

Lab 7

Question #1

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ajtavarez@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:/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
_lapt:x:105:65534:/:nonexistent:/usr/sbin/nologin
tss:x:106:113:TPM software stack,,,:/var/lib/tpm:/bin/false
uuid:x:107:116:/:run/uuid:/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

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ajtavarez@cis106:~$ 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
ajtavarez:x:1000:1000:aramysjr,,,:/home/ajtavarez:/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
uuid:x:107:116:/:run/uuid:/usr/sbin/nologin
tss:x:106:113:TPM software stack,,,:/var/lib/tpm:/bin/false
_lapt: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

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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

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```

ajtavarez@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: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$
25 tss:x:106:113:TPM software stack,,,:/var/lib/tpm:/bin/false$
26 uuid:x:107:116::/run/uuid:/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$

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```

ajtavarez@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
ajtavarez@cis106:~$ 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
ajtavarez:x:1000:1000:aramysjr,,,:/home/ajtavarez:/bin/bash
vboxadd:x:999:1::/var/run/vboxadd:/bin/false
_flatpak:x:129:138:Flatpak system-wide installation helper,,,:/nonexistent:/usr/sbin/nologin

```

Question #2


```
ajtavarez@cis106:~$ awk -F: '{print $1}' /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
gnome-initial-setup
hplip
gdm
ajtavarez
vboxadd
_flatpak
```

```
ajtavarez@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
```

```
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
gnome-initial-setup = /bin/false
hplip = /bin/false
gdm = /bin/false
ajtavarez = /bin/bash
vboxadd = /bin/false
_flatpak = /usr/sbin/nologin
```



```

ajtavarez@cis106:~$ awk 'NR > 3 { print }' /etc/passwd
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:106:113: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
ajtavarez:x:1000:1000:aramysjr,,:/home/ajtavarez:/bin/bash
vboxadd:x:999:1:./var/run/vboxadd:/bin/false

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Question #3

```

ajtavarez@cis106:~$ cat -n ~/Documents/Books/dracula.txt_

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```

ajtavarez@cis106:~$ wc -w ~/Documents/Books/pride-and-prejudice.txt
130412 ~/Documents/Books/pride-and-prejudice.txt

```

```
ajtavarez@cis106:~$ sort /etc/passwd
ajtavarez:x:1000:1000:aramysjr,,,:/home/ajtavarez:/bin/bash
_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/n
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
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
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
messagebus:x:102:105:./nonexistent:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
nm-openvpn:x:121:127:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
pulse:x:125:132:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin
root:x:0:0:root:/root:/bin/bash
rtkit:x:116:123:RealtimeKit,,,:/proc:/usr/sbin/nologin
saned:x:122:129:./var/lib/saned:/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
sync:x:4:65534:sync:/bin:/bin/sync
syslog:x:104:111:./home/syslog:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin
systemd-oom:x:108:117:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
tcpdump:x:109:118:./nonexistent:/usr/sbin/nologin
tss:x:106:113:TPM software stack,,,:/var/lib/tpm:/bin/false
usbmux:x:111:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
uidd:x:107:116:./run/uidd:/usr/sbin/nologin
vboxadd:x:999:1:./var/run/vboxadd:/bin/false
whoopsie:x:117:124:./nonexistent:/bin/false
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
```

