

Lab 7

Question 1

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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:Mail 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
uidd:x:107:116:/run/uidd:/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
mthandan:x:1000:1000:mohammed,,:/home/mthandan:/bin/bash
vboxadd:x:999:1:/var/run/vboxadd:/bin/false
_flatpak:x:129:138:Flatpak system-wide installation helper,,:/nonexistent:/usr/sbin/nologin
epmd:x:130:139:/run/epmd:/usr/sbin/nologin
yaws:x:131:140:/var/cache/yaws:/usr/sbin/nologin
mthandan@cis106:~$

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mthandan@cis106:~$ tac /etc/passwd
yaws:x:131:140:/var/cache/yaws:/usr/sbin/nologin
epmd:x:130:139:/run/epmd:/usr/sbin/nologin
_flatpak:x:129:138:Flatpak system-wide installation helper,,:/nonexistent:/usr/sbin/nologin
vboxadd:x:999:1:/var/run/vboxadd:/bin/false
mthandan:x:1000:1000:mohammed,,:/home/mthandan:/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
uidd:x:107:116:/run/uidd:/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
systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
messagebus:x:102:105:/nonexistent:/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:/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

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```

mthamdan@cis106:~$ cat -nE /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:/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 messagebus:x:102:105:/nonexistent:/usr/sbin/nologin$
22 systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin$
23 syslog:x:104:111:/home/syslog:/usr/sbin/nologin$
24 _apt:x:105:65534:/nonexistent:/usr/sbin/nologin$
25 tss:x:106:113:TPM software stack,,,:/var/lib/tpm:/bin/false$
26 uidd:x:107:116:/run/uidd:/usr/sbin/nologin$
27 systemd-oom:x:108:117:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin$
28 tcpdump:x:109:118:/nonexistent:/usr/sbin/nologin$
29 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$
33 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$
35 rtkit:x:116:123:RealtimeKit,,,:/proc:/usr/sbin/nologin$
36 whoopsie:x:117:124:/nonexistent:/bin/false$
37 sssd:x:118:125:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin$
38 speech-dispatcher:x:119:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false$
39 fwupd-refresh:x:120:126:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin$
40 nm-openvpn:x:121:127:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin$
41 saned:x:122:129:/var/lib/saned:/usr/sbin/nologin$
42 colord:x:123:130:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin$
43 geoclue:x:124:131:/var/lib/geoclue:/usr/sbin/nologin$
44 pulse:x:125:132:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin$

```

```

mthamdan@cis106:~$ 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
mthamdan@cis106:~$

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mthamdan@cis106:~$ tail -5 /etc/passwd
mthamdan:x:1000:1000:mohammed,,,:/home/mthamdan:/bin/bash
vboxadd:x:999:1:/var/run/vboxadd:/bin/false
_flatpak:x:129:138:Flatpak system-wide installation helper,,,:/nonexistent:/usr/
sbin/nologin
epmd:x:130:139:/run/epmd:/usr/sbin/nologin
yaws:x:131:140:/var/cache/yaws:/usr/sbin/nologin
mthamdan@cis106:~$

```

Question 2

```
nthamdan@cls106:~$ 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
messagebus
systemd-timesync
syslog
_apt
tss
uidd
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
```

```
nthamdan@cls106:~$ 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
uidd /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
```

```

nithandam@cls106:~$ 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
uidd=/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

nithandam@cls106:~$ awk -F: '{for (i=1; i<=NF; i++) if (i != 3) printf $i ":"; print ""}' /etc/passwd
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:
uidd:x:116:/run/uidd:/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:119: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-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:
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:

```

Question 3

```

thamdan@cis106:~$ curl -s https://cis106.com/assets/shopping.txt -o etc/passwd
thamdan@cis106:~$ curl -s https://cis106.com/assets/tasks.txt -o etc/passwd
thamdan@cis106:~$ cat -n ~/Documents/Books/dracula.txt

```

```

thamdan@cis106:~$ 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-networkd=/usr/sbin/nologin
systemd-resolved=/usr/sbin/nologin
messagebus=/usr/sbin/nologin
systemd-timesyncd=/usr/sbin/nologin
syslog=/usr/sbin/nologin
_apt=/usr/sbin/nologin
tss=/bin/false
uidd=/usr/sbin/nologin
systemd-oomd=/usr/sbin/nologin
tcpdump=/usr/sbin/nologin
avahi-autoipd=/usr/sbin/nologin
usbmuxd=/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
sane=/usr/sbin/nologin
colord=/usr/sbin/nologin
geoclue=/usr/sbin/nologin
pulse=/usr/sbin/nologin

```

Question 4

```

thamdan@cis106:~$ sed -i 's/;/,/g' cereal.csv
sed: can't read cereal.csv: No such file or directory
thamdan@cis106:~$ grep '^love' dracula.txt

```

```

thamdan@cis106:~$ grep '^^[A-Z0-9]' dracula.txt
grep: dracula.txt: No such file or directory

```

```

thamdan@cis106:~$ grep -n -w -e 'love' -e 'hate' pride_and_prejudice.txt
grep: pride_and_prejudice.txt: No such file or directory
thamdan@cis106:~$ grep -n -w -e 'love' -e 'hate' pride_and_prejudice.txt

```

Question 6

```
mthamdan@cis106:~$ ulimit -a
real-time non-blocking time (microseconds, -R) unlimited
core file size              (blocks, -c) 0
data seg size               (kbytes, -d) unlimited
scheduling priority         (-e) 0
file size                   (blocks, -f) unlimited
pending signals              (-i) 7539
max locked memory           (kbytes, -l) 250804
max memory size              (kbytes, -m) unlimited
open files                   (-n) 1024
pipe size                    (512 bytes, -p) 8
POSIX message queues         (bytes, -q) 819200
real-time priority           (-r) 0
stack size                   (kbytes, -s) 8192
cpu time                     (seconds, -t) unlimited
max user processes           (-u) 7539
virtual memory               (kbytes, -v) unlimited
file locks                   (-x) unlimited
mthamdan@cis106:~$ grep -c '/sbin/nologin' /etc/passwd
42
mthamdan@cis106:~$ grep -i 'ford' cars.csv | wc -l
grep: cars.csv: No such file or directory
0
mthamdan@cis106:~$ grep -o -w -i -E '\b\w{4}\b' bible.txt | wc -l
grep: bible.txt: No such file or directory
0
mthamdan@cis106:~$
```

Challenge Question

```
thamdan@cis106:~/Downloads$ awk -F ',' '{print $1}' cereal.csv
wk: cannot open cereal.csv (No such file or directory)
thamdan@cis106:~/Downloads$ awk -F ',' 'NR > 1 {print $1}' cereal.csv | sort | sed '1,2d' > cereal-sorted.csv
thamdan@cis106:~/Downloads$ awk -F ';' 'NR > 1 {print $1}' cereal.csv | sort | sed '1,2d' | tr ';' ',' > cereal-sorted.csv
```