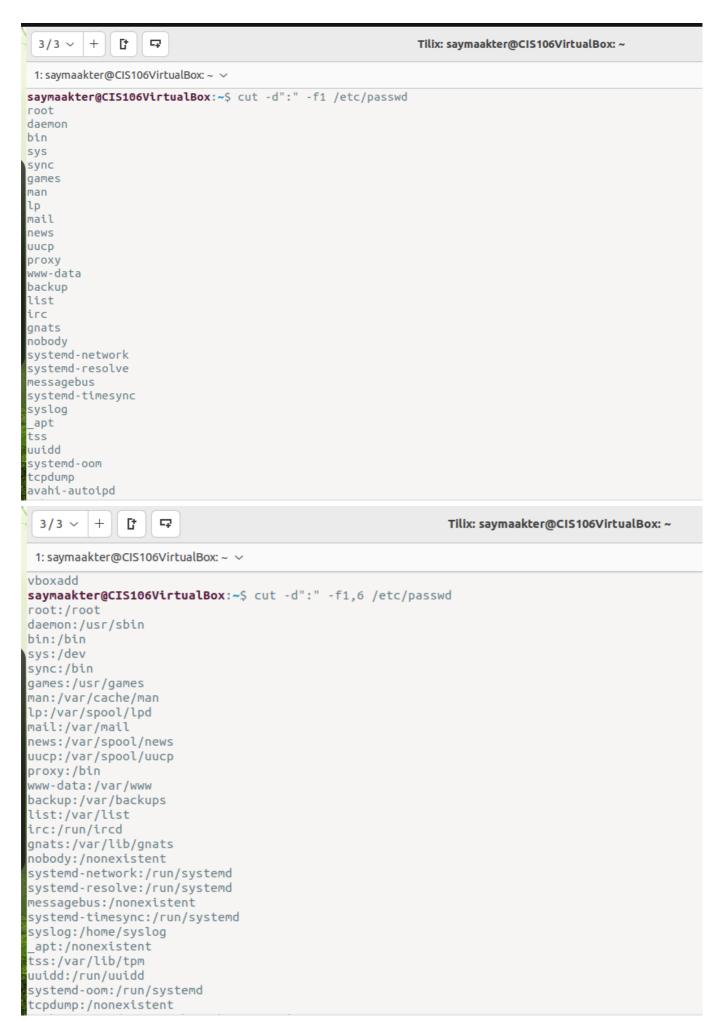
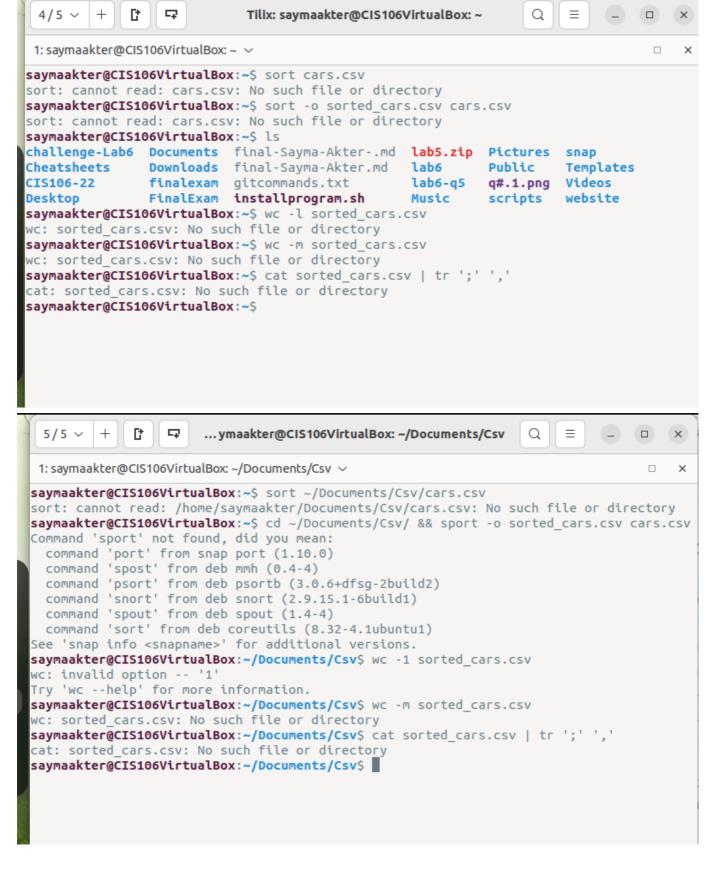
lab 7

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                                                         Tilix: saymaakter@CIS106VirtualBox: ~
 1: savmaakter@CIS106VirtualBox: ~ ~
saymaakter@CIS106VirtualBox:~$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
messagebus:x:102:105::/nonexistent:/usr/sbin/nologin
systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
syslog:x:104:111::/home/syslog:/usr/sbin/nologin
_apt:x:105:65534::/nonexistent:/usr/sbin/nologin
tss:x:106:112:TPM software stack,,,:/var/lib/tpm:/bin/false
uuidd:x:107:115::/run/uuidd:/usr/sbin/nologin
systemd-oom:x:108:116:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin
tcpdump:x:109:117::/nonexistent:/usr/sbin/nologin
avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
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                                                                Tilix: saymaakter@CIS106VirtualBox: ~
 1: saymaakter@CIS106VirtualBox: ~ ~
vboxadd:x:999:1::/var/run/vboxadd:/bin/false
saymaakter@CIS106VirtualBox:~$ tac /etc/passwd
vboxadd:x:999:1::/var/run/vboxadd:/bin/false
saymaakter:x:1000:1000:Sayma Akter,,,:/home/saymaakter:/bin/bash