Question #4


```

ajtavarez@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,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
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
Cream of Wheat (Quick),N,H,100,3,0,80,1,21,0,-1,0,2,1,1,64.533816
Crispix,K,C,110,2,0,220,1,21,3,30,25,3,1,1,46.895644
Crispy Wheat & Raisins,G,C,100,2,1,140,2,11,10,120,25,3,1,0.75,36.176196
Double Chex,R,C,100,2,0,190,1,18,5,80,25,3,1,0.75,44.330856
Froot Loops,K,C,110,2,1,125,1,11,13,30,25,2,1,1,32.207582
Frosted Flakes,K,C,110,1,0,200,1,14,11,25,25,1,1,0.75,31.435973
Frosted Mini-Wheats,K,C,100,3,0,0,3,14,7,100,25,2,1,0.8,58.345141
Fruit & Fibre Dates, Walnuts, and Oats,P,C,120,3,2,160,5,12,10,200,25,3,1,25,0.67,40.917047
Fruitful Bran,K,C,120,3,0,240,5,14,12,190,25,3,1,33,0.67,41.015492
Fruity Pebbles,P,C,110,1,1,135,0,13,12,25,25,2,1,0.75,28.025765
Golden Crisp,P,C,100,2,0,45,0,11,15,40,25,1,1,0.88,35.252444
Golden Grahams,G,C,110,1,1,280,0,15,9,45,25,2,1,0.75,23.804043
Grape Nuts Flakes,P,C,100,3,1,140,3,15,5,85,25,3,1,0.88,52.076897
Grape-Nuts,P,C,110,3,0,170,3,17,3,90,25,3,1,0.25,53.371007
Great Grains Pecan,P,C,120,3,3,75,3,13,4,100,25,3,1,0.33,45.811716
Honey Graham Ohs,Q,C,120,1,2,220,1,12,11,45,25,2,1,1,21.871292
Honey Nut Cheerios,G,C,110,3,1,250,1.5,11.5,10,90,25,1,1,0.75,31.072217
Honey-comb,P,C,110,1,0,180,0,14,11,35,25,1,1,1.33,28.742414
Just Right Crunchy Nuggets,K,C,110,2,1,170,1,17,6,60,100,3,1,1,36.523683
Just Right Fruit & Nut,K,C,140,3,1,170,2,20,9,95,100,3,1,3,0.75,36.471512
Kix,G,C,110,2,1,260,0,21,3,40,25,2,1,1.5,39.241114
Life,Q,C,100,4,2,150,2,12,6,95,25,2,1,0.67,45.328074
Lucky Charms,G,C,110,2,1,180,0,12,12,55,25,2,1,1,26.734515
Maypo,A,H,100,4,1,0,0,16,3,95,25,2,1,1,54.850917
Muesli Raisins, Dates, & Almonds,R,C,150,4,3,95,3,16,11,170,25,3,1,1,37.136863
Muesli Raisins, Peaches, & Pecans,R,C,150,4,3,150,3,16,11,170,25,3,1,1,34.139765
Mueslix Crispy Blend,K,C,160,3,2,150,3,17,13,160,25,3,1.5,0.67,30.313351
Multi-Grain Cheerios,G,C,100,2,1,220,2,15,6,90,25,1,1,1,40.105965
Nut&Honey Crunch K C 120 2 1 190 0 15 9 40 25 2 1 0 67 29 924285

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```

ajtavarez@cis106:~/Documents/Books$ grep -i '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."
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

```

"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 be a great loss to me to have many such acquaintance. I dearly **love** a to-day. Lydia, my **love**, ring the bell. I must speak to Hill this His plan did not vary on seeing them. Miss Bennet's **lovely** face effects of your **loveliness** and amiable qualifications. As I must, shall choose to attribute it to your wish of increasing my **love** by successful **love**; for Mrs. Bennet, having dawdled about in the vestibule in **love** with you and wants him to marry Miss Darcy. She follows him to is not such a simpleton. Could she have seen half as much **love** in Mr. of being in **love** with you, he is very much in **love** with her friend." she dared to hope that so much **love** and eloquence awaited her there.

"So much **love** and eloquence"

publish his prosperous **love**.

