

Lab 5 |

Question 1

1.

```
juniornunez920@juniornunez920-VirtualBox:~$ cat /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
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin)/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,:/run/systemd:/usr/sbin/nologin
systemd-timesync:x:102:104:systemd Time Synchronization,,:/run/systemd:/usr/sbin/nologin
messagebus:x:103:106:/nonexistent:/usr/sbin/nologin
syslog:x:104:110:/home/syslog:/usr/sbin/nologin
_apt:x:105:65534:/nonexistent:/usr/sbin/nologin
tss:x:106:111:TPM software stack,,:/var/lib/tpm:/bin/false
uidd:x:107:114:/run/uidd:/usr/sbin/nologin
tcpdump:x:108:115:/nonexistent:/usr/sbin/nologin
avahi-autoipd:x:109:116:Avahi autoip daemon,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
usbmux:x:110:46:usbmux daemon,,:/var/lib/usbmux:/usr/sbin/nologin
rtkit:x:111:117:RealtimeKit,,:/proc:/usr/sbin/nologin
dnsmasq:x:112:65534:dnsmasq,,:/var/lib/misc:/usr/sbin/nologin
cups-pk-helper:x:113:120:user for cups-pk-helper service,,:/home/cups-pk-helper:/usr/sbin/nologin
speech-dispatcher:x:114:29:Speech Dispatcher,,:/run/speech-dispatcher:/bin/false
avahi:x:115:121:Avahi mDNS daemon,,:/var/run/avahi-daemon:/usr/sbin/nologin
kernoops:x:116:65534:Kernel Oops Tracking Daemon,,:/usr/sbin/nologin
saned:x:117:123:/var/lib/saned:/usr/sbin/nologin
nm-openvpn:x:118:124:NetworkManager OpenVPN,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
hplip:x:119:7:HPLIP system user,,:/run/hplip:/bin/false
whoopsie:x:120:125:/nonexistent:/bin/false
colord:x:121:126:colord colour management daemon,,:/var/lib/colord:/usr/sbin/nologin
geoclue:x:122:127:/var/lib/geoclue:/usr/sbin/nologin
pulse:x:123:128:PulseAudio daemon,,:/var/run/pulse:/usr/sbin/nologin
gnome-initial-setup:x:124:65534:/run/gnome-initial-setup:/bin/false
gdm:x:125:130:Gnome Display Manager:/var/lib/gdm3:/bin/false
sssd:x:126:131:SSSD system user,,:/var/lib/sss:/usr/sbin/nologin
juniornunez920:x:1000:1000:juniornunez920,,:/home/juniornunez920:/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
juniornunez920@juniornunez920-VirtualBox:~$
```

 Question 1.2 Answer

```

juniornunez920@juniornunez920-VirtualBox:~$ 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
juniornunez920:x:1000:1000:juniornunez920,,,:/home/juniornunez920:/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
nm-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
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
list:x:38:38:Mailing 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
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
sys:x:3:3:sys:/dev:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
root:x:0:0:root:/root:/bin/bash
juniornunez920@juniornunez920-VirtualBox:~$

```

```

root:x:0:0:root:/root:/bin/bash
juniornunez920@juniornunez920-VirtualBox:~$ 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

```

```

juniornunez920@juniornunez920-VirtualBox:~$ tail -5 /etc/passwd
sssd:x:126:131:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin
juniornunez920:x:1000:1000:juniornunez920,,,:/home/juniornunez920:/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

```

Question 2

```
juniornunez920@juniornunez920-VirtualBox:~$ cut -d ':' -f 1 /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
```

```
juniornunez920@juniornunez920-VirtualBox:~$ tail -5 /etc/passwd | cut -d ':' -f 1
```

```
sssd
juniornunez920
systemd-coredump
_flatpak
vboxadd
```

```
juniornunez920@juniornunez920-VirtualBox:~$ cut -d ':' -f1,3 /etc/passwd | sort
_apt:105
avahi:115
avahi-autoipd:109
backup:34
bin:2
colord:121
cups-pk-helper:113
daemon:1
dnsmasq:112
_flatpak:127
games:5
gdm:125
geoclue:122
gnats:41
gnome-initial-setup:124
hplip:119
irc:39
juniornunez920:1000
kernoops:116
list:38
lp:7
mail:8
man:6
messagebus:103
news:9
nm-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
uuid:107
vboxadd:998
whoopsie:120
www-data:33
```

```
juniornunez920@juniornunez920-VirtualBox:~$ cut -d ':' -f1,3 /etc/passwd | sort | tail -5
uucp:10
uuid:107
vboxadd:998
whoopsie:120
www-data:33
```

