

# Lab 7

## Question 1

```
evreynoso@cis106:~$ 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
syslog:x:107:111::/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
kernooops: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
evreynoso:x:1000:1000:Erneldy Reynoso,,,:/home/evreynoso:/bin/bash
vboxadd:x:999:1::/var/run/vboxadd:/bin/false
```

```
evreynoso@cis106:~$ tac /etc/passwd
_mopidy:x:130:29::/var/lib/mopidy:/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
evreynoso:x:1000:1000:Erneldy Reynoso,,,:/home/evreynoso:/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/sssd:/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:KernelOops 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
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: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
```

```
evreynoso@cis106:~$ cat -n /etc/passwd | sed 's/$//'
1 root:x:0:0:root:/root:/bin/bash
2 daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin$
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:/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:Mailing 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$
```

```
evreynoso@cis106:~$ 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:/sync
evreynoso@cis106:~$ tail -n 5 /etc/passwd
gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false
evreynoso:x:1000:1000:Erneldy Reynoso,,,:/home/evreynoso:/bin/bash
vboxadd:x:999:1::/var/run/vboxadd:/bin/false
_flatpak:x:129:138:Flatpak system-wide installation helper,,,:/nonexistent:/usr/sbin/nologin
mopidy:x:130:29::/var/lib/mopidy:/usr/sbin/nologin
evreynoso@cis106:~$
```

```
evreynoso@cis106:~$ 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:/sync
evreynoso@cis106:~$ tail -n 5 /etc/passwd
gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false
evreynoso:x:1000:1000:Erneldy Reynoso,,,:/home/evreynoso:/bin/bash
vboxadd:x:999:1::/var/run/vboxadd:/bin/false
_flatpak:x:129:138:Flatpak system-wide installation helper,,,:/nonexistent:/usr/sbin/nologin
mopidy:x:130:29::/var/lib/mopidy:/usr/sbin/nologin
evreynoso@cis106:~$
```

## Question 2

```
evreynoso@cis106:~$ cut -d: -f1 /etc/passwd
```

root	Starred	Question1.1.5.png	Question0.2png	Question1.1.png
daemon	Home			
bin	Desktop			
sys	Documents			
sync	Downloads			
games	Music			
man	Pictures	Question1.png	Question2.1.png	Question2.2.png
lp	Videos			
mail	Trash			
news				
uucp				
proxy				
www-data				
backup				
list				
irc				
gnats				
nobody				
systemd-network				
systemd-resolve				
messagebus				
systemd-timesync				
syslog	+ Other Locations			
_apt				
tss				
uuidd				

```
evreynoso@cis106:~$ cut -d: -f1,7 --output-delimiter='=' /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  
evreynoso=/bin/bash  
vboxadd=/bin/false  
_flatpak=/usr/sbin/nologin  
mopidy=/usr/sbin/nologin  
evreynoso@cis106:~$
```

```
evreynoso@cis106:~$ cut -d: --complement -f3 /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  
uuidd:x:116::/run/uuidd:/usr/sbin/nologin
```