The possibility of Mr. Collins's fancying himself in **love** with her while her health was so indifferent, and **lovers** were of all people the dishonourable to the stability of her **lover**, she could not prevent its and, luckily for the others, the business of **love**-making relieved them you. I feel as if I had never done you justice, or **loved** you as you whom I really **love**, and still fewer of whom I think well. The more I see known her much longer than they have known me; no wonder if they **love** day, "your sister is crossed in **love**, I find. I congratulate her. Next to being married, a girl likes to be crossed in **love** a little now and

```

ajtavarez@cis106:~/Documents/Books$ grep -w "love" pride-and-prejudice.txt
by allowance" and "loving with personal love." This distinction applies
proper thing to love them. And in the sect--fairly large and yet
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
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
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
be a great loss to _me_ to have many such acquaintance. I dearly love a
to-day. Lydia, my love, ring the bell. I must speak to Hill this
shall choose to attribute it to your wish of increasing my love by
successful love; for Mrs. Bennet, having dawdled about in the vestibule
in love with you and wants him to marry Miss Darcy. She follows him to
is not such a simpleton. Could she have seen half as much love in Mr.
of being in love with you, he is very much in love with her friend."
she dared to hope that so much love and eloquence awaited her there.
    "So much love and eloquence"
publish his prosperous love.
The possibility of Mr. Collins's fancying himself in love with her
and, luckily for the others, the business of love-making relieved them
whom I really love, and still fewer of whom I think well. The more I see
known her much longer than they have known me; no wonder if they love
day, "your sister is crossed in love, I find. I congratulate her. Next
to being married, a girl likes to be crossed in love a little now and
After a week spent in professions of love and schemes of felicity, Mr.
such as you describe Mr. Bingley, so easily falls in love with a pretty
love with only a few days before."
"But that expression of 'violently in love' is so hackneyed, so
Mr. Bingley's love?"
finer symptoms? Is not general incivility the very essence of love?"
"Oh, yes! of that kind of love which I suppose him to have felt. Poor
them, from what she saw, to be very seriously in love, their preference
"You are too sensible a girl, Lizzy, to fall in love merely because you
myself, and of Mr. Wickham too. He shall not be in love with me, if I
"I beg your pardon. I will try again. At present I am not in love with
that I have never been much in love; for had I really experienced that
her a very good sort of girl. There can be no love in all this. My
interesting object to all my acquaintance, were I distractedly in love
making love to a girl whom he did not care about, and who was equally

```



```
ajtavarez@cis106:~/Documents/Books$ grep -ni '^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."
```

```
ajtavarez@cis106:~/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

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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

CHAPTER IX. Mina Murray's Journal

CHAPTER X. Mina Murray's Journal

CHAPTER XI. Lucy Westenra's Diary

CHAPTER XII. Dr. Seward's Diary

CHAPTER XIII. Dr. Seward's Diary

CHAPTER XIV. Mina Harker's Journal

CHAPTER XV. Dr. Seward's Diary

CHAPTER XVI. Dr. Seward's Diary

CHAPTER XVII. Dr. Seward's Diary

CHAPTER XVIII. Dr. Seward's Diary

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CHAPTER XXI. Dr. Seward's Diary

CHAPTER XXII. Jonathan Harker's Journal

CHAPTER XXIII. Dr. Seward's Diary

CHAPTER XXIV. Dr. Seward's Phonograph Diary, spoken by Van Helsing

CHAPTER XXV. Dr. Seward's Diary

CHAPTER XXVI. Dr. Seward's Diary

CHAPTER XXVII. Mina Harker's Journal

How these papers have been placed in sequence will be made manifest in

DRACULA

CHAPTER I

JONATHAN HARKER'S JOURNAL

Vienna early next morning; should have arrived at 6:46, but train was an

East; the most western of splendid bridges over the Danube, which is

We left in pretty good time, and came after nightfall to Klausenburgh.

Here I stopped for the night at the Hotel Royale. I had for dinner, or

Carpathians. I found my smattering of German very useful here; indeed, I

Having had some time at my disposal when in London, I had visited the

British Museum, and made search among the books and maps in the library

Transylvania, Moldavia and Bukovina, in the midst of the Carpathian

Castle Dracula, as there are no maps of this country as yet to compare

In the population of Transylvania there are four distinct nationalities:

Question #5


```
ajtavarez@cisi106:~/Documents/Books$ awk -F ';' '{print $1,$NF}' ../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
Plymouth Duster US
AMC Hornet US
Ford Maverick US
Datsun PL510 Japan
Volkswagen 1131 Deluxe Sedan Europe
Peugeot 504 Europe
Audi 100 LS Europe
Saab 99e Europe
BMW 2002 Europe
AMC Gremlin US
Ford F250 US
Chevy C20 US
Dodge D200 US
Hi 1200D US
Datsun PL510 Japan
Chevrolet Vega 2300 US
Toyota Corolla Japan
Ford Pinto US
Volkswagen Super Beetle 117 Europe
AMC Gremlin US
Plymouth Satellite Custom US
Chevrolet Chevelle Malibu US
Ford Torino 500 US
AMC Matador US
Chevrolet Impala US
Pontiac Catalina Brougham US
Ford Galaxie 500 US
```

