent:/usr/sbin/nologin
uidd:x:107:114:/run/uidd:/usr/sbin/nologin
tss:x:106:111:TPM software stack,,:/var/lib/tpm:/bin/false
_apt:x:105:65534:/nonexistent:/usr/sbin/nologin
syslog:x:104:107:/home/syslog:/usr/sbin/nologin
messagebus:x:103:106:/nonexistent:/usr/sbin/nologin
systemd-timesync:x:102:104:systemd Time Synchronization,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,:/run/systemd:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,:/run/systemd:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
list:x:38:38:Mail List Manager:/var/list:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
games:x:5:60:games:/usr/games:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
```

3.Display the content of the /etc/passwd file with line numbers and the \$ to indicate the end of every line.

```

Applications Places
jorge@jorge-VirtualBox: ~/lab5$ tac /etc/passwd
vboxadd:x:998:1::/var/run/vboxadd:/bin/false
_flatpak:x:127:135:Flatpak system-wide installation helper,,:/usr/sbin/nologin
systemd-coredump:x:999:999:systemd Core Dumper:/usr/sbin/nologin
jorge:x:1000:1000:jorge,,:/home/jorge:/bin/bash
sssd:x:126:131:SSSD system user,,:/var/lib/sss:/usr/sbin/nologin
gdm:x:125:130:Gnome Display Manager:/var/lib/gdm3:/bin/false
gnome-initial-setup:x:124:65534:/run/gnome-initial-setup:/bin/false
pulse:x:123:128:PulseAudio daemon,,:/var/run/pulse:/usr/sbin/nologin
geoclue:x:122:127:/var/lib/geoclue:/usr/sbin/nologin
colord:x:121:126:colord colour management daemon,,:/var/lib/colord:/usr/sbin/nologin
whoopsie:x:120:125:/nonexistent:/bin/false
hplip:x:119:7:HPLIP system user,,:/run/hplip:/bin/false
nn-openvpn:x:118:124:NetworkManager OpenVPN,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
saned:x:117:123:/var/lib/saned:/usr/sbin/nologin
kernoops:x:116:65534:Kernel Oops Tracking Daemon,,:/usr/sbin/nologin
avahi:x:115:121:Avahi mDNS daemon,,:/var/run/avahi-daemon:/usr/sbin/nologin
speech-dispatcher:x:114:29:Speech Dispatcher,,:/run/speech-dispatcher:/bin/false
cups-pk-helper:x:113:120:user for cups-pk-helper service,,:/home/cups-pk-helper:/usr/sbin/nologin
dnsmasq:x:112:65534:dnsmasq,,:/var/lib/misc:/usr/sbin/nologin
rtkit:x:111:117:RealtimeKit,,:/proc:/usr/sbin/nologin
usbmux:x:110:46:usbmux daemon,,:/var/lib/usbmux:/usr/sbin/nologin
avahi-autoipd:x:109:116:Avahi autoip daemon,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
tcpdump:x:108:115:/nonexistent:/usr/sbin/nologin
uuid:x:107:114:/run/uuid:/usr/sbin/nologin
tss:x:106:111:TPM software stack,,:/var/lib/tpm:/bin/false
apt:x:105:65534:/nonexistent:/usr/sbin/nologin
syslog:x:104:110:/home/syslog:/usr/sbin/nologin
messagebus:x:103:106:/nonexistent:/usr/sbin/nologin
systemd-timesync:x:102:104:systemd Time Synchronization,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,:/run/systemd:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,:/run/systemd:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
ircd:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
lstd:x:38:38:Mail List Manager:/var/lib/ltst:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
games:x:5:60:games:/usr/games:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync

```

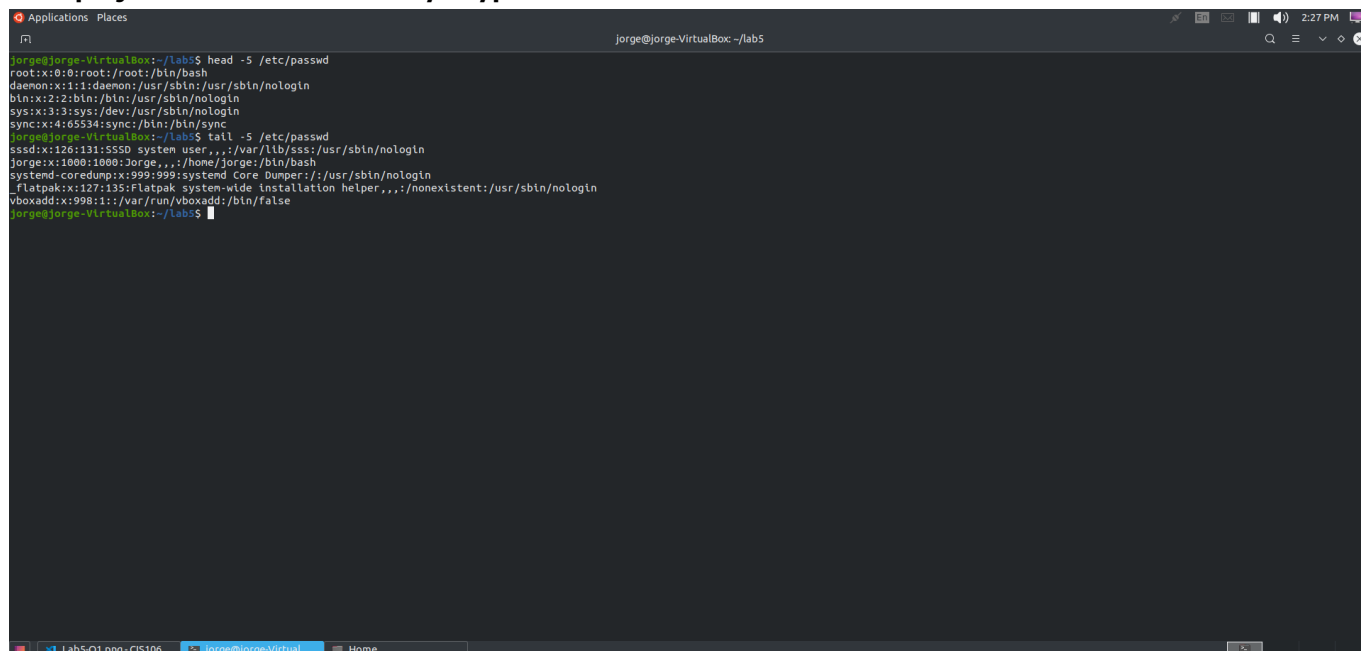
4.Display the first 5 lines of a the /etc/passwd file.