gdm:x:127:133:Gnome Display Manager:/var/lib/gdm3:/bin/false
hplip:x:126:7:HPLIP system user,,,:/run/hplip:/bin/false
gnome-initial-setup:x:125:65534::/run/gnome-initial-setup/:/bin/false
pulse:x:124:131:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin
geoclue:x:123:130::/var/lib/geoclue:/usr/sbin/nologin
colord:x:122:129:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
saned:x:121:128::/var/lib/saned:/usr/sbin/nologin
nm-openvpn:x:120:126:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/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:109:117::/nonexistent:/usr/sbin/nologin
systemd-oom:x:108:116:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin
uuidd:x:107:115::/run/uuidd:/usr/sbin/nologin
tss:x:106:112: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
```

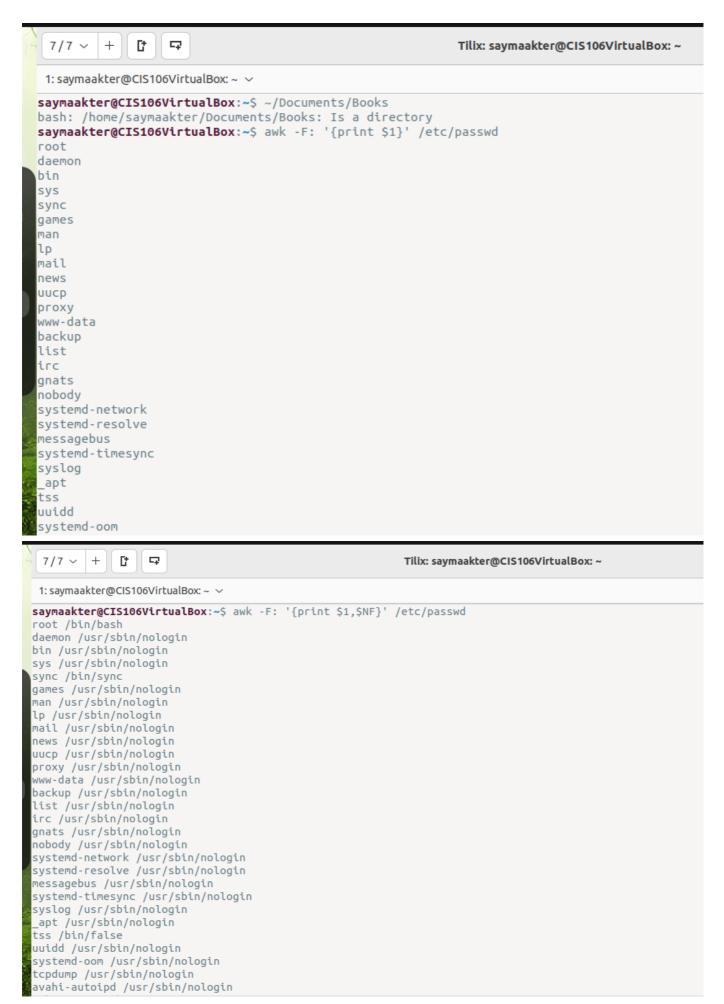
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                                                       Tilix: saymaakter@CIS106VirtualBox: ~
 1: saymaakter@CIS106VirtualBox: ~ ~
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
root:x:0:0:root:/root:/bin/bash
saymaakter@CIS106VirtualBox:~$ cat -nE/etc/passwd
cat: invalid option -- '/'
Try 'cat --help' for more information.