```
made in Chevy 340,310,4,115,0,02,00,2720,19,4,02,00
ajtavarez@cisi106:~/Documents/Books$ awk -F ';' '{OFS=" made in "} {print $1,$NF}' ../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
Ford Torino (sw) made in US
Plymouth Satellite (sw) made in US
AMC Rebel SST (sw) made in US
Dodge Challenger SE made in US
Plymouth 'Cuda 340 made in US
Ford Mustang Boss 302 made in US
Chevrolet Monte Carlo made in US
Buick Estate Wagon (sw) made in US
Toyota Corolla Mark ii made in Japan
Plymouth Duster made in US
AMC Hornet made in US
Ford Maverick made in US
Datsun PL510 made in Japan
```

```

Datsun PL510 made in Japan
Volkswagen 1131 Deluxe Sedan made in Europe
Peugeot 504 made in Europe
Audi 100 LS made in Europe
Saab 99e made in Europe
BMW 2002 made in Europe
AMC Gremlin made in US
Ford F250 made in US
Chevy C20 made in US
Dodge D200 made in US
Hi 1200D made in US
Datsun PL510 made in Japan
Chevrolet Vega 2300 made in US
Toyota Corolla made in Japan
Ford Pinto made in US
Volkswagen Super Beetle 117 made in Europe
AMC Gremlin made in US
Plymouth Satellite Custom made in US
Chevrolet Chevelle Malibu made in US
Ford Torino 500 made in US
AMC Matador made in US
Chevrolet Impala made in US
Pontiac Catalina Brougham made in US

```

```

ajtavarez@cisl06:~/Documents/Books$ awk -F ';' '{print "The" , $1, " has ", $3, " cylinders", " and is made in ", $NF}' ../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
The Dodge Challenger SE has 8 cylinders and is made in US
The Plymouth 'Cuda 340 has 8 cylinders and is made in US
The Ford Mustang Boss 302 has 8 cylinders and is made in US
The Chevrolet Monte Carlo has 8 cylinders and is made in US
The Buick Estate Wagon (sw) has 8 cylinders and is made in US
The Toyota Corolla Mark ii has 4 cylinders and is made in Japan
The Plymouth Duster has 6 cylinders and is made in US
The AMC Hornet has 6 cylinders and is made in US
The Ford Maverick has 6 cylinders and is made in US
The Datsun PL510 has 4 cylinders and is made in Japan
The Volkswagen 1131 Deluxe Sedan has 4 cylinders and is made in Europe
The Peugeot 504 has 4 cylinders and is made in Europe
The Audi 100 LS has 4 cylinders and is made in Europe
The Saab 99e has 4 cylinders and is made in Europe
The BMW 2002 has 4 cylinders and is made in Europe
The AMC Gremlin has 6 cylinders and is made in US
The Ford F250 has 8 cylinders and is made in US
The Chevy C20 has 8 cylinders and is made in US
The Dodge D200 has 8 cylinders and is made in US
The Hi 1200D has 8 cylinders and is made in US
The Datsun PL510 has 4 cylinders and is made in Japan
The Chevrolet Vega 2300 has 4 cylinders and is made in US
The Toyota Corolla has 4 cylinders and is made in Japan
The Ford Pinto has 4 cylinders and is made in US
The Volkswagen Super Beetle 117 has 4 cylinders and is made in Europe
The AMC Gremlin has 6 cylinders and is made in US
The Plymouth Satellite Custom has 6 cylinders and is made in US
The Chevrolet Chevelle Malibu has 6 cylinders and is made in US
The Ford Torino 500 has 6 cylinders and is made in US
The AMC Matador has 6 cylinders and is made in US
The Chevrolet Impala has 8 cylinders and is made in US
The Pontiac Catalina Brougham has 8 cylinders and is made in US
The Ford Galaxie 500 has 8 cylinders and is made in US

```



