

Question 1

```
brian@CIS106VM:~$ 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:/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:106:112:TPM software stack,,,:/var/lib/tpm:/bin/false
uidd:x:107:115:/:run/uidd:/usr/sbin/nologin
systemd-oom:x:108:116:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin
tcpdump:x:109:117:/: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
nm-openvpn:x:120:126:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
saned:x:121:128:/:var/lib/saned:/usr/sbin/nologin
colord:x:122:129:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
geoclue:x:123:130:/:var/lib/geoclue:/usr/sbin/nologin
pulse:x:124:131:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin
gnome-initial-setup:x:125:65534:/:run/gnome-initial-setup:/bin/false
hplip:x:126:7:HPLIP system user,,,:/run/hplip:/bin/false
gdm:x:127:133:Gnome Display Manager:/var/lib/gdm3:/bin/false
brian:x:1000:1000:Brian,,,:/home/brian:/bin/bash
_flatpak:x:128:137:Flatpak system-wide installation helper,,,:/nonexistent:/usr/sbin/nologin
vboxadd:x:999:1:/:var/run/vboxadd:/bin/false
fwupd-refresh:x:129:138:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
```

```
brian@CIS106VM:~$ tac /etc/passwd
shd:x:130:65534:/:run/sshd:/usr/sbin/nologin
wupd-refresh:x:129:138:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
```

```
brian@CIS106VM:~$ tail -5 /etc/passwd
brian:x:1000:1000:Brian,,,:/home/brian:/bin/bash
_flatpak:x:128:137:Flatpak system-wide installation helper,,,:/nonexistent:/usr/sbin/nologin
vboxadd:x:999:1::/var/run/vboxadd:/bin/false
fwupd-refresh:x:129:138:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
sshd:x:130:65534::/run/sshd:/usr/sbin/nologin
brian@CIS106VM:~$ 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
brian@CIS106VM:~$ 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
```

Unable to capt

Question 2

```
brian@CIS106VM:~$ cut -d ':' -f1 /etc/passwd
root
daemon
bin
sys
sync
```

```
brian@CIS106VM:~$ cut -d ':' -f1 /etc/passwd | tr ':' '='
root
daemon
bin
sys
sync
games
nan
```

```
brian@CIS106VM:~$ cut -d ':' -f1,7 /etc/passwd
root:/bin/bash
daemon:/usr/sbin/nologin
```

Question 3

```
brian@CIS106VM:~$ wc -l Documents/Books/dracula.txt
15860 Documents/Books/dracula.txt
brian@CIS106VM:~$ wc -l Documents/Books/pride-and-prejudice.txt
14904 Documents/Books/pride-and-prejudice.txt
brian@CIS106VM:~$ sort /etc/pa
pam.conf  pam.d/      papersize  passwd    passwd-
brian@CIS106VM:~$ sort /etc/passwd
_apt:x:105:65534::/nonexistent:/usr/sbin/nologin
avahi-autoipd:x:110:119:Avahi-autoipd daemon:/var/lib/avahi-autoipd:/usr/sbin/nologin
```

Question 4

```
brian@CIS106VM:~/Documents/Books$ grep "love" pride-and-prejudice.txt
y allowance" and "loving with personal love." This distinction applies
o their best work than in the case of those others who are loved "by
roper thing to love them. And in the sect--fairly large and yet
ll the minor passages--the loves of Jane and Bingley, the advent of Mr.
```

```
brian@CIS106VM:~/Documents/Books$ grep "hate" pride-and-prejudice.txt
"Come, Darcy," said he, "I must have you dance. I hate to see you
"To walk three miles, or four miles, or five miles, or whatever it is,
to employ for captivation. Whatever bears affinity to cunning is
"Whatever I do is done in a hurry," replied he; "and therefore if I
thankful; and then you may say whatever you like of me."
"And _your_ defect is a propensity to hate everybody."
him to write to you at all, and very hypocritical. I hate such false
different sort of men, and that he hates me."
```

```
brian@CIS106VM:~/Documents/Books$ grep -E "[A-Z][0-9]" dracula.txt
brian@CIS106VM:~/Documents/Books$ grep -E "[A-Z][0-9]" dracula.txt
```

Question 5

```
brian@CIS106VM:~/Documents/Books$ awk -F ':' '{print $1,$NF}' ../Csv/cars.csv
Car;MPG;Cylinders;Displacement;Horsepower;Weight;Acceleration;Model;Origin
STRING;DOUBLE;INT;DOUBLE;DOUBLE;DOUBLE;DOUBLE;INT;CAT
```

```
brian@CIS106VM:~/Documents/Books$ awk -F ':' '{OFS=" Made in " } {print $1,$NF}' cars.csv
```

```
brian@CIS106VM:~/Documents/Books$ sed 's/Dracula/Alucard/g' dracula.txt
```

Question 6

```
brian@CIS106VM:~/Documents/Books$ grep "/bin/bash" /etc/passwd | wc -l
2
```

```
brian@CIS106VM:~/Documents/Books$
```

```
brian@CIS106VM:~/Documents/Books$ grep "/sbin/nologin" /etc/passwd | wc -l
41
```

```
brian@CIS106VM:~/Documents/Csv$ grep -i 'ford' cars.csv | wc -l
53
```

```
brian@CIS106VM:~/Documents/Csv$
```

```
brian@CIS106VM:~/Documents/Csv$ grep -i '....' ~/Documents/Books/bible.txt | wc -l
31102
```

```
brian@CIS106VM:~/Documents/Csv$
```

Challenge Question

```
brian@CIS106VM:~/Documents/Csv$ awk -F ';' 'NR > 3 {print $1}' cereal.csv
mildred's honey oats
```

```
brian@CIS106VM:~/Documents/Csv$ awk -F ';' 'NR > 3 {print $1}' cereal.csv | sort
100% Natural Bran
```

```
rian@CIS106VM:~/Documents/Csv$ awk -F ';' '{print $1,$4}' cereal.csv | tr ';' ','  
name calories  
tring Int
```