# Lab 7 Submission

## Question 1

```
kevin@kevins-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:/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
```

```
kevin@kevins-VirtualBox:~$ tac /etc/passwd
_flatpak:x:129:138:Flatpak system-wide installation helper,,,:/nonexistent:/usr/sbin/nologin
vboxadd:x:999:1::/var/run/vboxadd:/bin/false
kevin:x:1000:1000:Kevin Marcelo-Castillo,,,:/home/kevin:/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/nolog
```

```
kevin@kevins-VirtualBox:~$ 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: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$
```

```
kevin@kevins-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
kevin@kevins-VirtualBox:~$ tail -5 /etc/passwd
hplip:x:127:7:HPLIP system user,,,:/run/hplip:/bin/false
gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false
kevin:x:1000:1000:Kevin Marcelo-Castillo,,,:/home/kevin:/bin/bash
vboxadd:x:999:1::/var/run/vboxadd:/bin/false
_flatpak:x:129:138:Flatpak system-wide installation helper,,,:/nonexistent:/usr/sbin/nologin
kevin@kevins-VirtualBox:~$
```

# Question 2

```
kevin@kevins-VirtualBox:~$ cut -d ':' -f1 /etc/passwd
root
daemon
bin
sys
sync
games                                    3 / 9
man
lp
mail
news
uucp
proxy
www-data
backup
list
irc
gnats
nobody
systemd-network
systemd-resolve
messagebus
systemd-timesync
```

```
kevin@kevins-VirtualBox:~$ cut -d ':' -f1,7 /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
```

```
kevin@kevins-VirtualBox:~$ 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
```

```
kevin@kevins-VirtualBox:~$ cut -d ':' --complement -s -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
```

## Question 3

```
kevin@kevins-VirtualBox:~$ curl -s https://cis106.com/assets/shopping.txt -o shopping.txt
kevin@kevins-VirtualBox:~$ curl -s https://cis106.com/assets/tasks.txt -o tasks.txt
kevin@kevins-VirtualBox:~$ paste shopping.txt tasks.txt
Eggs      Do laundry
Milk      Play Bingo
Juice    Go to Work
Carrots          Go to School
Potatoes         Pay Bills
kevin@kevins-VirtualBox:~$ wc -l ~/Documents/Books/dracula.txt
15845 /home/kevin/Documents/Books/dracula.txt
kevin@kevins-VirtualBox:~$ wc -w ~/Documents/Books/pride-and-prejudice.txt
130412 /home/kevin/Documents/Books/pride-and-prejudice.txt
kevin@kevins-VirtualBox:~$ 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
_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
```

# Question 4

```
kevin@kevins-VirtualBox:~$ cat ~/Documents/Csv/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,Int,Float,Float,Int,Int,Int,Int,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
```

```
kevin@kevins-VirtualBox:~$ grep "love" ~/Documents/Books/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."
```

```
kevin@kevins-VirtualBox:~/Documents/Books$ grep -Ewn "love|hate" 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.
```

```
9914:it was to love. Of the lady's sensations they remained a little in
10005:it was evident that he was very much in love with her. They saw much to
10034:certainly did not hate him. No; hatred had vanished long ago, and she
```

```
kevin@kevins-VirtualBox:~/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."
```

```
kevin@kevins-VirtualBox:~/Documents/Books$ grep -E "^[A-Z]|^[0-9]" dracula.txt
This eBook is for the use of anyone anywhere in the United States and
Title: Dracula
Author: Bram Stoker
Release Date: October, 1995 [eBook #345]
Language: English
Produced by: Chuck Greif and the Online Distributed Proofreading Team
Contents
CHAPTER I. Jonathan Harker's Journal
CHAPTER II. Jonathan Harker's Journal
CHAPTER III. Jonathan Harker's Journal
CHAPTER IV. Jonathan Harker's Journal
CHAPTER V. Letters—Lucy and Mina
CHAPTER VI. Mina Murray's Journal
CHAPTER VII. Cutting from "The Dailygraph," 8 August
CHAPTER VIII. Mina Murray's Journal
```