```

Applications Places
jorge@jorge-VirtualBox: ~/lab5$ cat -n -E /etc/passwd
 1 root:x:0:0:root:/root:/bin/bash$
 2 daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin$
 3 bin:x:2:2:bin:/bin:/usr/sbin/nologin$
 4 sys:x:3:3:sys:/dev:/usr/sbin/nologin$
 5 sync:x:4:65534:sync:/bin:/bin/sync$
 6 games:x:5:60:games:/usr/games:/usr/sbin/nologin$
 7 man:x:6:12:man:/var/cache/man:/usr/sbin/nologin$
 8 lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin$
 9 mail:x:8:8:mail:/var/mail:/usr/sbin/nologin$
10 news:x:9:9:news:/var/spool/news:/usr/sbin/nologin$
11 uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin$
12 proxy:x:13:13:proxy:/bin:/usr/sbin/nologin$
13 www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin$
14 backup:x:34:34:backup:/var/backups:/usr/sbin/nologin$
15 lstd:x:38:38:Mail List Manager:/var/lib/ltst:/usr/sbin/nologin$
16 ircd:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin$
17 gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin$
18 nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin$
19 systemd-network:x:100:102:systemd Network Management,,:/run/systemd:/usr/sbin/nologin$
20 systemd-resolve:x:101:103:systemd Resolver,,:/run/systemd:/usr/sbin/nologin$
21 systemd-timesync:x:102:104:systemd Time Synchronization,,:/run/systemd:/usr/sbin/nologin$
22 messagebus:x:103:106:/nonexistent:/usr/sbin/nologin$
23 syslog:x:104:110:/home/syslog:/usr/sbin/nologin$
24 apt:x:105:65534:/nonexistent:/usr/sbin/nologin$
25 tss:x:106:111:TPM software stack,,:/var/lib/tpm:/bin/false$
26 uuid:x:107:114:/run/uuid:/usr/sbin/nologin$
27 tcpdump:x:108:115:/nonexistent:/usr/sbin/nologin$
28 avahi-autoipd:x:109:116:Avahi autoip daemon,,:/var/lib/avahi-autoipd:/usr/sbin/nologin$
29 usbmux:x:110:46:usbmux daemon,,:/var/lib/usbmux:/usr/sbin/nologin$
30 rtkit:x:111:117:RealtimeKit,,:/proc:/usr/sbin/nologin$
31 dnsmasq:x:112:65534:dnsmasq,,:/var/lib/misc:/usr/sbin/nologin$
32 cups-pk-helper:x:113:120:user for cups-pk-helper service,,:/home/cups-pk-helper:/usr/sbin/nologin$
33 speech-dispatcher:x:114:29:Speech Dispatcher,,:/run/speech-dispatcher:/bin/false$
34 avahi:x:115:121:Avahi mDNS daemon,,:/var/run/avahi-daemon:/usr/sbin/nologin$
35 kernoops:x:116:65534:Kernel Oops Tracking Daemon,,:/usr/sbin/nologin$
36 saned:x:117:123:/var/lib/saned:/usr/sbin/nologin$
37 nn-openvpn:x:118:124:NetworkManager OpenVPN,,:/var/lib/openvpn/chroot:/usr/sbin/nologin$
38 hplip:x:119:7:HPLIP system user,,:/run/hplip:/bin/false$
39 whoopsie:x:120:125:/nonexistent:/bin/false$
40 colord:x:121:126:colord colour management daemon,,:/var/lib/colord:/usr/sbin/nologin$
41 geoclue:x:122:127:/var/lib/geoclue:/usr/sbin/nologin$
42 pulse:x:123:128:PulseAudio daemon,,:/var/run/pulse:/usr/sbin/nologin$
43 gnome-initial-setup:x:124:65534:/run/gnome-initial-setup:/bin/false$
44 gdm:x:125:130:Gnome Display Manager:/var/lib/gdm3:/bin/false$
45 sssd:x:126:131:SSSD system user,,:/var/lib/sss:/usr/sbin/nologin$

```

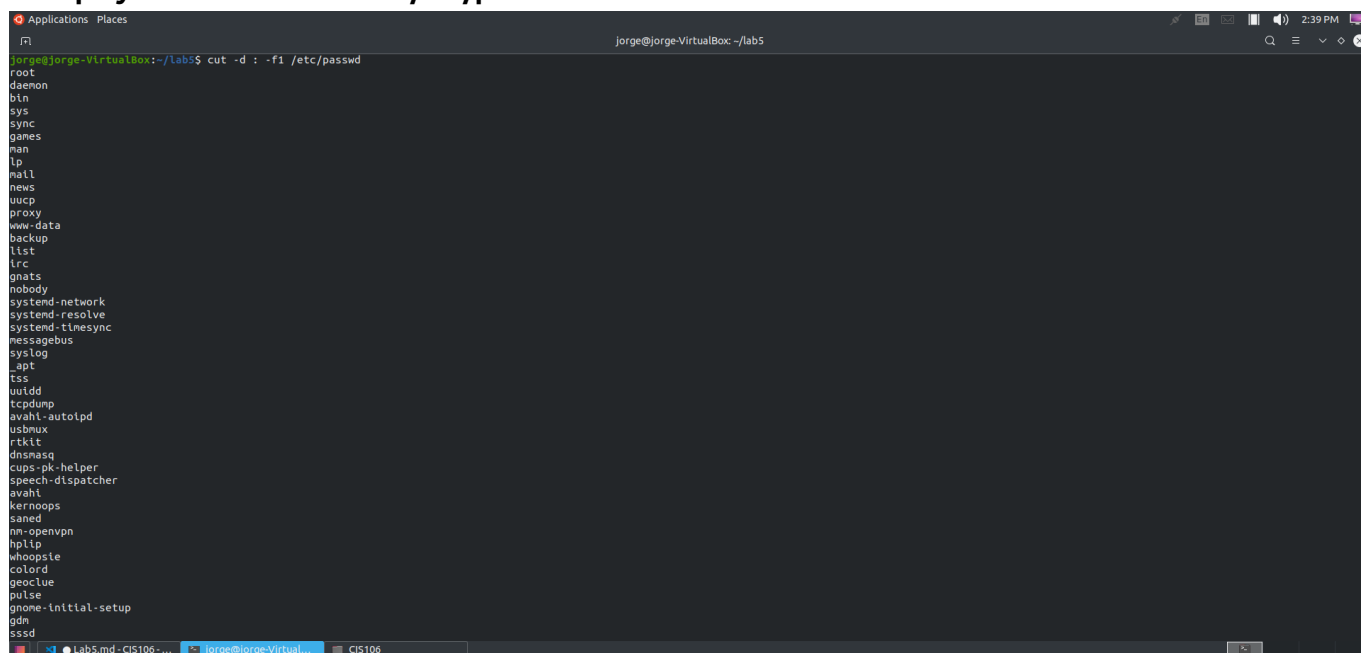
5.Display the last 5 lines of the /etc/passwd file.



