name : Monil Chauhan Course : CIS 106 DATE: 12/2/23

QUESTION 1:

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nonilcis106@monilcis106-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/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:/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
messagebus:x:102:105::/nonexistent:/usr/sbin/nologin
systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
syslog:x:104:111::/home/syslog:/usr/sbin/nologin
_apt:x:105:65534::/nonexistent:/usr/sbin/nologin
tss:x:106:113:TPM software stack,,,:/var/lib/tpm:/bin/false
uuidd:x:107:116::/run/uuidd:/usr/sbin/nologin
systemd-oom:x:108:117:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin
tcpdump:x:109:118::/nonexistent:/usr/sbin/nologin
avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
usbmux:x:111:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
kernoops:x:113:65534:Kernel Oops Tracking Daemon,,,:/:/usr/sbin/nologin
avahi:x:114:121:Avahi mDNS daemon,,,:/run/avahi-daemon:/usr/sbin/nologin
cups-pk-helper:x:115:122:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin
rtkit:x:116:123:RealtimeKit,,,:/proc:/usr/sbin/nologin
whoopsie:x:117:124::/nonexistent:/bin/false
sssd:x:118:125:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin
speech-dispatcher:x:119:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false
fwupd-refresh:x:120:126:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
nm-openvpn:x:121:127:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
saned:x:122:129::/var/lib/saned:/usr/sbin/nologin
colord:x:123:130:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
geoclue:x:124:131::/var/lib/geoclue:/usr/sbin/nologin
pulse:x:125:132:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin
gnome-initial-setup:x:126:65534::/run/gnome-initial-setup/:/bin/false
hplip:x:127:7:HPLIP system user,,,:/run/hplip:/bin/false
gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false
monilcis106:x:1000:1000:MonilCis106,,,:/home/monilcis106:/bin/bash
_flatpak:x:129:138:Flatpak system-wide installation helper,,,:/nonexistent:/usr/sbin/nologin
monilcis106@monilcis106-VirtualBox:-$ tac /etc/passwd
_flatpak:x:129:138:Flatpak system-wide installation helper,,,:/nonexistent:/usr/sbin/nologin
monilcis106:x:1000:1000:MonilCis106,,,:/home/monilcis106:/bin/bash
gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false
hplip:x:127:7:HPLIP system user,,,:/run/hplip:/bin/false
gnome-initial-setup:x:126:65534::/run/gnome-initial-setup/:/bin/false
pulse:x:125:132:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin
geoclue:x:124:131::/var/lib/geoclue:/usr/sbin/nologin
colord:x:123:130:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
saned:x:122:129::/var/lib/saned:/usr/sbin/nologin
nm-openvpn:x:121:127:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
fwupd-refresh:x:120:126:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
speech-dispatcher:x:119:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false
sssd:x:118:125:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin
whoopsie:x:117:124::/nonexistent:/bin/false
rtkit:x:116:123:RealtimeKit,,,:/proc:/usr/sbin/nologin
cups-pk-helper:x:115:122:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin
avahi:x:114:121:Avahi mDNS daemon,,,:/run/avahi-daemon:/usr/sbin/nologin
kernoops:x:113:65534:Kernel Oops Tracking Daemon,,,://usr/sbin/nologin
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
usbmux:x:111:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
tcpdump:x:109:118::/nonexistent:/usr/sbin/nologin
systemd-oom:x:108:117:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin
uuidd:x:107:116::/run/uuidd:/usr/sbin/nologin
tss:x:106:113:TPM software stack,,,:/var/lib/tpm:/bin/false