saymaakter@CIS106VirtualBox:~$ 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/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$
       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$
       syslog:x:104:111::/home/syslog:/usr/sbin/nologin$
       _apt:x:105:65534::/nonexistent:/usr/sbin/nologin$
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                                                               Tilix: saymaakter@CIS106VirtualBox
 1: saymaakter@CIS106VirtualBox: ~ ~
        geoclue:x:123:130::/var/lib/geoclue:/usr/sbin/nologin$
        pulse:x:124:131:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin$
        gnome-initial-setup:x:125:65534::/run/gnome-initial-setup/:/bin/false$
    45 hplip:x:126:7:HPLIP system user,,,:/run/hplip:/bin/false$
    46 gdm:x:127:133:Gnome Display Manager:/var/lib/gdm3:/bin/false$
    47 saymaakter:x:1000:1000:Sayma Akter,,,:/home/saymaakter:/bin/bash$
    48 vboxadd:x:999:1::/var/run/vboxadd:/bin/false$
saymaakter@CIS106VirtualBox:~$ 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
saymaakter@CIS106VirtualBox:~$ 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
saymaakter@CIS106VirtualBox:~$ tail -5 /etc/passwd
gnome-initial-setup:x:125:65534::/run/gnome-initial-setup/:/bin/false
hplip:x:126:7:HPLIP system user,,,:/run/hplip:/bin/false
gdm:x:127:133:Gnome Display Manager:/var/lib/gdm3:/bin/false
saymaakter:x:1000:1000:Sayma Akter,,,:/home/saymaakter:/bin/bash
vboxadd:x:999:1::/var/run/vboxadd:/bin/false
saymaakter@CIS106VirtualBox:~$ tail -1 /etc/passwd
vboxadd:x:999:1::/var/run/vboxadd:/bin/false
saymaakter@CIS106VirtualBox:~$ head -1 /etc/passwd
root:x:0:0:root:/root:/bin/bash
saymaakter@CIS106VirtualBox:~$
```

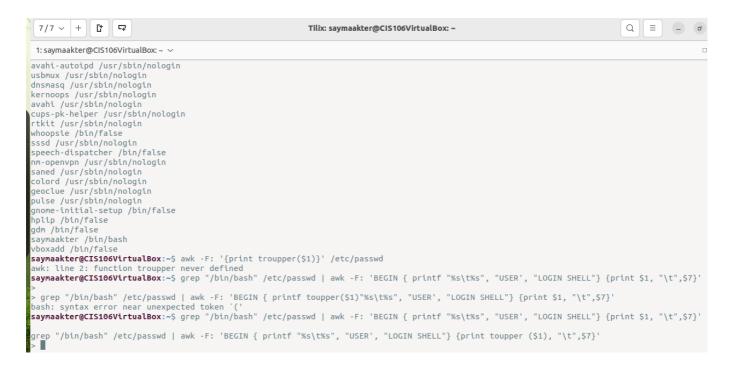


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                   Tilix: saymaakter@CIS106VirtualBox: ~
 1: saymaakter@CIS106VirtualBox: ~ ~
saymaakter@CIS106VirtualBox:~$ cut -d":" -f1,6,7 --output-delimiter=" > " /etc/passwd
root > /root > /bin/bash
daemon > /usr/sbin > /usr/sbin/nologin
bin > /bin > /usr/sbin/nologin
sys > /dev > /usr/sbin/nologin
sync > /bin > /bin/sync
games > /usr/games > /usr/sbin/nologin
man > /var/cache/man > /usr/sbin/nologin
lp > /var/spool/lpd > /usr/sbin/nologin
mail > /var/mail > /usr/sbin/nologin
news > /var/spool/news > /usr/sbin/nologin
uucp > /var/spool/uucp > /usr/sbin/nologin
proxy > /bin > /usr/sbin/nologin