```
jorge@jorge-VirtualBox: ~/lab5$ head -5 /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
jorge@jorge-VirtualBox: ~/lab5$ tail -5 /etc/passwd
sssd:x:126:131:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin
jorge:x:1000:1000:jorge,,,:/home/jorge:/bin/bash
systemd-coredump:x:999:999:systemd Core Dumper:/:/usr/sbin/nologin
flatpak:x:127:135:Flatpak system-wide installation helper,,,:/nonexistent:/usr/sbin/nologin
vboxadd:x:998:1:/:var/run/vboxadd:/bin/false
jorge@jorge-VirtualBox: ~/lab5$
```

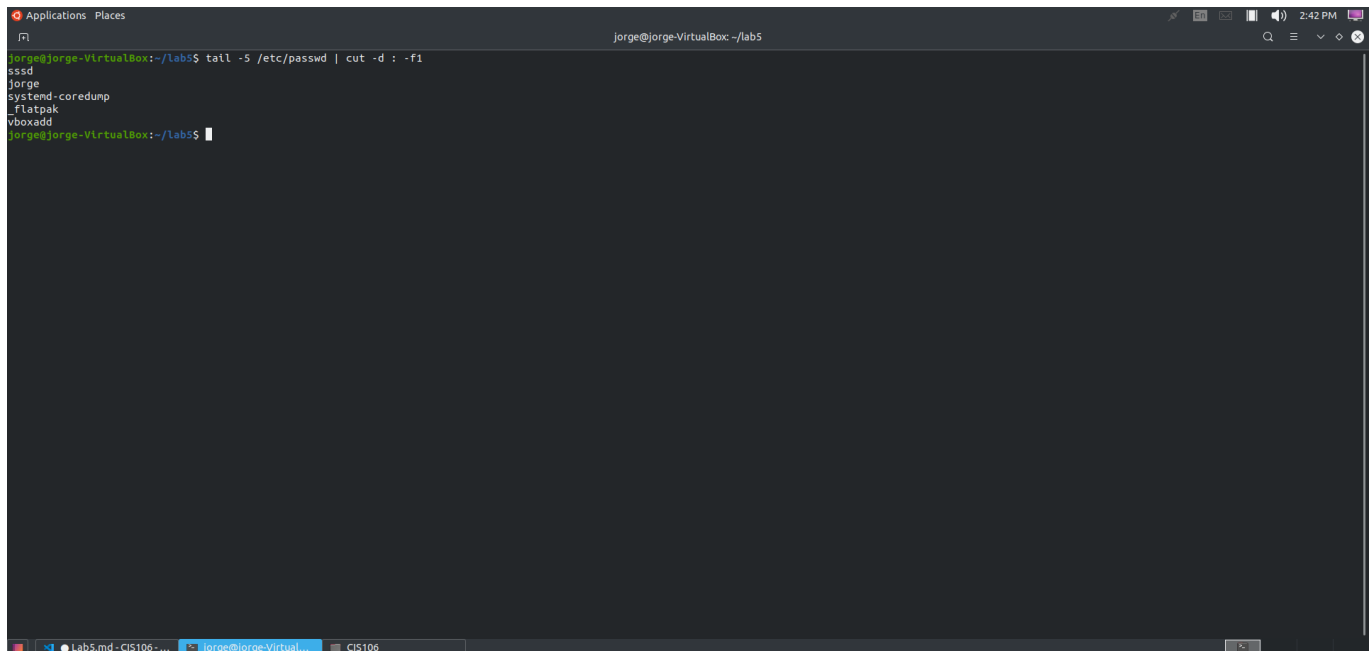
Question 2

1.Display the first field of the /etc/passwd file.