_apt:x:105:65534::/nonexistent:/usr/sbin/nologin
syslog:x:104:111::/home/syslog:/usr/sbin/nologin
```

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messagebus:x:102:105::/nonexistent:/usr/sbin/nologin
systemd-resolvex: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:/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:news:/var/spool/lucp:/usr/sbin/nologin
news:x:9:news:/var/spool/lpd:/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
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
daemon:x:1:1:daemon:/usr/sbin/usr/sbin/nologin
```

```
irtualBox:~$ cat -n /etc/passwd | sed 's/$/$/
 1 root:x:0:0:root:/root:/bin/bash$
     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$
      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$
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$
      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:/run/ircd:/usr/sbin/nologin$
15
      gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin$
17
      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$
messagebus:x:102:105::/nonexistent:/usr/sbin/nologin$
21
      systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin$
22
     syslog:x:104:111::/home/syslog:/usr/sbin/nologin$
_apt:x:105:65534::/nonexistent:/usr/sbin/nologin$
23
      tss:x:106:113:TPM software stack,,,:/var/lib/tpm:/bin/false$
26 uuidd:x:107:116::/run/uuidd:/usr/sbin/nologin$
      systemd-oom:x:108:117:systemd Userspace 00M Killer,,,:/run/systemd:/usr/sbin/nologin$
      tcpdump:x:109:118::/nonexistent:/usr/sbin/nologin$
      avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin$
30 usbmux:x:111:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin$
31 dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin$
32 kernoops:x:113:65534:Kernel Oops Tracking Daemon,,,:/:/usr/sbin/nologin$
      avahi:x:114:121:Avahi mDNS daemon,,,:/run/avahi-daemon:/usr/sbin/nologin$
34 cups-pk-helper:x:115:122:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin$
     rtkit:x:116:123:RealtimeKit,,,:/proc:/usr/sbin/nologin$
whoopsie:x:117:124::/nonexistent:/bin/false$
      sssd:x:118:125:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin$ speech-dispatcher:x:119:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false$
38
     fwupd-refresh:x:120:126:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin$
nm-openvpn:x:121:127:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin$
40
41
      saned:x:122:129::/var/lib/saned:/usr/sbin/nologin$
      colord:x:123:130:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin$
geoclue:x:124:131::/var/lib/geoclue:/usr/sbin/nologin$
pulse:x:125:132:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin$
42
     gnome-initial-setup:x:125:132:PdseAudco daemon,,,,,/rdn/pdcse:/ds//socia/nocogcn3
gnome-initial-setup:x:126:65534::/run/gnome-initial-setup/:/bin/false$
hplip:x:127:7:HPLIP system user,,,:/run/hplip:/bin/false$
gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false$
monilcis106:x:1000:1000:MonilCis106,,,:/home/monilcis106:/bin/bash$
_flatpak:x:129:138:Flatpak system-wide installation helper,,,:/nonexistent:/usr/sbin/nologin$
46
47
```

```
monilcis106@monilcis106-VirtualBox:~$ head -n 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
monilcis106@monilcis106-VirtualBox:~$ tail -n 5 /etc/passwd
```

```
nonilcis106@monilcis106-VirtualBox:~$ tail -n 5 /etc/passwd
gnome-initial-setup:x:126:65534::/run/gnome-initial-setup/:/bin/false
hplip:x:127:7:HPLIP system user,,,:/run/hplip:/bin/false
gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false
nonilcis106:x:1000:1000:MonilCis106,,,:/home/monilcis106:/bin/bash
_flatpak:x:129:138:Flatpak system-wide_installation helper,,,:/nonexistent:/usr/sbin/nologin
```