## Question 3

```
evreynoso@cis106:~$ curl -s https://cis106.com/assets/shopping.txt -o Q3
evreynoso@cis106:~$ curl -s https://cis106.com/assets/tasks.txt -o Q3.2
evreynoso@cis106:~$ paste ~/Q3 Q3.2
Eggs      Do laundry
Milk      Play Bingo
Juice     Go to Work
Carrots    Go to School
Potatoes   Pay Bills
evreynoso@cis106:~$ wc -l Documents/Books/dracula.txt
15845 Documents/Books/dracula.txt
evreynoso@cis106:~$ wc -l Documents/Books/pride-and-prejudice.txt
wc: Documents/Books/pride-and-prejudice.txt: No such file or directory
evreynoso@cis106:~$ curl -s https://www.gutenberg.org/files/1342/1342-0.txt -o pride-and-prejudice.txt
evreynoso@cis106:~$ wc -l Documents/Books/pride-and-prejudice.txt
14905 Documents/Books/pride-and-prejudice.txt
evreynoso@cis106:~$ sort /etc/passwd
_apt:x:105:65534::/nonexistent:/usr/sbin/nologin
avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
avahi:x:114:121:Avahi mDNS daemon,,,:/run/avahi-daemon:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
colord:x:123:130:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
cups-pk-helper:x:115:122:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
evreynoso:x:1000:1000:Erneldy Reynoso,,,:/home/evreynoso:/bin/bash
flatpak:x:129:138:Flatpak system-wide installation helper,,,:/nonexistent:/usr/sbin/nologin
fwupd-refresh:x:120:126:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
games:x:5:60:games:/usr/games:/usr/sbin/nologin
gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false
geoclue:x:124:131::/var/lib/geoclue:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/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
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
kernoops:x:113:65534:Kernel Oops Tracking Daemon,,,:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
```

## Question 4

```
evreynoso@cis106:~$ curl -s https://perso.telecom-paristech.fr/eagan/class/igr204/data/cereal.csv -o cereal.csv
vreynoso@cis106:~$ cd ~/Documents/Csv
e
c
vreynoso@cis106:~/Documents/Csv$ cat cereal.csv | tr ' ' ','
name,mfr,type,calories,protein,fat,sodium,fiber,carbo,sugars,potass,vitamins,shelf,weight,cups,rating
String,Categorical,Categorical,Int,Int,Int,Float,Float,Int,Int,Int,Float,Float,Float,Float
100% Bran,N,C,70,4,1,130,10,5,6,280,25,3,1,0.33,68.402973
100% Natural Bran,Q,C,120,3,5,15,2,8,8,135,0.3,1,1,33.983679
All-Bran,K,C,70,4,1,260,9,7,5,320,25,3,1,0.33,59.425505
All-Bran with Extra Fiber,K,C,50,4,0,140,14,8,0,330,25,3,1,0.5,93.704912
Almond Delight,R,C,110,2,2,200,1,14,8,-1,25,3,1,0.75,34.384843
Apple Cinnamon Cheerios,G,C,110,2,2,180,1,5,10.5,10,70,25,1,1,0.75,29.509541
Apple Jacks,K,C,110,2,0,125,1,11,14,30,25,2,1,1,33.174094
Basic 4,G,C,130,3,2,210,2,18,8,100,25,3,1,33,0.75,37.038562
Bran Chex,R,C,90,2,1,200,4,15,6,125,25,1,1,0.67,49.120253
Bran Flakes,P,C,90,3,0,210,5,13,5,190,25,3,1,0.67,53.313813
Cap'n Crunch,Q,C,120,1,2,220,0,12,12,35,25,2,1,0.75,18.042851
Cheerios,G,C,110,6,2,290,2,17,1,105,25,1,1,1.25,50.764999
Cinnamon Toast Crunch,G,C,120,1,3,210,0,13,9,45,25,2,1,0.75,19.823573
Clusters,G,C,110,3,2,140,2,13,7,105,25,3,1,0.5,40.400208
Cocoa Puffs,G,C,110,1,1,180,0,12,13,55,25,2,1,1,22.736446
Corn Chex,R,C,110,2,0,280,0,22,3,25,25,1,1,1.41,445019
Corn Flakes,K,C,100,2,0,290,1,21,2,35,25,1,1,1,45.863324
Corn Pops,K,C,110,1,0,90,1,13,12,20,25,2,1,1,35.782791
Count Chocula,G,C,110,1,1,180,0,12,13,65,25,2,1,1,22.396513
Cracklin' Oat Bran,K,C,110,3,3,140,4,10,7,160,25,3,1,0.5,40.448772
```