```
jorge@jorge-VirtualBox: ~/lab5$ cut -d : -f1 /etc/passwd
root
daemon
bin
sys
sync
games
man
lp
mail
news
uucp
proxy
www-data
backup
list
irc
gnats
nobody
systemd-network
systemd-resolve
systemd-timesync
messagebus
syslog
_apt
tss
uuidd
tcpdump
avahi-autoipd
usbmux
rtkit
dnsmasq
cups-pk-helper
speech-dispatcher
avahi
kernoops
saned
nnp-openvpn
hplip
whoopsie
colord
geoclue
pulse
gnome-initial-setup
gdm
sssd
```

2.Display the last 5 users in the /etc/passwd file.

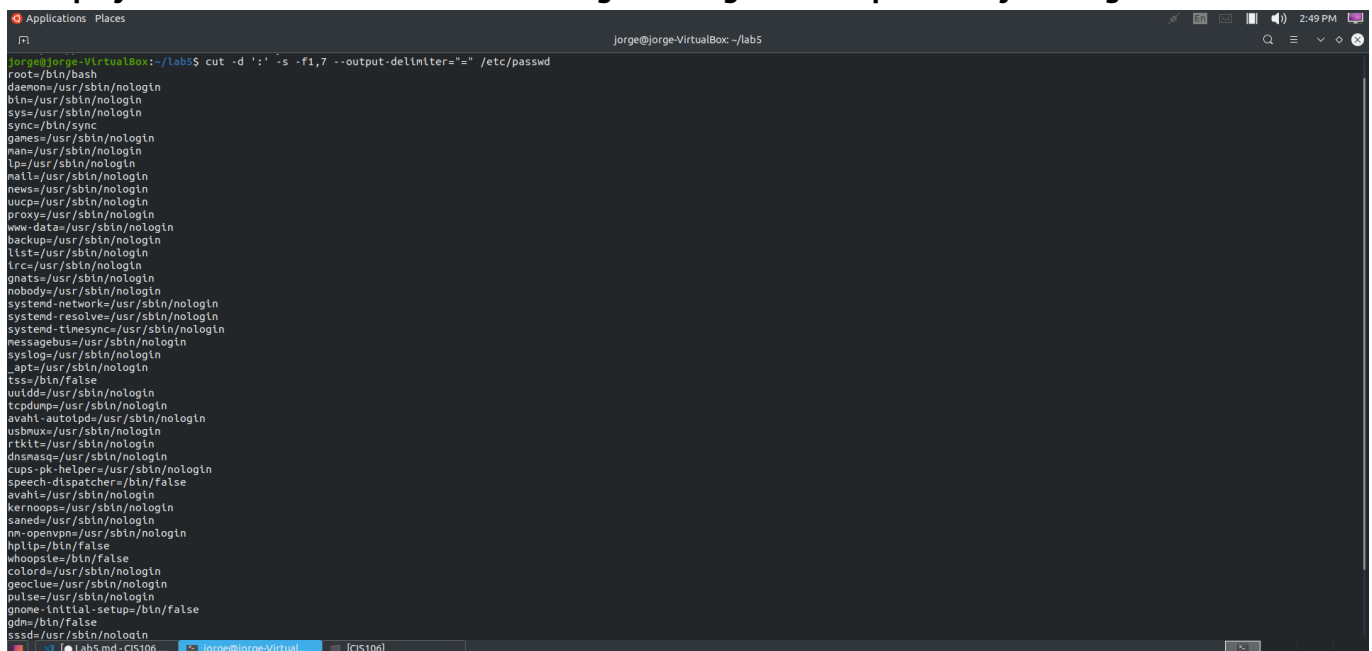


```

Applications  Places
jorge@jorge-VirtualBox: ~/lab5
jorge@jorge-VirtualBox:~/lab5$ tail -5 /etc/passwd | cut -d : -f1
sssd
jorge
systemd-coredump
_flatpak
vboxadd
jorge@jorge-VirtualBox:~/lab5$

```

3.Display a list of all the users and their designated login shell separated by an = sign.

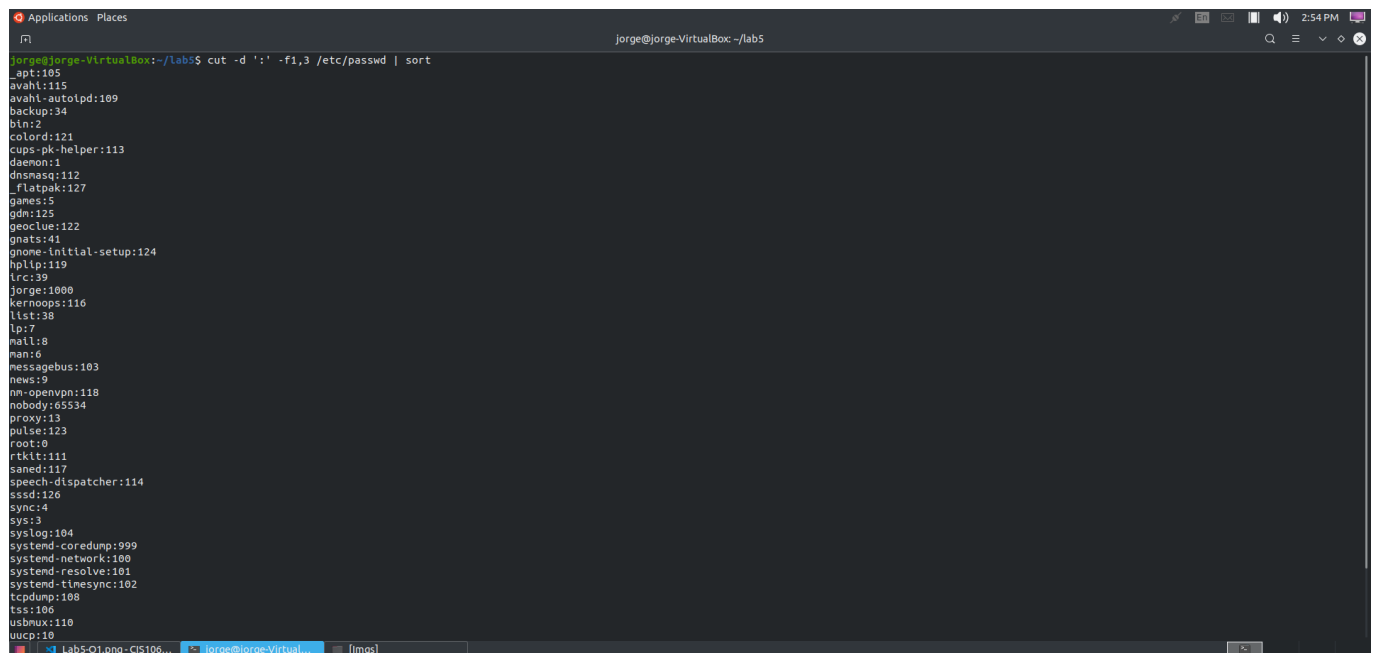