QUESTION 2:

```
onilcis106-VirtualBox:~S cut -d: -f1 /etc/passwd
root
daemon
bin
sys
sync
games
man
lρ
mail
news
uucn
ргоху
www-data
backup
list
irc
gnats
nobody
systemd-network
systemd-resolve
messagebus
systemd-timesync
syslog
_apt
tss
uuri dd
systemd-oom
tcpdump
avahi-autoipd
usbmux
dnsmasq
kernoops
avahi
cups-pk-helper
rtkit
whoopsie
sssd
speech-dispatcher
fwupd-refresh
nm-openvpn
saned
colord
geoclue
pulse
gnome-initial-setup
hplip
gdm
monilcis106
flatpak
```

```
nilcis106-VirtualBox:~$ awk -F: '{print $1, $ND}' /etc/passwd
root root:x:0:0:root:/root:/bin/bash
daemon daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync sync:x:4:65534:sync:/bin:/bin/sync
games games:x:5:60:games:/usr/games:/usr/sbin/nologin
man man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
gnats gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
messagebus messagebus:x:102:105::/nonexistent:/usr/sbin/nologin
systemd-timesync systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
syslog syslog:x:104:111::/home/syslog:/usr/sbin/nologin
_apt _apt:x:105:65534::/nonexistent:/usr/sbin/nologin
tss tss:x:106:113:TPM software stack,,,:/var/lib/tpm:/bin/false
uuidd uuidd:x:107:116::/run/uuidd:/usr/sbin/nologin
systemd-oom systemd-oom:x:108:117:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin
tcpdump tcpdump:x:109:118::/nonexistent:/usr/sbin/nologin
```

```
avahi-autoipd avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
usbmux usbmux:x:111:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
dnsmasq dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
kernoops kernoops:x:113:65534:Kernel Oops Tracking Daemon,,,:/:/usr/sbin/nologin
avahi avahi:x:114:121:Avahi mDNS daemon,,,:/run/avahi-daemon:/usr/sbin/nologin
cups-pk-helper cups-pk-helper:x:115:122:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin
rkit rtkit:x:116:123:RealtimeKit,,,:/proc:/usr/sbin/nologin
whoopsie whoopsie:x:117:124::/nonexistent:/bin/false
sssd sssd:x:118:125:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin
speech-dispatcher speech-dispatcher:x:119:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false
fwupd-refresh fwupd-refresh:x:120:126:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
nm-openvpn nm-openvpn:x:121:127:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
saned saned:x:122:129::/var/lib/saned:/usr/sbin/nologin
colord colord:x:123:130:colord colour management daemon,,::/var/lib/colord:/usr/sbin/nologin
geoclue geoclue:x:124:131::/var/lib/geoclue:/usr/sbin/nologin
pulse pulse:x:125:132:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin
gnome-initial-setup gnome-initial-setup:x:126:65534::/run/gnome-initial-setup/:/bin/false
hplip hplip:x:127:7:HPLIP system user,,,:/run/hplip:/bin/false
monilcis106 monilcis106:x:1000:1000:Monilcis106,,,:/home/monilcis106:/bin/bash
_flatpak_flatpak:x:129:138:Flatpak system-wide installation helper,,,:/nonexistent:/usr/sbin/nologin
```