www-data > /var/www > /usr/sbin/nologin
backup > /var/backups > /usr/sbin/nologin
list > /var/list > /usr/sbin/nologin
irc > /run/ircd > /usr/sbin/nologin
gnats > /var/lib/gnats > /usr/sbin/nologin
nobody > /nonexistent > /usr/sbin/nologin
systemd-network > /run/systemd > /usr/sbin/nologin
systemd-resolve > /run/systemd > /usr/sbin/nologin
messagebus > /nonexistent > /usr/sbin/nologin
systemd-timesync > /run/systemd > /usr/sbin/nologin
syslog > /home/syslog > /usr/sbin/nologin
_apt > /nonexistent > /usr/sbin/nologin
tss > /var/lib/tpm > /bin/false
uuidd > /run/uuidd > /usr/sbin/nologin
systemd-oom > /run/systemd > /usr/sbin/nologin
tcpdump > /nonexistent > /usr/sbin/nologin
avahi-autoipd > /var/lib/avahi-autoipd > /usr/sbin/nologin
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                                                           Tilix: saymaakter@CIS106VirtualBox: ~
 1: saymaakter@CIS106VirtualBox: ~ ~
 systemd-oom > /run/systemd > /usr/sbin/nologin
 tcpdump > /nonexistent > /usr/sbin/nologin
 avahi-autoipd > /var/lib/avahi-autoipd > /usr/sbin/nologin
usbmux > /var/lib/usbmux > /usr/sbin/nologin
dnsmasq > /var/lib/misc > /usr/sbin/nologin
 kernoops > / > /usr/sbin/nologin
 avahi > /run/avahi-daemon > /usr/sbin/nologin
 cups-pk-helper > /home/cups-pk-helper > /usr/sbin/nologin
 rtkit > /proc > /usr/sbin/nologin
 whoopsie > /nonexistent > /bin/false
 sssd > /var/lib/sss > /usr/sbin/nologin
 speech-dispatcher > /run/speech-dispatcher > /bin/false
 nm-openvpn > /var/lib/openvpn/chroot > /usr/sbin/nologin
saned > /var/lib/saned > /usr/sbin/nologin
 colord > /var/lib/colord > /usr/sbin/nologin
 geoclue > /var/lib/geoclue > /usr/sbin/nologin
 pulse > /run/pulse > /usr/sbin/nologin
 gnome-initial-setup > /run/gnome-initial-setup/ > /bin/false
 hplip > /run/hplip > /bin/false
 gdm > /var/lib/gdm3 > /bin/false
 saymaakter > /home/saymaakter > /bin/bash
 vboxadd > /var/run/vboxadd > /bin/false
 saymaakter@CIS106VirtualBox:~$ cut -d";" -f1 ~/Documents/Csv/cereal.csv
 cut: /home/saymaakter/Documents/Csv/cereal.csv: No such file or directory
 saymaakter@CIS106VirtualBox:~$ head -1 ~/Documents/Csv/cereal.csv
 head: cannot open '/home/saymaakter/Documents/Csv/cereal.csv' for reading: No such file or directory
 saymaakter@CIS106VirtualBox:~$ cut -d";" -f1,4 --output-delimeter=" calories = " ~/Documents/Csv/cereal.csv
 cut: unrecognized option '--output-delimeter= calories =
 Try 'cut --help' for more information.