sh Tab Width:

```
evreynoso@cis106:~/Documents/Csv$ cd ../Books/
vreynoso@cis106:~/Documents/Books$ grep 'love' pride-and-prejudice.txt
by allowance" and "loving with personal love." This distinction applies
to their best work than in the case of those others who are loved "by
proper thing to love them. And in the sect--fairly large and yet
All the minor passages--the loves of Jane and Bingley, the advent of Mr.
aversion to actual love. I do not know whether the all-grasping hand of
his falling in love at all is not extremely probable. Here again I
injured in disposition, and thoroughly in love. As for his being in
love, Elizabeth has given as just an exposition of the causes of that
anybody who can read between lines will not find the lovers'
ladies with whom it might be a pleasure to fall in love; there are at
Grant. I should have been most in love with Beatrix and Argemone; I
"So much love and eloquence" 156
_may_ fall in love with one of them, and therefore you must visit him as
persuade you at last. I was sure you loved your girls too well to
for your sakes we would do anything. Lydia, my love, though you _are_
dancing was a certain step towards falling in love; and very lively
way to be very much in love; but she considered with pleasure that it
very few of us who have heart enough to be really in love without
in love as much as she chooses."
imagination is very rapid; it jumps from admiration to love, from love
Jane, make haste and tell us; make haste, my love."
brother Gardiner's in town so much in love with her, that my
discovered the efficacy of poetry in driving away love!"
```

"I have been used to consider poetry as the \_food\_ of **love**," said Darcy.

"Of a fine, stout, healthy **love** it may. Everything nourishes what is

```
evreynoso@cis106:~/Documents/Books$ grep -n '^love' pride-and-prejudice.txt
99:by allowance" and "loving with personal love." This distinction applies
105:proper thing to love them. And in the sect--fairly large and yet
166:aversion to actual love. I do not know whether the all-grasping hand of
396:his falling in love at all is not extremely probable. Here again I
408:injured in disposition, and thoroughly in love. As for his being in
409:love, Elizabeth has given as just an exposition of the causes of that
470:ladies with whom it might be a pleasure to fall in love; there are at
474:Grant. I should have been most in love with Beatrix and Argemone; I
575:"So much love and eloquence" 156
756:_may_ fall in love with one of them, and therefore you must visit him as
933:for your sakes we would do anything. Lydia, my love, though you _are_
972:dancing was a certain step towards falling in love; and very lively
1048:"Come, Darcy," said he, "I must have you dance. I hate to see you
1415:way to be very much in love; but she considered with pleasure that it
1430:very few of us who have heart enough to be really in love without
1450:in love as much as she chooses."
1657:imagination is very rapid; it jumps from admiration to love, from love
1764:Jane, make haste and tell us; make haste, my love."
2334:brother Gardiner's in town so much in love with her, that my
2341:discovered the efficacy of poetry in driving away love!"
2343:"I have been used to consider poetry as the _food_ of love," said Darcy.
2345:"Of a fine, stout, healthy love it may. Everything nourishes what is
2821:be a great loss to _me_ to have many such acquaintance. I dearly love a
2868:"And _your_ defect is a propensity to hate everybody."
```

```
evreynoso@cis106:~/Documents/Books$ grep -n '^love' dracula.txt
2338:loves you honestly, going away and looking all broken-hearted, and to
2421:lover; it's more unselfish anyhow. My dear, I'm going to have a pretty
2452:lover, such a husband, and such a friend.
2537:lovelier than ever, and we drove up to the house at the Crescent in
6092:love her. One, two, three, all open their veins for her, besides one old
6247:love and pride, seen you grow up. Now I want you to make your home here
6277:love me, and he loves me, and I love you with all the moods and tenses
6662:loveliness had come back to her in death, and the hours that had passed,
6846:loveliness. It frightened and amazed me somewhat; and as for Arthur, he
7301:love her. Oh, Madam Mina, by that love, I implore you, help me. It is
8473:lover, but only her physician and her friend. I gave to her my nights
9540:loved and honoured as our host is, everything regarding him is of
10474:love and from the good, good wishes of those other strong men.
11580:love Mina, I know. Oh, do something to save her. It cannot have gone too
14713:loved him and honoured him more than I can say, and that my latest and
15427:loved her, that they did dare much for her sake."
evreynoso@cis106:~/Documents/Books$
```

```
evreynoso@cis106:~/Documents/Books$ grep -n '^[A-Z0-9]' dracula.txt
3:This eBook is for the use of anyone anywhere in the United States and
11:Title: Dracula
13:Author: Bram Stoker
15:Release Date: October, 1995 [eBook #345]
18:Language: English
20:Produced by: Chuck Greif and the Online Distributed Proofreading Team
62:Contents
64:CHAPTER I. Jonathan Harker's Journal
65:CHAPTER II. Jonathan Harker's Journal
66:CHAPTER III. Jonathan Harker's Journal
67:CHAPTER IV. Jonathan Harker's Journal
68:CHAPTER V. Letters—Lucy and Mina
69:CHAPTER VI. Mina Murray's Journal
70:CHAPTER VII. Cutting from "The Dailygraph," 8 August
71:CHAPTER VIII. Mina Murray's Journal
72:CHAPTER IX. Mina Murray's Journal
73:CHAPTER X. Mina Murray's Journal
74:CHAPTER XI. Lucy Westenra's Diary
75:CHAPTER XII. Dr. Seward's Diary
76:CHAPTER XIII. Dr. Seward's Diary
77:CHAPTER XIV. Mina Harker's Journal
78:CHAPTER XV. Dr. Seward's Diary
```