.s106-VirtualBox:~\$ awk -F: '{print \$1 "=" \$NF}' /etc/passwd root=/bin/bash daemon=/usr/sbin/nologin bin=/usr/sbin/nologin sys=/usr/sbin/nologin sync=/bin/sync games=/usr/sbin/nologin man=/usr/sbin/nologin lp=/usr/sbin/nologin mail=/usr/sbin/nologin news=/usr/sbin/nologin news=/usr/sbin/nologin uucp=/usr/sbin/nologin proxy=/usr/sbin/nologin www-data=/usr/sbin/nologin backup=/usr/sbin/nologin list=/usr/sbin/nologin gnats=/usr/sbin/nologin nobody=/usr/sbin/nologin systemd-network=/usr/sbin/nologin systemd-resolve=/usr/sbin/nologin messagebus=/usr/sbin/nologin systemd-timesync=/usr/sbin/nologin syslog=/usr/sbin/nologin _apt=/usr/sbin/nologin tss=/bin/false uuidd=/usr/sbin/nologin systemd-oom=/usr/sbin/nologin tcpdump=/usr/sbin/nologin avahi-autoipd=/usr/sbin/nologin usbmux=/usr/sbin/nologin dnsmasq=/usr/sbin/nologin ansmasq=/usr/sbin/nologin
kernoops=/usr/sbin/nologin
avahi=/usr/sbin/nologin
cups-pk-helper=/usr/sbin/nologin
rtkit=/usr/sbin/nologin
whoopsie=/bin/false sssd=/usr/sbin/nologin speech-dispatcher=/bin/false fwupd-refresh=/usr/sbin/nologin nm-openvpn=/usr/sbin/nologin saned=/usr/sbin/nologin colord=/usr/sbin/nologin geoclue=/usr/sbin/nologin pulse=/usr/sbin/nologin gnome-initial-setup=/bin/false hplip=/bin/false gdm=/bin/false monilcis106=/bin/bash flatpak=/usr/sbin/nologin

```
'{for (i=1; i<=NF; i++) if (i != 3) printf$i ":"; print
root:x:0:root:/root:/bin/bash:
daemon:x:1:daemon:/usr/sbin:/usr/sbin/nologin:
bin:x:2:bin:/bin:/usr/sbin/nologin:
sys:x:3:sys:/dev:/usr/sbin/nologin:
sync:x:65534:sync:/bin:/bin/sync:
games:x:60:games:/usr/games:/usr/sbin/nologin:
man:x:12:man:/var/cache/man:/usr/sbin/nologin:
lp:x:7:lp:/var/spool/lpd:/usr/sbin/nologin:
mail:x:8:mail:/var/mail:/usr/sbin/nologin:
news:x:9:news:/var/spool/news:/usr/sbin/nologin:
uucp:x:10:uucp:/var/spool/uucp:/usr/sbin/nologin:
proxy:x:13:proxy:/bin:/usr/sbin/nologin:
 www-data:x:33:www-data:/var/www:/usr/sbin/nologin:
backup:x:34:backup:/var/backups:/usr/sbin/nologin:
list:x:38:Mailing List Manager:/var/list:/usr/sbin/nologin:
irc:x:39:ircd:/run/ircd:/usr/sbin/nologin:
gnats:x:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin:
nobody:x:65534:nobody:/nonexistent:/usr/sbin/nologin:
systemd-network:x:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin:
systemd-resolve:x:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin:
messagebus:x:105::/nonexistent:/usr/sbin/nologin:
systemd-timesync:x:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin:
syslog:x:111::/home/syslog:/usr/sbin/nologin:
_apt:x:65534::/nonexistent:/usr/sbin/nologin:
tss:x:113:TPM software stack,,,:/var/lib/tpm:/bin/false:
uuidd:x:116::/run/uuidd:/usr/sbin/nologin:
systemd-oom:x:117:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin:
tcpdump:x:118::/nonexistent:/usr/sbin/nologin:
avahi-autoipd:x:110:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin:
usbmux:x:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin:
dnsmasq:x:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin:
kernoops:x:65534:Kernel Oops Tracking Daemon,,,:/:/usr/sbin/nologin:
avahi:x:121:Avahi mDNS daemon,,,:/run/avahi-daemon:/usr/sbin/nologin:
cups.gk.belpas.x:122:usas.for.cups.gk.belpas.casyisa
cups-pk-helper:x:122:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin:
rtkit:x:123:RealtimeKit,,,:/proc:/usr/sbin/nologin:
whoopsie:x:124::/nonexistent:/bin/false
whoopste:x:124::/hohextstent:/bth/fatse:

sssd:x:125:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin:

speech-dispatcher:x:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false:

fwupd-refresh:x:126:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin:

nm-openvpn:x:127:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin:

saned:x:129::/var/lib/saned:/usr/sbin/nologin:
colord:x:130:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin:
geoclue:x:131::/var/lib/geoclue:/usr/sbin/nologin:
pulse:x:132:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin:
gnome-initial-setup:x:65534::/run/gnome-initial-setup/:/bin/false:
hplip:x:7:HPLIP system user,,,:/run/hplip:/bin/false:
gdm:x:134:Gnome Display Manager:/var/lib/gdm3:/bin/false:
monilcis106:x:1000:MonilCis106,,,:/home/monilcis106:/bin/bash:
_flatpak:x:138:Flatpak system-wide installation helper,,,:/nonexistent:/usr/sbin/nologin:
```