```

ajtavarez@cis106:~/Documents/Csv$ awk 'NR > 3 {print}' 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
Plymouth Satellite (sw);0;8;383.0;175.0;4166.;10.5;70;US
AMC Rebel SST (sw);0;8;360.0;175.0;3850.;11.0;70;US
Dodge Challenger SE;15.0;8;383.0;170.0;3563.;10.0;70;US
Plymouth 'Cuda 340;14.0;8;340.0;160.0;3609.;8.0;70;US
Ford Mustang Boss 302;0;8;302.0;140.0;3353.;8.0;70;US
Chevrolet Monte Carlo;15.0;8;400.0;150.0;3761.;9.5;70;US
Buick Estate Wagon (sw);14.0;8;455.0;225.0;3086.;10.0;70;US
Toyota Corolla Mark ii;24.0;4;113.0;95.00;2372.;15.0;70;Japan
Plymouth Duster;22.0;6;198.0;95.00;2833.;15.5;70;US
AMC Hornet;18.0;6;199.0;97.00;2774.;15.5;70;US
Ford Maverick;21.0;6;200.0;85.00;2587.;16.0;70;US
Datsun PL510;27.0;4;97.00;88.00;2130.;14.5;70;Japan
Volkswagen 1131 Deluxe Sedan;26.0;4;97.00;46.00;1835.;20.5;70;Europe
Peugeot 504;25.0;4;110.0;87.00;2672.;17.5;70;Europe
Audi 100 LS;24.0;4;107.0;90.00;2430.;14.5;70;Europe
Saab 99e;25.0;4;104.0;95.00;2375.;17.5;70;Europe
BMW 2002;26.0;4;121.0;113.0;2234.;12.5;70;Europe
AMC Gremlin;21.0;6;199.0;90.00;2648.;15.0;70;US
Ford F250;10.0;8;360.0;215.0;4615.;14.0;70;US
Chevy C20;10.0;8;307.0;200.0;4376.;15.0;70;US
Dodge D200;11.0;8;318.0;210.0;4382.;13.5;70;US
Hi 1200D;9.0;8;304.0;193.0;4732.;18.5;70;US
Datsun PL510;27.0;4;97.00;88.00;2130.;14.5;71;Japan
Chevrolet Vega 2300;28.0;4;140.0;90.00;2264.;15.5;71;US
Toyota Corolla;25.0;4;113.0;95.00;2228.;14.0;71;Japan
Ford Pinto;25.0;4;98.00;0;2046.;19.0;71;US
Volkswagen Super Beetle 117;0;4;97.00;48.00;1978.;20.0;71;Europe
AMC Gremlin;19.0;6;232.0;100.0;2634.;13.0;71;US
Plymouth Satellite Custom;16.0;6;225.0;105.0;3439.;15.5;71;US
Chevrolet Chevelle Malibu;17.0;6;250.0;100.0;3329.;15.5;71;US
Ford Torino 500;19.0;6;250.0;88.00;3302.;15.5;71;US
AMC Matador;18.0;6;232.0;100.0;3288.;15.5;71;US
Chevrolet Impala;14.0;8;350.0;165.0;4209.;12.0;71;US
Pontiac Catalina Brougham;14.0;8;400.0;175.0;4464.;11.5;71;US
Ford Galaxie 500;14.0;8;351.0;153.0;4154.;13.5;71;US

```

```

ajtavarez@cis106:~/Documents/Books$ sed 's/Dracula/Alucard/g' dracula.txt_

```

```
ajtavarez@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

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

uidd:x:107:116:./run/uidd:/usr/sbin/nologin
```

```
ajtavarez@cis106:~$ sed '/^$/d;G' ~/Documents/Books/pride-and-prejudice.txt _
```

Question #6

```
ajtavarez@cis106:~$ grep "/bin/bash" /etc/passwd
root:x:0:0:root:/root:/bin/bash
ajtavarez:x:1000:1000:aramysjr,,,:/home/ajtavarez:/bin/bash
ajtavarez@cis106:~$ grep "/bin/bash" /etc/passwd | wc -l
2
ajtavarez@cis106:~$ _
```

```
ajtavarez@cis106:~$ grep "/sbin/nologin" /etc/passwd | wc -l
40
ajtavarez@cis106:~$ _
```