## Question 5

```
evreynoso@cis106:~$ awk -F';' '{print $1,$NF}' Documents/Csv/cars.csv
Car Origin
STRING CAT
Chevrolet Chevelle Malibu US
Buick Skylark 320 US
Plymouth Satellite US
AMC Rebel SST US
Ford Torino US
Ford Galaxie 500 US
Chevrolet Impala US
Plymouth Fury iii US
Pontiac Catalina US
AMC Ambassador DPL US
Citroen DS-21 Pallas Europe
Chevrolet Chevelle Concours (sw) US
Ford Torino (sw) US
Plymouth Satellite (sw) US
AMC Rebel SST (sw) US
Dodge Challenger SE US
Plymouth 'Cuda 340 US
Ford Mustang Boss 302 US
Chevrolet Monte Carlo US
Buick Estate Wagon (sw) US
Toyota Corolla Mark ii Japan
```

```
evreynoso@cis106:~$ awk -F';' '{print "The",$1,"is made in",$NF}' Documents/Csv/cars.csv
The Car is made in Origin
The STRING is made in CAT
The Chevrolet Chevelle Malibu is made in US
The Buick Skylark 320 is made in US
The Plymouth Satellite is made in US
The AMC Rebel SST is made in US
The Ford Torino is made in US
The Ford Galaxie 500 is made in US
The Chevrolet Impala is made in US
The Plymouth Fury iii is made in US
The Pontiac Catalina is made in US
The AMC Ambassador DPL is made in US
The Citroen DS-21 Pallas is made in Europe
The Chevrolet Chevelle Concours (sw) is made in US
The Ford Torino (sw) is made in US
The Plymouth Satellite (sw) is made in US
The AMC Rebel SST (sw) is made in US
The Dodge Challenger SE is made in US
The Plymouth 'Cuda 340 is made in US
The Ford Mustang Boss 302 is made in US
The Chevrolet Monte Carlo is made in US
The Buick Estate Wagon (sw) is made in US
The Toyota Corolla Mark ii is made in Japan
The Plymouth Duster is made in US
The AMC Hornet is made in US
The Ford Maverick is made in US
```

```
evreynoso@cis106:~$ awk -F';' '{print "The",$1,"has",$3,"cyinders and is made in" , $NF}' Documents/Csv/cars.csv
The Car has Cylinders cyinders and is made in Origin
The STRING has INT cyinders and is made in CAT
The Chevrolet Chevelle Malibu has 8 cyinders and is made in US
The Buick Skylark 320 has 8 cyinders and is made in US
The Plymouth Satellite has 8 cyinders and is made in US
The AMC Rebel SST has 8 cyinders and is made in US
The Ford Torino has 8 cyinders and is made in US
The Ford Galaxie 500 has 8 cyinders and is made in US
The Chevrolet Impala has 8 cyinders and is made in US
The Plymouth Fury iii has 8 cyinders and is made in US
The Pontiac Catalina has 8 cyinders and is made in US
The AMC Ambassador DPL has 8 cyinders and is made in US
The Citroen DS-21 Pallas has 4 cyinders and is made in Europe
The Chevrolet Chevelle Concours (sw) has 8 cyinders and is made in US