QUESTION 3:

monilcis106@monilcis106-VirtualBox:~\$ curl -s https://cis106.com/assets/shopping.txt -o etc/passwd monilcis106@monilcis106-VirtualBox:~\$ curl -s https://cis106.com/assets/tasks.txt -o etc/passwd monilcis106@monilcis106-VirtualBox:~\$ cat -n ~/Documents/Books/Dracula.txt

```
nilcis106-VirtualBox:~$ awk -F: '{print $1 "=" $NF}' /etc/passwd
root=/bin/bash
daemon=/usr/sbin/nologin
bin=/usr/sbin/nologin
sys=/usr/sbin/nologin
sync=/bin/sync
games=/usr/sbin/nologin
man=/usr/sbin/nologin
lp=/usr/sbin/nologin
mail=/usr/sbin/nologin
news=/usr/sbin/nologin
uucp=/usr/sbin/nologin
proxy=/usr/sbin/nologin
www-data=/usr/sbin/nologin
backup=/usr/sbin/nologin
list=/usr/sbin/nologin
irc=/usr/sbin/nologin
gnats=/usr/sbin/nologin
nobody=/usr/sbin/nologin
systemd-network=/usr/sbin/nologin
systemd-resolve=/usr/sbin/nologin
messagebus=/usr/sbin/nologin
systemd-timesync=/usr/sbin/nologin
syslog=/usr/sbin/nologin
_apt=/usr/sbin/nologin
tss=/bin/false
uuidd=/usr/sbin/nologin
systemd-oom=/usr/sbin/nologin
tcpdump=/usr/sbin/nologin
avahi-autoipd=/usr/sbin/nologin
usbmux=/usr/sbin/nologin
dnsmasq=/usr/sbin/nologin
kernoops=/usr/sbin/nologin
avahi=/usr/sbin/nologin
cups-pk-helper=/usr/sbin/nologin
rtkit=/usr/sbin/nologin
whoopsie=/bin/false
sssd=/usr/sbin/nologin
speech-dispatcher=/bin/false
fwupd-refresh=/usr/sbin/nologin
nm-openvpn=/usr/sbin/nologin
saned=/usr/sbin/nologin
colord=/usr/sbin/nologin
geoclue=/usr/sbin/nologin
pulse=/usr/sbin/nologin
gnome-initial-setup=/bin/false
hplip=/bin/false
gdm=/bin/false
monilcis106=/bin/bash
_flatpak=/usr/sbin/nologin
 onilcis106@monilcis106-VirtualBox:~$
```

```
monilcis106@monilcis106-VirtualBox:~$
monilcis106@monilcis106-VirtualBox:~$
monilcis106@monilcis106-VirtualBox:~$ sed -i 's/;/,/g' cereal.cvs
sed: can't read cereal.cvs: No such file or directory
monilcis106@monilcis106-VirtualBox:~$ grep "love" ~/Documents/Books/Pride_and_Prejudice.txt
grep: /home/monilcis106/Documents/Books/Pride_and_Prejudice.txt: No such file or directory
monilcis106@monilcis106-VirtualBox:~$ grep -wnE "love|hate" ~/Documents/Books/Pride_and_Prejudice.txt
grep: /home/monilcis106/Documents/Books/Pride_and_Prejudice.txt: No such file or directory
```

QUESTION 6:

```
nonilcis106@monilcis106-VirtualBox:~$ ulimit -a
real-time non-blocking time (microseconds, -R) unlimited
core file size
                            (blocks, -c) 0
                            (kbytes, -d) unlimited
data seg size
                                     (-e) 0
scheduling priority
file size
                            (blocks, -f) unlimited
                                     (-i) 15326
pending signals
                            (kbytes, -l) 499984
max locked memory
                            (kbytes, -m) unlimited
max memory size
open files
                                     (-n) 1024
pipe size
                         (512 bytes, -p) 8
POSIX message queues
                             (bytes,
                                     -q) 819200
                                    (-r) 0
real-time priority
stack size
                            (kbytes, -s) 8192
                           (seconds, -t) unlimited
cpu time
max user processes
                                    (-u) 15326
virtual memory
                            (kbytes, -v) unlimited
                                     (-x) unlimited
file locks
monilcis106@monilcis106-VirtualBox:~$ grep -c '/sbin/nologin' /etc/passwd
monilcis106@monilcis106-VirtualBox:~$ grep -i 'ford' cars.csv | wc -l
grep: cars.csv: No such file or directory
monilcis106@monilcis106-VirtualBox:~$ grep -o -w -i -E '/b/w{4}/b' bible.txt | wc -l
grep: bible.txt: No such file or directory
monilcis106@monilcis106-VirtualBox:~$
```

Challenge:

```
monilcis106@monilcis106-VirtualBox:-$ awk -F, '{print $1, $NF}' ~/Documents/Csv/cars.csv
awk: cannot open /home/monilcis106/Documents/Csv/cars.csv (No such file or directory)
monilcis106@monilcis106-VirtualBox:-$ awk -F ',' 'NR > 1 {print $1}' cereal.csv | sort | sed '1,2d' > cereal-sorted.csv
```

FINISHED