```

Applications  Places
jorge@jorge-VirtualBox: ~/lab5
jorge@jorge-VirtualBox:~/lab5$ cut -d ':' -s -f1,7 --output-delimiter='=' /etc/passwd
root=/usr/sbin/bash
daemon=/usr/sbin/nologin
bin=/usr/sbin/nologin
sys=/usr/sbin/nologin
sync=/usr/sbin/nologin
games=/usr/sbin/nologin
man=/usr/sbin/nologin
lp=/usr/sbin/nologin
mail=/usr/sbin/nologin
news=/usr/sbin/nologin
uucp=/usr/sbin/nologin
proxy=/usr/sbin/nologin
www-data=/usr/sbin/nologin
backups=/usr/sbin/nologin
list=/usr/sbin/nologin
irc=/usr/sbin/nologin
gnats=/usr/sbin/nologin
nobody=/usr/sbin/nologin
systemd-network=/usr/sbin/nologin
systemd-resolve=/usr/sbin/nologin
systemd-timesync=/usr/sbin/nologin
messagebus=/usr/sbin/nologin
syslog=/usr/sbin/nologin
_apt=/usr/sbin/nologin
tss=/usr/sbin/false
uidd=/usr/sbin/nologin
tcpdump=/usr/sbin/nologin
avahi-autoipd=/usr/sbin/nologin
usbmux=/usr/sbin/nologin
rtkit=/usr/sbin/nologin
dnsmasq=/usr/sbin/nologin
cups-pk-helper=/usr/sbin/nologin
speech-dispatcher=/usr/sbin/false
avahi=/usr/sbin/nologin
kernoops=/usr/sbin/nologin
saned=/usr/sbin/nologin
nnp-openvpn=/usr/sbin/nologin
hplip=/usr/sbin/false
whoopsie=/usr/sbin/false
colord=/usr/sbin/nologin
geoclue=/usr/sbin/nologin
pulse=/usr/sbin/nologin
gnome-initial-setup=/usr/sbin/false
gdm=/usr/sbin/false
sssd=/usr/sbin/nologin

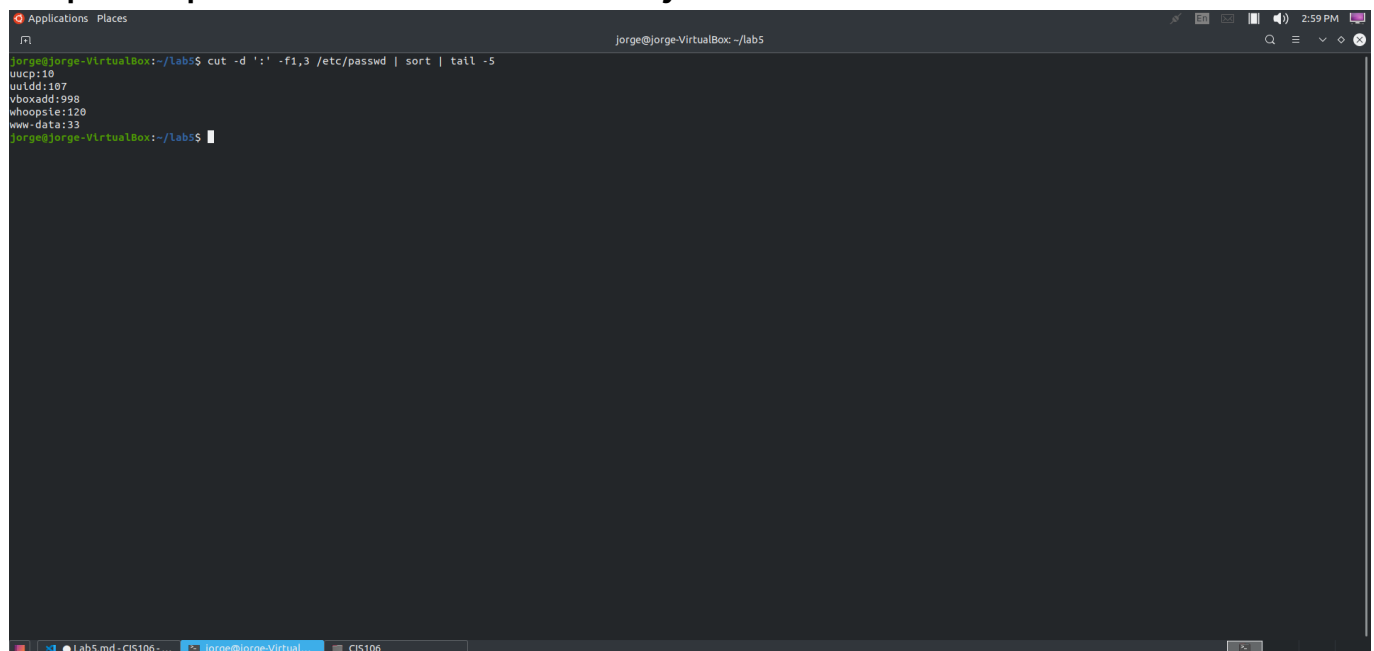
```

4.The sort command is another amazing tool in any linux user's tool box. Sort allows you to display data in a given order. Cut the first and 3rd field of the /etc/passwd field and sort the output.