 saymaakter@CIS106VirtualBox:~$
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                                                             Tilix: saymaakter@CIS106VirtualBox: ~
 1: saymaakter@CIS106VirtualBox: ~ ~
saymaakter@CIS106VirtualBox:~$ ~/Documents/Csv
bash: /home/saymaakter/Documents/Csv: Is a directory
saymaakter@CIS106VirtualBox:~$ grep -i 'honda' cars.csv | sed 's/Honda/tesla/g'
grep: cars.csv: No such file or directory
saymaakter@CIS106VirtualBox:~$ grep -i 'honda' cars.csv | sed '1,3 s/Honda/tesla/g'
grep: cars.csv: No such file or directory
saymaakter@CIS106VirtualBox:~$ sed 'Honda/d' cars.csv
sed: -e expression #1, char 2: extra characters after command
saymaakter@CIS106VirtualBox:~$ grep -i 'honda civic' cars.csv | sed G
grep: cars.csv: No such file or_directory
saymaakter@CIS106VirtualBox:~$
 2: saymaakter@CIS106VirtualBox: ~ ~
saymaakter@CIS106VirtualBox:~$ 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
saymaakter@CIS106VirtualBox:~$ grep "/bin/bash" /etc/passwd
root:x:0:0:root:/root:/bin/bash
saymaakter:x:1000:1000:Sayma Akter,,,:/home/saymaakter:/bin/bash
saymaakter@CIS106VirtualBox:~$ grep "/bin/bash" /etc/passwd | wc -l
saymaakter@CIS106VirtualBox:~$ grep -c "/bin/bash"/ /etc/passwd
saymaakter@CIS106VirtualBox:~$
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                                                  Tilix: saymaakter@CIS106VirtualBox: ~/Documents/Csv
 1: saymaakter@CIS106VirtualBox: ~ ~
saymaakter@CIS106VirtualBox:~$ ~/Documents/Csv
bash: /home/saymaakter/Documents/Csv: Is a directory
saymaakter@CIS106VirtualBox:~$ grep -i 'honda' cars.csv | sed 's/Honda/tesla/g'
grep: cars.csv: No such file or directory
saymaakter@CIS106VirtualBox:~$ grep -i 'honda' cars.csv | sed '1,3 s/Honda/tesla/g'
grep: cars.csv: No such file or directory
saymaakter@CIS106VirtualBox:~$ sed 'Honda/d' cars.csv
sed: -e expression #1, char 2: extra characters after command
saymaakter@CIS106VirtualBox:~$ grep -i 'honda civic' cars.csv | sed G
grep: cars.csv: No such file or directory
saymaakter@CIS106VirtualBox:~$
 2: saymaakter@CIS106VirtualBox: ~/Documents/Csv ~
saymaakter@CIS106VirtualBox:~/Documents/Csv$ grep -l
Usage: grep [OPTION]... PATTERNS [FILE]...
Try 'grep --help' for more information.
saymaakter@CIS106VirtualBox:~/Documents/Csv$ grep -l 'ford' cars.csv
grep: cars.csv: No such file or directory
saymaakter@CIS106VirtualBox:~/Documents/Csv$ grep -l 'ford' cars.csv | wc -l
grep: cars.csv: No such file or directory
saymaakter@CIS106VirtualBox:~/Documents/Csv$ clear
```



Challenge Question

```
Tilix: saymaakter@CIS106VirtualBox:~

1:saymaakter@CIS106VirtualBox:~$ head -1 cereal.csv
head: cannot open 'cereal.csv' for reading: No such file or directory
saymaakter@CIS106VirtualBox:~$ awk 'NR > 3 {print}' cars.csv | sort > cars-no-header.csv
awk: cannot open cars.csv (No such file or directory)
saymaakter@CIS106VirtualBox:~$ cat cars-no-header.csv | tr ';' ',' | awk -F, '{print $1,$NF}'
saymaakter@CIS106VirtualBox:~$ cat cars-no-header.csv | tr ';' ',' | awk -F, '{print $1,$NF}'
saymaakter@CIS106VirtualBox:~$ cat cars-no-header.csv | tr ';' ',' | awk -F, '{print $1,$NF} > cars-brands.csv

> ls

> grep ";US" cars.csv | awk -F ';' '{print $1}' | sort > americanCars.csv
> cat americanCars.csv

> cat americanCars.csv
```