## Question 5

```
kevin@kevins-VirtualBox:~$ 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                                    7 / 9
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
```

```
kevin@kevins-VirtualBox:~$ awk -F ';' '{OFS=" made in "} {print $1,$NF}' ~/Documents/Csv/cars.csv
Car made in Origin
STRING made in CAT
Chevrolet Chevelle Malibu made in US
Buick Skylark 320 made in US
Plymouth Satellite made in US
AMC Rebel SST made in US
Ford Torino made in US
Ford Galaxie 500 made in US
Chevrolet Impala made in US
Plymouth Fury iii made in US
Pontiac Catalina made in US
AMC Ambassador DPL made in US
Citroen DS-21 Pallas made in Europe
Chevrolet Chevelle Concours (sw) made in US
```

```
kevin@kevins-VirtualBox:~$ awk -F ';' '{print "The ",$1, " has ",$3, "cylinders", "and is made in ",$NF}' ~/Documents/Csv/cars.csv
The  Car  has  Cylinders cylinders and is made in  Origin
The  STRING  has  INT cylinders and is made in  CAT
The  Chevrolet Chevelle Malibu  has  8 cylinders and is made in  US
The  Buick Skylark 320  has  8 cylinders and is made in  US
The  Plymouth Satellite  has  8 cylinders and is made in  US
The  AMC Rebel SST  has  8 cylinders and is made in  US
The  Ford Torino  has  8 cylinders and is made in  US
The  Ford Galaxie 500  has  8 cylinders and is made in  US
The  Chevrolet Impala  has  8 cylinders and is made in  US
The  Plymouth Fury iii  has  8 cylinders and is made in  US
The  Pontiac Catalina  has  8 cylinders and is made in  US
The  AMC Ambassador DPL  has  8 cylinders and is made in  US
The  Citroen DS-21 Pallas  has  4 cylinders and is made in  Europe
The  Chevrolet Chevelle Concours (sw)  has  8 cylinders and is made in  US
The  Ford Torino (sw)  has  8 cylinders and is made in  US
The  Plymouth Satellite (sw)  has  8 cylinders and is made in  US
The  AMC Rebel SST (sw)  has  8 cylinders and is made in  US
```

```
kevin@kevins-VirtualBox:~$ awk 'NR > 3 {print}' ~/Documents/Csv/cars.csv
Buick Skylark 320;15.0;8;350.0;165.0;3693.;11.5;70;US
Plymouth Satellite;18.0;8;318.0;150.0;3436.;11.0;70;US
AMC Rebel SST;16.0;8;304.0;150.0;3433.;12.0;70;US
Ford Torino;17.0;8;302.0;140.0;3449.;10.5;70;US
Ford Galaxie 500;15.0;8;429.0;198.0;4341.;10.0;70;US
Chevrolet Impala;14.0;8;454.0;220.0;4354.;9.0;70;US
Plymouth Fury iii;14.0;8;440.0;215.0;4312.;8.5;70;US
Pontiac Catalina;14.0;8;455.0;225.0;4425.;10.0;70;US
AMC Ambassador DPL;15.0;8;390.0;190.0;3850.;8.5;70;US
Citroen DS-21 Pallas;0;4;133.0;115.0;3090.;17.5;70;Europe
Chevrolet Chevelle Concours (sw);0;8;350.0;165.0;4142.;11.5;70;US
Ford Torino (sw);0;8;351.0;153.0;4034.;11.0;70;US
```

```
kevin@kevins-VirtualBox:~$ awk -F ';' '{print toupper($1)}' ~/Documents/Csv/cars.csv
CAR
STRING
CHEVROLET CHEVELLE MALIBU
BUICK SKYLARK 320
PLYMOUTH SATELLITE
AMC REBEL SST
FORD TORINO
FORD GALAXIE 500
CHEVROLET IMPALA
PLYMOUTH FURY III
PONTIAC CATALINA
AMC AMBASSADOR DPL
CITROEN DS-21 PALLAS
```

```
kevin@kevins-VirtualBox:~/Documents/Books$ sed 's/Dracula/Alucard/g' dracula.txt | grep "Alucard"
The Project Gutenberg eBook of Alucard, by Bram Stoker
Title: Alucard
Castle Alucard, as there are no maps of this country as yet to compare
town named by Count Alucard, is a fairly well-known place. I shall enter
Count Alucard had directed me to go to the Golden Krone Hotel, which I
was all he knew. When I asked him if he knew Count Alucard, and could
"Count Alucard?" He bowed in a courtly way as he replied:--
"I am Alucard; and I bid you welcome, Mr. Harker, to my house. Come in;
Alucard, jumping to his feet, said:--
Alucard, as it may help me to understand. To-night he may talk of
the Turk on his own ground? This was a Alucard indeed! Woe was it that
Turk and brought the shame of slavery on them! Was it not this Alucard,
Hungarian yoke, we of the Alucard blood were amongst their leaders, for
Szekelys--and the Alucard as their heart's blood, their brains, and
Alucard was speaking, there was that in his eyes and in his bearing
Alucard." I suspected him, and determined to test his sincerity.
to my own room. The last I saw of Count Alucard was his kissing his hand
had just been received. It is only a line dated from Castle Alucard,
terrible events at Whitby when Count Alucard landed, so I shall look
had found in his absence: that the house which Alucard had bought was
sisters in the castle of Alucard. He become so small--we ourselves saw
has been. He must, indeed, have been that Voivode Alucard who won his
```

```
kevin@kevins-VirtualBox:~$ 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

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
```

```
subscribe to our email newsletter to hear about new eBooks.
kevin@kevins-VirtualBox:~/Documents/Books$ sed 's/^/''/g' pride-and-prejudice.txt
```
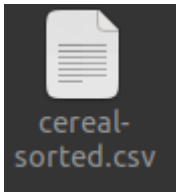
# Question 6

```
kevin@kevins-VirtualBox:~$ grep -c "/bin/bash" /etc/passwd
2
kevin@kevins-VirtualBox:~$ grep -c "/sbin/nologin" /etc/passwd
40
kevin@kevins-VirtualBox:~$ grep -ci "ford" ~/Documents/Csv/cars.csv
53
kevin@kevins-VirtualBox:~$ grep -c "...." ~/Documents/Books/bible.txt
31102
```