Question 3

```
juniornunez920@juniornunez920-VirtualBox:~$ wc /etc/passwd
49   89 2969 /etc/passwd
juniornunez920@juniornunez920-VirtualBox:~$ wc -l /etc/passwd
49 /etc/passwd
juniornunez920@juniornunez920-VirtualBox:~$
```

Question 4

```
juniornunez920@juniornunez920-VirtualBox:~$ ip ad
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
   link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
   inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
   inet6 ::1/128 scope host
       valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
   link/ether 08:00:27:1e:3d:7d brd ff:ff:ff:ff:ff:ff
   inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
       valid_lft 78132sec preferred_lft 78132sec
   inet6 fe80::3674:dbc8:c2e9:2f20/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
juniornunez920@juniornunez920-VirtualBox:~$ ip ad | grep 'inet'
inet 127.0.0.1/8 scope host lo
inet6 ::1/128 scope host
inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
inet6 fe80::3674:dbc8:c2e9:2f20/64 scope link noprefixroute
juniornunez920@juniornunez920-VirtualBox:~$ ip ad | grep 'inet' | wc
   4    23    209
juniornunez920@juniornunez920-VirtualBox:~$ ip ad | grep 'inet' | sort | tail
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::3674:dbc8:c2e9:2f20/64 scope link noprefixroute
juniornunez920@juniornunez920-VirtualBox:~$
```

Question 5


```

juniornunez920@juniornunez920-VirtualBox:~$ ip ad
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:1e:3d:7d brd ff:ff:ff:ff:ff:ff
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
        valid_lft 78132sec preferred_lft 78132sec
    inet6 fe80::3674:dbc8:c2e9:2f20/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
juniornunez920@juniornunez920-VirtualBox:~$ ip ad | grep 'inet'
    inet 127.0.0.1/8 scope host lo
    inet6 ::1/128 scope host
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
    inet6 fe80::3674:dbc8:c2e9:2f20/64 scope link noprefixroute
juniornunez920@juniornunez920-VirtualBox:~$ ip ad | grep 'inet' | wc
      4      23      209
juniornunez920@juniornunez920-VirtualBox:~$ ip ad | grep 'inet' | sort | tail
    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::3674:dbc8:c2e9:2f20/64 scope link noprefixroute
juniornunez920@juniornunez920-VirtualBox:~$ echo "# Information about my pc" > mypc.md
juniornunez920@juniornunez920-VirtualBox:~$ ls
allusers      Extras          manguu          oct27           Templates
cis106        fall-2020       midtermfiles    Pictures        Videos
Desktop       final           movies          Public          website.html
Documents     final-junior-nunez.md
Downloads     gabriel-heinzer-4Mw7nkQDByk-unsplash.jpg
drinks        goodfile        mypc.md         snap
juniornunez920@juniornunez920-VirtualBox:~$ echo ## CPU Information >> mypc.md

juniornunez920@juniornunez920-VirtualBox:~$ echo "## CPU Information" >> mypc.md
juniornunez920@juniornunez920-VirtualBox:~$ cat mypc.md
# Information about my pc
## CPU Information
juniornunez920@juniornunez920-VirtualBox:~$ ls cpu
ls: cannot access 'cpu': No such file or directory
juniornunez920@juniornunez920-VirtualBox:~$ lscpu
Architecture:                x86_64
CPU op-mode(s):              32-bit, 64-bit
Byte Order:                  Little Endian
Address sizes:               48 bits physical, 48 bits virtual
CPU(s):                      2
On-line CPU(s) list:         0,1
Thread(s) per core:          1
Core(s) per socket:          2
Socket(s):                   1
NUMA node(s):                1
Vendor ID:                   AuthenticAMD
CPU family:                   25

```