```

ajtavarez@cis106:~/Documents/Csv$ grep -i 'ford' cars.csv
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
Ford Torino (sw);0;8;351.0;153.0;4034.;11.0;70;US
Ford Mustang Boss 302;0;8;302.0;140.0;3353.;8.0;70;US
Ford Maverick;21.0;6;200.0;85.00;2587.;16.0;70;US
Ford F250;10.0;8;360.0;215.0;4615.;14.0;70;US
Ford Pinto;25.0;4;98.00;0;2046.;19.0;71;US
Ford Torino 500;19.0;6;250.0;88.00;3302.;15.5;71;US
Ford Galaxie 500;14.0;8;351.0;153.0;4154.;13.5;71;US
Ford Country Squire (sw);13.0;8;400.0;170.0;4746.;12.0;71;US
Ford Mustang;18.0;6;250.0;88.00;3139.;14.5;71;US
Ford Pinto Runabout;21.0;4;122.0;86.00;2226.;16.5;72;US
Ford Galaxie 500;14.0;8;351.0;153.0;4129.;13.0;72;US
Ford Gran Torino (sw);13.0;8;302.0;140.0;4294.;16.0;72;US
Ford Pinto (sw);22.0;4;122.0;86.00;2395.;16.0;72;US
Ford Gran Torino;14.0;8;302.0;137.0;4042.;14.5;73;US
Ford LTD;13.0;8;351.0;158.0;4363.;13.0;73;US
Ford Maverick;18.0;6;250.0;88.00;3021.;16.5;73;US
Ford Country;12.0;8;400.0;167.0;4906.;12.5;73;US
Ford Pinto;19.0;4;122.0;85.00;2310.;18.5;73;US
Ford Maverick;21.0;6;200.0;0;2875.;17.0;74;US
Ford Pinto;26.0;4;122.0;80.00;2451.;16.5;74;US
Ford Gran Torino;16.0;8;302.0;140.0;4141.;14.0;74;US
Ford Gran Torino (sw);14.0;8;302.0;140.0;4638.;16.0;74;US
Ford Maverick;15.0;6;250.0;72.00;3158.;19.5;75;US
Ford LTD;14.0;8;351.0;148.0;4657.;13.5;75;US
Ford Mustang II;13.0;8;302.0;129.0;3169.;12.0;75;US
Ford Pinto;23.0;4;140.0;83.00;2639.;17.0;75;US
Ford Pinto;18.0;6;171.0;97.00;2984.;14.5;75;US
Ford Gran Torino;14.5;8;351.0;152.0;4215.;12.8;76;US
Ford Maverick;24.0;6;200.0;81.00;3012.;17.6;76;US
Ford Grenada ghia;18.0;6;250.0;78.00;3574.;21.0;76;US
Ford Pinto;26.5;4;140.0;72.00;2565.;13.6;76;US
Ford F108;13.0;8;302.0;130.0;3870.;15.0;76;US
Ford Grenada;18.5;6;250.0;98.00;3525.;19.0;77;US
Ford Thunderbird;16.0;8;351.0;149.0;4335.;14.5;77;US
Ford Mustang II 2+2;25.5;4;140.0;89.00;2755.;15.8;77;US
Ford Fiesta;36.1;4;98.00;66.00;1800.;14.4;78;US
Ford Fairmont (auto);20.2;6;200.0;85.00;2965.;15.8;78;US
Ford Fairmont (man);25.1;4;140.0;88.00;2720.;15.4;78;US
Ford Futura;18.1;8;302.0;139.0;3205.;11.2;78;US
Ford Fairmont 4;22.3;4;140.0;88.00;2890.;17.3;79;US
Ford LTD Landau;17.6;8;302.0;129.0;3725.;13.4;79;US
Ford Country Squire (sw);15.5;8;351.0;142.0;4054.;14.3;79;US
Ford Fairmont;26.4;4;140.0;88.00;2870.;18.1;80;US
Ford Mustang Cobra;23.6;4;140.0;0;2905.;14.3;80;US
Ford Escort 4W;34.4;4;98.00;65.00;2045.;16.2;81;US
Ford Escort 2H;29.9;4;98.00;65.00;2380.;20.7;81;US
Ford Grenada gl;20.2;6;200.0;88.00;3060.;17.1;81;US
Ford Fairmont Futura;24.0;4;140.0;92.00;2865.;16.4;82;US
Ford Grenada 1;22.0;6;232.0;112.0;2835;14.7;82;US

```

```

ajtavarez@cis106:~/Documents/Books$ grep -c '....' bible.txt
31102

```

Challenge Questions