```
Applications Places
jorge@jorge-VirtualBox: ~/lab5
jorge@jorge-VirtualBox:~/lab5$ cut -d ':' -f1,3 /etc/passwd | sort
_apt:105
avaht:115
avaht-autotpd:109
backup:34
bin:2
color:121
cups-pk-helper:113
daemon:1
dnsmasq:112
_ftpak:127
games:5
gdm:125
geoclue:122
gnats:41
gnome-initial-setup:124
hplip:119
irc:39
jorge:1000
kernoops:116
list:38
lp:7
mail:8
man:6
messagebus:103
news:9
nmap-openvpn:118
nobody:65534
proxy:13
pulse:123
root:0
rtkit:111
saned:117
speech-dispatcher:114
sssd:126
sync:4
sys:3
syslog:104
systemd-coredump:999
systemd-network:100
systemd-resolve:101
systemd-timesync:102
tcpdump:108
tss:106
usbmux:110
uucp:10
```

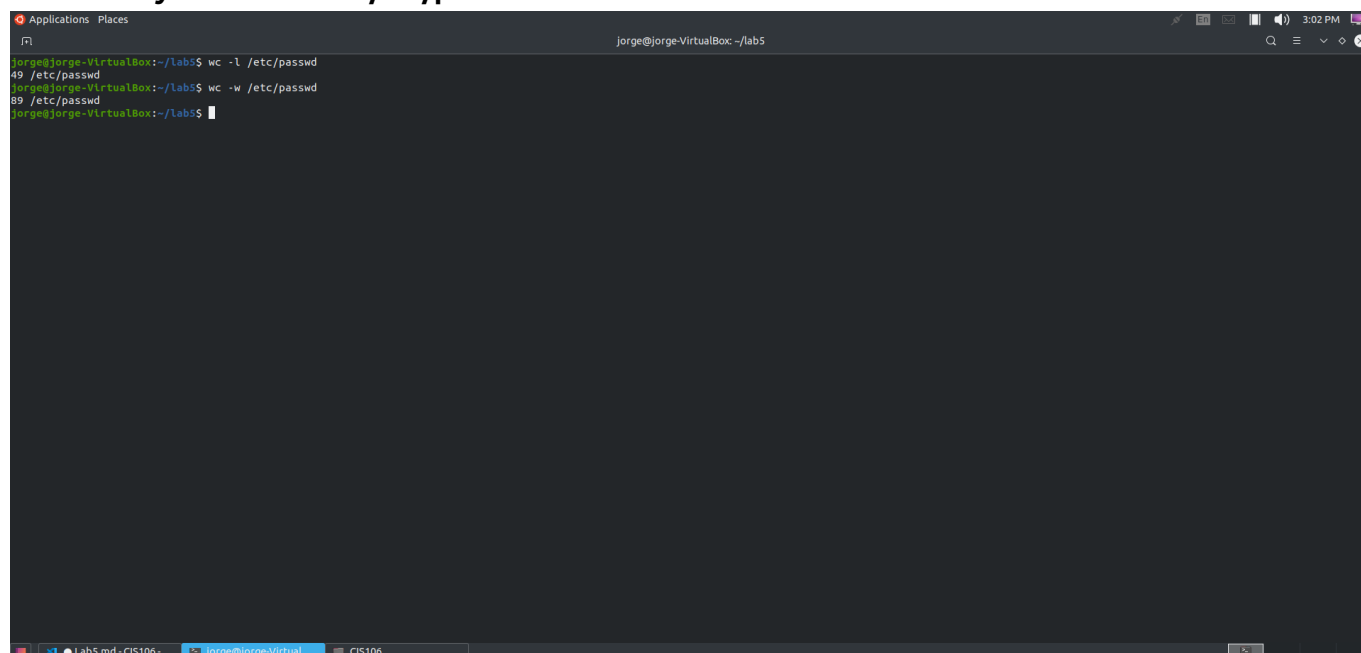
5.Repeat the previous command but this time only show the last 5 entries.