The Ford Torino (sw) has 8 cyinders and is made in US
The Plymouth Satellite (sw) has 8 cyinders and is made in US
The AMC Rebel SST (sw) has 8 cyinders and is made in US
The Dodge Challenger SE has 8 cyinders and is made in US
The Plymouth 'Cuda 340 has 8 cyinders and is made in US
The Ford Mustang Boss 302 has 8 cyinders and is made in US
The Chevrolet Monte Carlo has 8 cyinders and is made in US
The Buick Estate Wagon (sw) has 8 cyinders and is made in US
The Toyota Corolla Mark ii has 4 cyinders and is made in Japan
The Plymouth Duster has 6 cyinders and is made in US
The AMC Hornet has 6 cyinders and is made in US
The Ford Maverick has 6 cyinders and is made in US
```

```
evreynoso@cis106:~$ awk -F';' 'NR>3 {print "The",toupper($1),"has",$3,"cyinders and is made in",$NF}' Documents/Csv/cars.csv
The BUICK SKYLARK 320 has 8 cyinders and is made in US
The PLYMOUTH SATELLITE has 8 cyinders and is made in US
The AMC REBEL SST has 8 cyinders and is made in US
The FORD TORINO has 8 cyinders and is made in US
The FORD GALAXIE 500 has 8 cyinders and is made in US
The CHEVROLET IMPALA has 8 cyinders and is made in US
The PLYMOUTH FURY III has 8 cyinders and is made in US
The PONTIAC CATALINA has 8 cyinders and is made in US
The AMC AMBASSADOR DPL has 8 cyinders and is made in US
The CITROEN DS-21 PALLAS has 4 cyinders and is made in Europe
The CHEVROLET CHEVELLE CONCOURS (SW) has 8 cyinders and is made in US
The FORD TORINO (SW) has 8 cyinders and is made in US
The PLYMOUTH SATELLITE (SW) has 8 cyinders and is made in US
The AMC REBEL SST (SW) has 8 cyinders and is made in US
The DODGE CHALLENGER SE has 8 cyinders and is made in US
The PLYMOUTH 'CUDA 340 has 8 cyinders and is made in US
The FORD MUSTANG BOSS 302 has 8 cyinders and is made in US
The CHEVROLET MONTE CARLO has 8 cyinders and is made in US
The BUICK ESTATE WAGON (SW) has 8 cyinders and is made in US
The TOYOTA COROLLA MARK II has 4 cyinders and is made in Japan
The PLYMOUTH DUSTER has 6 cyinders and is made in US
The AMC HORNET has 6 cyinders and is made in US
The FORD MAVERICK has 6 cyinders and is made in US
The DATSUN PL510 has 4 cyinders and is made in Japan
The VOLKSWAGEN 1131 DELUXE SEDAN has 4 cyinders and is made in Europe
The PEUGEOT 504 has 4 cyinders and is made in Europe
```

```
evreynoso@cis106:~$ sed G /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
```

```
evreynoso@cis106:~$ cd ~/Documents/Books
evreynoso@cis106:~/Documents/Books$ cat pride-and-prejudice.txt | tr '\n/n/n/n/n/' 'n/'
```