```
ajtavarez@cis106:~/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
Clusters
Cocoa Puffs
Corn Chex
Corn Flakes
Corn Pops
Count Chocula
Cracklin' Oat Bran
Cream of Wheat (Quick)
Crispix
Crispy Wheat & Raisins
Double Chex
Froot Loops
Frosted Flakes
Frosted Mini-Wheats
Fruit & Fibre Dates, Walnuts, and Oats
Fruitful Bran
Fruity Pebbles
Golden Crisp
Golden Grahams
Grape Nuts Flakes
Grape-Nuts
Great Grains Pecan
Honey Graham Ohs
Honey Nut Cheerios
Honey-comb
Just Right Crunchy Nuggets
Just Right Fruit & Nut
Kix
Life
Lucky Charms
Maypo
Muesli Raisins, Dates, & Almonds
Muesli Raisins, Peaches, & Pecans
Mueslix Crispy Blend
Multi-Grain Cheerios
Nut&Honey Crunch
Nutri-Grain Almond-Raisin
Nutri-grain Wheat
Oatmeal Raisin Crisp
```

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



Cocoa Puffs
Corn Chex
Corn Flakes
Corn Pops
Count Chocula
Cracklin' Oat Bran
Cream of Wheat (Quick)
Crispix
Crispy Wheat & Raisins
Double Chex
Froot Loops
Frosted Flakes
Frosted Mini-Wheats
Fruit & Fibre Dates, Walnuts, and Oats
Fruitful Bran
Fruity Pebbles
Golden Crisp
Golden Grahams
Grape-Nuts
Grape Nuts Flakes
Great Grains Pecan
Honey-comb
Honey Graham Ohs
Honey Nut Cheerios
Just Right Crunchy Nuggets
Just Right Fruit & Nut
Kix
Life
Lucky Charms
Maypo
Muesli Raisins, Dates, & Almonds
Muesli Raisins, Peaches, & Pecans
Mueslix Crispy Blend
Multi-Grain Cheerios
Nut&Honey Crunch
Nutri-Grain Almond-Raisin
Nutri-grain Wheat
Oatmeal Raisin Crisp
Post-Nut Raisin Bran

```
ajtavarez@cis106:~/Documents/CSV$ awk -F ';' '{print "The " , $1, " has " , $4, " calories" }' cereal.csv
The name has calories calories
The String has Int calories
The 100% Bran has 70 calories
The 100% Natural Bran has 120 calories
The All-Bran has 70 calories
The All-Bran with Extra Fiber has 50 calories
The Almond Delight has 110 calories
The Apple Cinnamon Cheerios has 110 calories
The Apple Jacks has 110 calories
The Basic 4 has 130 calories
The Bran Chex has 90 calories
The Bran Flakes has 90 calories
The Cap'n Crunch has 120 calories
The Cheerios has 110 calories
The Cinnamon Toast Crunch has 120 calories
The Clusters has 110 calories
The Cocoa Puffs has 110 calories
The Corn Chex has 110 calories
The Corn Flakes has 100 calories
The Corn Pops has 110 calories
The Count Chocula has 110 calories
The Cracklin' Oat Bran has 110 calories
The Cream of Wheat (Quick) has 100 calories
The Crispix has 110 calories
The Crispy Wheat & Raisins has 100 calories
The Double Chex has 100 calories
The Froot Loops has 110 calories
The Frosted Flakes has 110 calories
The Frosted Mini-Wheats has 100 calories
The Fruit & Fibre Dates, Walnuts, and Oats has 120 calories
The Fruitful Bran has 120 calories
The Fruity Pebbles has 110 calories
The Golden Crisp has 100 calories
The Golden Grahams has 110 calories
The Grape Nuts Flakes has 100 calories
The Grape-Nuts has 110 calories
The Great Grains Pecan has 120 calories
The Honey Graham Ohs has 120 calories
The Honey Nut Cheerios has 110 calories
The Honey-comb has 110 calories
The Just Right Crunchy Nuggets has 110 calories
The Just Right Fruit & Nut has 140 calories
The Kix has 110 calories
The Life has 100 calories
The Lucky Charms has 110 calories
The Maypo has 100 calories
The Muesli Raisins, Dates, & Almonds has 150 calories
The Muesli Raisins, Peaches, & Pecans has 150 calories
The Mueslix Crispy Blend has 160 calories
The Multi-Grain Cheerios has 100 calories
The Nut&Honey Crunch has 120 calories
```