```
Applications Places
jorge@jorge-VirtualBox: ~/lab5
jorge@jorge-VirtualBox:~/lab5$ cut -d ':' -f1,3 /etc/passwd | sort | tail -5
uucp:10
uuidd:107
vboxadd:998
whoopsie:120
www-data:33
jorge@jorge-VirtualBox:~/lab5$
```

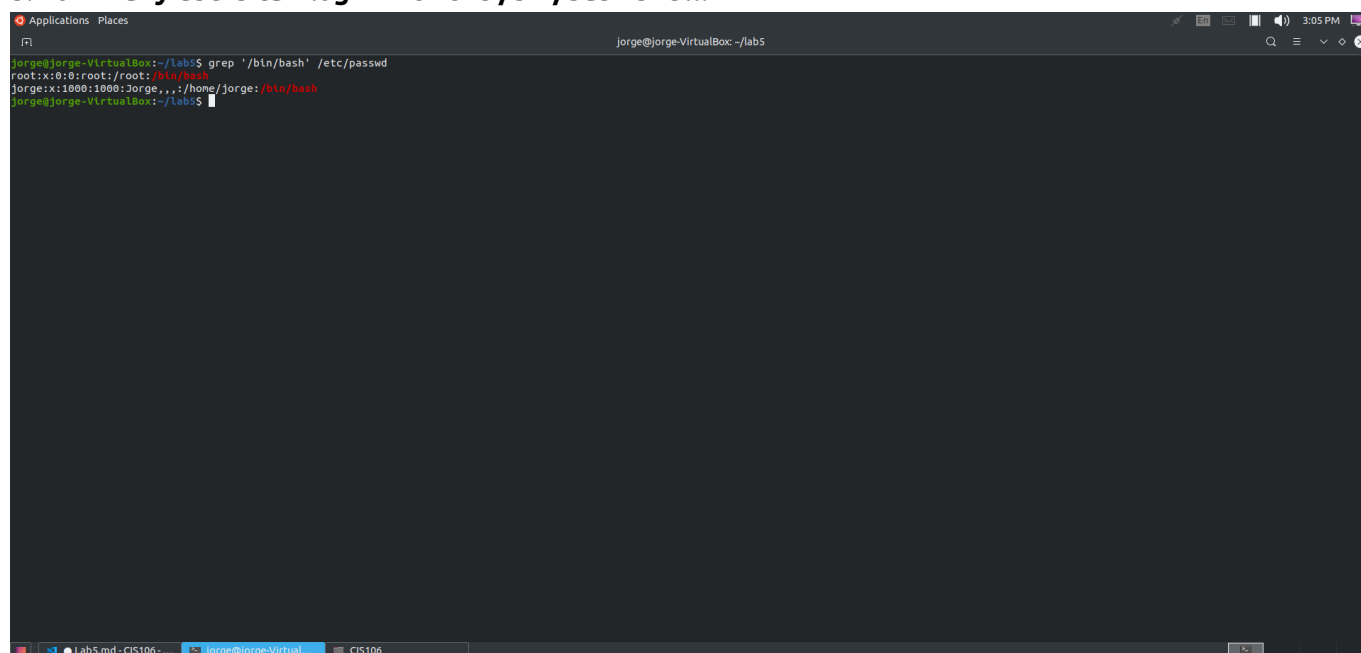
Question 3

1.How many lines does the /etc/passwd file have?



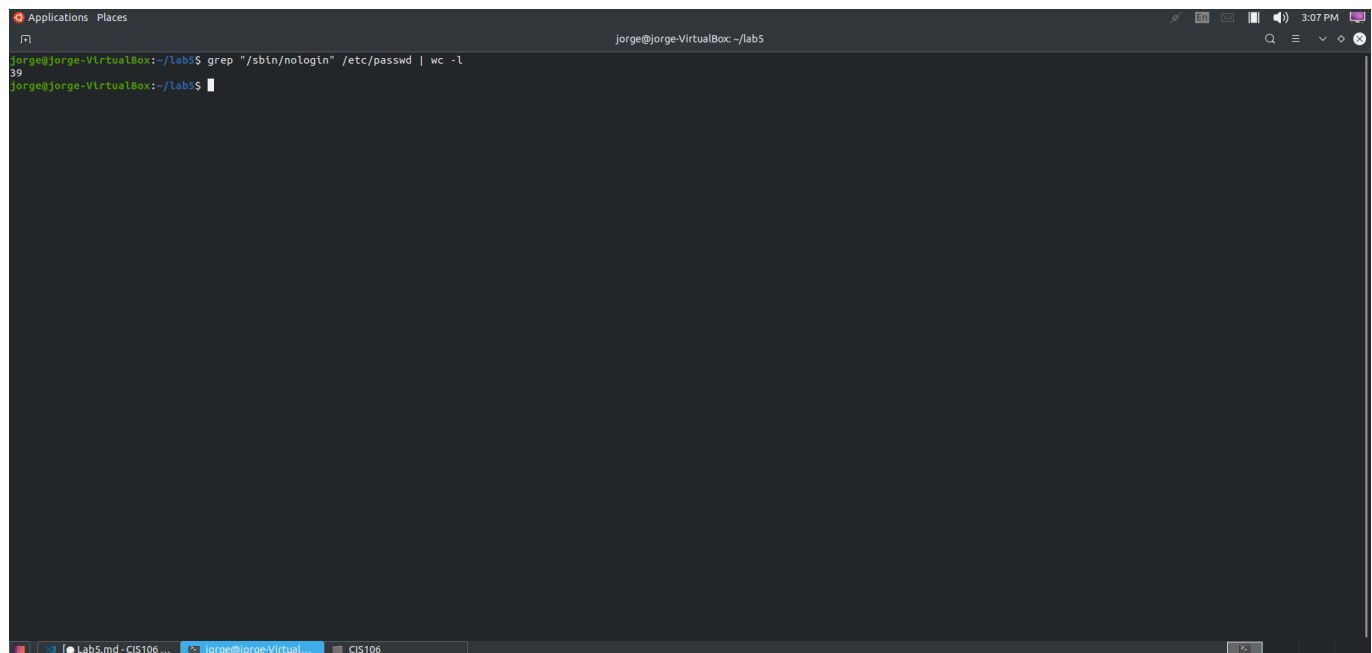
```
jorge@jorge-VirtualBox: ~/lab5
jorge@jorge-VirtualBox:~/lab5$ wc -l /etc/passwd
49 /etc/passwd
jorge@jorge-VirtualBox:~/lab5$ wc -w /etc/passwd
89 /etc/passwd
jorge@jorge-VirtualBox:~/lab5$
```

3.How many users can login with the /bin/bash shell?



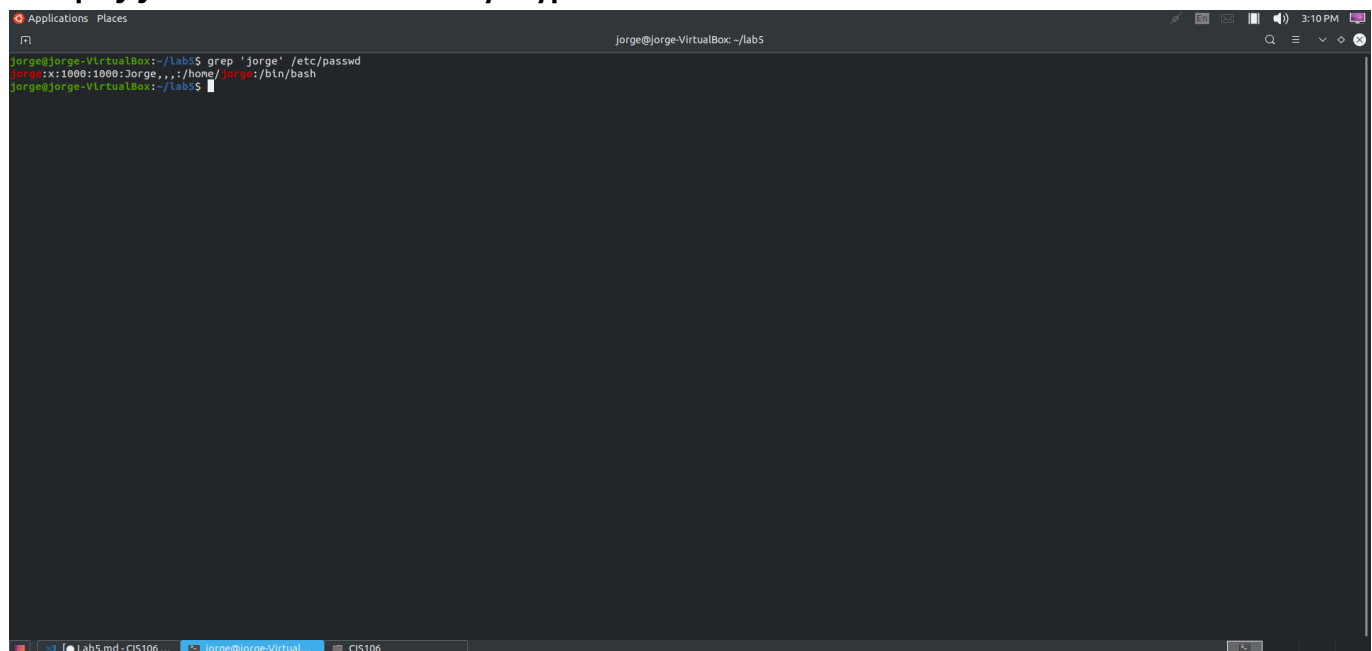
```
jorge@jorge-VirtualBox:~/lab5$ grep '/bin/bash' /etc/passwd
root:x:0:0:root:/root:/bin/bash
jorge:x:1000:1000:jorge,,:/home/jorge:/bin/bash
jorge@jorge-VirtualBox:~/lab5$
```

4.How many users have the /sbin/nologin shell assigned?