## Question 6

```
evreynoso@cis106:~$ grep -c '''/bin/bash' /etc/passwd
2
evreynoso@cis106:~$ grep -c '/sbin/nologin' /etc/passwd
41
evreynoso@cis106:~$ cd ~/Documents/Csv/
evreynoso@cis106:~/Documents/Csv$ grep -ic 'ford' cars.csv
53
evreynoso@cis106:~/Documents/Csv$ cd ~/Documents/Books
evreynoso@cis106:~/Documents/Books$ grep -ic '....' bible.txt
29713
evreynoso@cis106:~/Documents/Books$ █
```

## Question 7 Challenge

```
evreynoso@cis106:~$ awk -F';' 'NR > 3 {print $1}' Documents/Csv/cereal.csv
```

100% Natural Bran Starred  
All-Bran  
All-Bran with Extra Fiber  
Almond Delight  
Apple Cinnamon Cheerios top  
Apple Jacks  
Basic 4  
Bran Chex  
Bran Flakes  
Cap'n'Crunch  
Cheerios  
Cinnamon Toast Crunch  
Clusters  
Cocoa Puffs  
Corn Chex  
Corn Flakes  
Corn Pops  
Count Chocula  
Cracklin' Oat Bran  
Cream of Wheat (Quick)  
Crispix  
Crispy Wheat & Raisins  
Double Chex + Other Locations  
Froot Loops  
Frosted Flakes  
Frosted Mini-Wheats

```
evreynoso@cis106:~$ awk -F';' 'NR > 3 {print $1}' Documents/Csv/cereal.csv | sort
```

100% Natural Bran Starred  
All-Bran  
All-Bran with Extra Fiber  
Almond Delight  
Apple Cinnamon Cheerios top  
Apple Jacks  
Basic 4  
Bran Chex  
Bran Flakes  
Cap'n'Crunch  
Cheerios  
Cinnamon Toast Crunch  
Clusters  
Cocoa Puffs  
Corn Chex  
Corn Flakes  
Corn Pops  
Count Chocula  
Cracklin' Oat Bran  
Cream of Wheat (Quick)  
Crispix  
Crispy Wheat & Raisins  
Double Chex + Other Locations  
Froot Loops  
Frosted Flakes  
Frosted Mini-Wheats

```
evreynoso@cis106:~$ cut -d";" -f1,4 Documents/Csv/cereal.csv
name;calories
String;Int
100% Bran;70
100% Natural Bran;120
All-Bran;70
All-Bran with Extra Fiber;50
Almond Delight;110
Apple Cinnamon Cheerios;110
Apple Jacks;110
Basic 4;130
Bran Chex;90
Bran Flakes;90
Cap'n'Crunch;120
Cheerios;110
Cinnamon Toast Crunch;120
Clusters;110
Cocoa Puffs;110
Corn Chex;110
Corn Flakes;100
Corn Pops;110
Count Chocula;110
Cracklin' Oat Bran;110
Cream of Wheat (Quick);100
Crispix;110
Crispy Wheat & Raisins;100
Double Chex;100
```

```
evreynoso@cis106:~$ cut -d";" -f1,4 --output-delimiter="," Documents/Csv/cereal.csv
name,calories
String,Int
100% Bran,70
100% Natural Bran,120
All-Bran,70
All-Bran with Extra Fiber,50
Almond Delight,110
Apple Cinnamon Cheerios,110
Apple Jacks,110
Basic 4,130
Bran Chex,90
Bran Flakes,90
Cap'n'Crunch,120
Cheerios,110
Cinnamon Toast Crunch,120
Clusters,110
Cocoa Puffs,110
Corn Chex,110
Corn Flakes,100
Corn Pops,110
Count Chocula,110
Cracklin' Oat Bran,110
Cream of Wheat (Quick),100
Crispix,110
Crispy Wheat & Raisins,100
Double Chex,100
```