# Challenge Question

```
kevin@kevins-VirtualBox:~$ cd Documents/Csv
kevin@kevins-VirtualBox:~/Documents/Csv$ awk -F';' 'NR > 3 {print $1}' cereal.csv
100% Natural Bran
All-Bran
All-Bran with Extra Fiber
Almond Delight
Apple Cinnamon Cheerios
Apple Jacks
Basic 4
Bran Chex
Bran Flakes
Cap'n'Crunch
Cheerios
Cinnamon Toast Crunch
```

```
kevin@kevins-VirtualBox:~/Documents/Csv$ awk -F';' 'NR > 3 {print $1}' cereal.csv | sort -o cereal-sorted.csv
kevin@kevins-VirtualBox:~/Documents/Csv$
```

cereal-sorted.csv

```
kevin@kevins-VirtualBox:~/Documents/Csv$ awk -F';' 'NR > 3 {print $1,":", $4,"calories per serving"}' cereal.csv
100% Natural Bran : 120 calories per serving
All-Bran : 70 calories per serving
All-Bran with Extra Fiber : 50 calories per serving
Almond Delight : 110 calories per serving
Apple Cinnamon Cheerios : 110 calories per serving
Apple Jacks : 110 calories per serving
Basic 4 : 130 calories per serving
Bran Chex : 90 calories per serving
Bran Flakes : 90 calories per serving
Cap'n'Crunch : 120 calories per serving
Cheerios : 110 calories per serving
Cinnamon Toast Crunch : 120 calories per serving
Clusters : 110 calories per serving
Cocoa Puffs : 110 calories per serving
Corn Chex : 110 calories per serving
Corn Flakes : 100 calories per serving
```

```
kevin@kevins-VirtualBox:~/Documents/Csv$ awk -F';' 'NR > 3 {print $1,",", $4,"calories per serving"}' cereal.csv
100% Natural Bran , 120 calories per serving
All-Bran , 70 calories per serving
All-Bran with Extra Fiber , 50 calories per serving
Almond Delight , 110 calories per serving
Apple Cinnamon Cheerios , 110 calories per serving
Apple Jacks , 110 calories per serving
Basic 4 , 130 calories per serving
Bran Chex , 90 calories per serving
Bran Flakes , 90 calories per serving
Cap'n'Crunch , 120 calories per serving
Cheerios , 110 calories per serving
Cinnamon Toast Crunch , 120 calories per serving
Clusters , 110 calories per serving
Cocoa Puffs , 110 calories per serving
```