```
Applications Places
jorge@jorge-VirtualBox: ~/lab5
jorge@jorge-VirtualBox:~/lab5$ grep "/sbin/nologin" /etc/passwd | wc -l
99
jorge@jorge-VirtualBox:~/lab5$
```

5.Display your user's information in /etc/passwd file



```
Applications Places
jorge@jorge-VirtualBox: ~/lab5
jorge@jorge-VirtualBox:~/lab5$ grep 'jorge' /etc/passwd
jorge:x:1000:1000:jorge,,:/home/jorge:/bin/bash
jorge@jorge-VirtualBox:~/lab5$
```

Question 4

```

Applications Places
jorge@jorge-VirtualBox: ~/lab5
jorge@jorge-VirtualBox:~/lab5$ ip ad | grep 'inet' | wc -l
4
jorge@jorge-VirtualBox:~/lab5$ ip ad | grep 'inet6' | tac
inet6 fe80::bdb0:a8e2:7312:0070/64 scope link noprefixroute
inet6 ::1/128 scope host
jorge@jorge-VirtualBox:~/lab5$ ip ad | grep -E 'inet|inet6' | sort > file.txt
jorge@jorge-VirtualBox:~/lab5$ cat file.txt
inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
inet 127.0.0.1/8 scope host lo
inet6 ::1/128 scope host
inet6 fe80::bdb0:a8e2:7312:0070/64 scope link noprefixroute
jorge@jorge-VirtualBox:~/lab5$ ip ad | grep --color 'inet' | head -3 | tail -1
inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
jorge@jorge-VirtualBox:~/lab5$ ip ad | grep -oE '[[[:digit:]]{1,3}\.[:digit:]]{1,3}\.[:digit:]]{1,3}\.[:digit:]]{1,3}'
127.0.0.1
10.0.2.15
10.0.2.255
jorge@jorge-VirtualBox:~/lab5$

```

Question 5

```

Applications Places
jorge@jorge-VirtualBox: ~/lab5
jorge@jorge-VirtualBox:~/lab5$ echo "# Information about my pc" > Platanos.md
jorge@jorge-VirtualBox:~/lab5$ ls
file.txt Platanos.md Platanos.md
jorge@jorge-VirtualBox:~/lab5$ echo "## CPU Information" >> Platanos.md
jorge@jorge-VirtualBox:~/lab5$ cat Platanos.md
# Information about my pc
## CPU Information
jorge@jorge-VirtualBox:~/lab5$ lscpu | grep -E 'architecture|thread|core|model_name|hz|virtualization' >>Platanos.md
jorge@jorge-VirtualBox:~/lab5$ echo "## RAM Information" >>Platanos.md
jorge@jorge-VirtualBox:~/lab5$ echo "## RAM Information" >> Platanos.md
jorge@jorge-VirtualBox:~/lab5$ lshw -c memory | grep -i 'size' >> Platanos.md
WARNING: output may be incomplete or inaccurate, you should run this program as super-user.
jorge@jorge-VirtualBox:~/lab5$ cat Platanos.md
# Information about my pc
## CPU Information
Architecture:          x86_64
Thread(s) per core:    1
Core(s) per socket:    2
Model name:            AMD Ryzen 5 4500U with Radeon Graphics
CPU MHz:               2370.544
Virtualization type:   full
## RAM Information
size: 2GiB
jorge@jorge-VirtualBox:~/lab5$

```