

# Lab 8

## Question 1

```
1: phernandez@cis106: ~  
phernandez@cis106:~/Documents/Books$ cd ~  
phernandez@cis106:~$ echo "All files in my home directory" > file_report.txt  
phernandez@cis106:~$ ld -Am ~ >> file_report.txt  
ld: cannot find /home/phernandez: file format not recognized  
phernandez@cis106:~$ ls -Am ~ >> file_report.txt  
phernandez@cis106:~$ cat file_report.txt  
All files in my home directory  
.ansi_codes.sh, .bash_aliases, .bash_history, .bash_logout, .bashrc, .cache,  
cis106, .config, Desktop, Documents, .dotnet, Downloads, file_report.txt,  
final-exam-submission, .fontconfig, .gitconfig, Github_cheat_sheet.txt, .gnupg,  
.lessht, .local, Music, Pictures, .pkg, .profile, Public, scripts, snap, .ssh,  
.sudo_as_admin_successful, Templates, .textFiles.sh, tfl.sh,  
.vboxclient-clipboard-tty2-control.pid, .vboxclient-clipboard-tty2-service.pid,  
.vboxclient-draganddrop-tty2-control.pid,  
.vboxclient-draganddrop-tty2-service.pid,  
.vboxclient-hostversion-tty2-control.pid, .vboxclient-seamless-tty2-control.pid,  
.vboxclient-seamless-tty2-service.pid,  
.vboxclient-vmsvga-session-tty2-control.pid,  
.vboxclient-vmsvga-session-tty2-service.pid, Videos, .vscode  
phernandez@cis106:~$
```

## Question 2

```
1: phernandez@cis106: ~  
phernandez@cis106:~$ echo "Total number of files in my home directory" >> file_report.txt  
phernandez@cis106:~$ ls -lA ~ | grep "^-" | wc -l  
22  
phernandez@cis106:~$ ls -lA ~ | grep "^." | wc -l >> file_report.txt  
phernandez@cis106:~$ echo "Total number of directories in my home directory" >> file_report.txt  
phernandez@cis106:~$ ls -lA ~ | grep "^d" | wc -l >> file_report.txt  
phernandez@cis106:~$ tail file_report.txt  
.vboxclient-draganddrop-tty2-control.pid,  
.vboxclient-draganddrop-tty2-service.pid,  
.vboxclient-hostversion-tty2-control.pid, .vboxclient-seamless-tty2-control.pid,  
.vboxclient-seamless-tty2-service.pid,  
.vboxclient-vmsvga-session-tty2-control.pid,  
.vboxclient-vmsvga-session-tty2-service.pid, Videos, .vscode  
Total number of files in my home directory  
22  
Total number of directories in my home directory  
21  
phernandez@cis106:~$
```

## Question 3

```
1: phernandez@cis106: ~  
phernandez@cis106:~$ awk -F":" '{print $1}' /etc/passwd  
root  
daemon  
bin  
sys  
sync  
games  
man  
lp  
mail  
news  
uucp
```

```
1: phernandez@cis106: ~  
phernandez@cis106:~$ awk -F":" '{print $1,$NF,$6}' /etc/passwd  
root /bin/bash /root  
daemon /usr/sbin/nologin /usr/sbin  
bin /usr/sbin/nologin /bin  
sys /usr/sbin/nologin /dev  
sync /bin/sync /bin  
games /usr/sbin/nologin /usr/games  
man /usr/sbin/nologin /var/cache/man  
lp /usr/sbin/nologin /var/spool/lpd  
mail /usr/sbin/nologin /var/mail
```

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The user speech-dispatcherlogs in with: /bin/false and its home dir is: /run/speech-dispatcher
The user fwupd-refreshlogs in with: /usr/sbin/nologin and its home dir is: /run/systemd
The user nm-openvpnlogs in with: /usr/sbin/nologin and its home dir is: /var/lib/openvpn/chroot
The user sanedlogs in with: /usr/sbin/nologin and its home dir is: /var/lib/saned
The user colordlogs in with: /usr/sbin/nologin and its home dir is: /var/lib/colord
The user geocluelogs in with: /usr/sbin/nologin and its home dir is: /var/lib/geoclue
The user pulselogs in with: /usr/sbin/nologin and its home dir is: /run/pulse
The user gnome-initial-setuplogs in with: /bin/false and its home dir is: /run/gnome-initial-setup/
The user hpliplogs in with: /bin/false and its home dir is: /run/hplip
The user gdmlogs in with: /bin/false and its home dir is: /var/lib/gdm3
The user phernandezlogs in with: /bin/bash and its home dir is: /home/fernandez
The user vboxaddlogs in with: /bin/false and its home dir is: /var/run/vboxadd
The user _flatpaklogs in with: /usr/sbin/nologin and its home dir is: /nonexistent
The user lightdmlogs in with: /bin/false and its home dir is: /var/lib/lightdm
fernandez@cis106:~$ awk -F":" '{print "The user "$1 "logs in with: "$NF, "and its home dir is: "$6}' /etc/passwd

```

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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
fernandez = /bin/bash
vboxadd = /bin/false
flatpak = /usr/sbin/nologin
lightdm = /bin/false
fernandez@cis106:~$ awk -F":" '{print $1" = "$NF}' /etc/passwd | grep "/bin/bash"
root = /bin/bash
fernandez = /bin/bash
fernandez@cis106:~$ awk -F":" '{print $1" = "$NF}' /etc/passwd | grep "/bin/bash" >> report_users.txt
fernandez@cis106:~$

```

```

The user speech-dispatcherlogs in with: /bin/false and its home dir is: /run/speech-dispatcher
The user fwupd-refreshlogs in with: /usr/sbin/nologin and its home dir is: /run/systemd
The user nm-openvpnlogs in with: /usr/sbin/nologin and its home dir is: /var/lib/openvpn/chroot
The user sanedlogs in with: /usr/sbin/nologin and its home dir is: /var/lib/saned
The user colordlogs in with: /usr/sbin/nologin and its home dir is: /var/lib/colord
The user geocluelogs in with: /usr/sbin/nologin and its home dir is: /var/lib/geoclue
The user pulselogs in with: /usr/sbin/nologin and its home dir is: /run/pulse
The user gnome-initial-setuplogs in with: /bin/false and its home dir is: /run/gnome-initial-setup/
The user hpliplogs in with: /bin/false and its home dir is: /run/hplip
The user gdmlogs in with: /bin/false and its home dir is: /var/lib/gdm3
The user phernandezlogs in with: /bin/bash and its home dir is: /home/fernandez
The user vboxaddlogs in with: /bin/false and its home dir is: /var/run/vboxadd
The user _flatpaklogs in with: /usr/sbin/nologin and its home dir is: /nonexistent
The user lightdmlogs in with: /bin/false and its home dir is: /var/lib/lightdm
root = /bin/bash
fernandez = /bin/bash
fernandez@cis106:~$ {

```

## Question 4

```
1: phernandez@cis106: ~
phernandez@cis106:~$ grep -1 "honda" ~/Documents/Csv/cars.csv > honda1.csv
phernandez@cis106:~$ head -1 ~/Documents/Csv/cars.csv > honda1.csv
phernandez@cis106:~$ cat honda1.csv
Car;MPG;Cylinders;Displacement;Horsepower;Weight;Acceleration;Model;Origin
phernandez@cis106:~$ head -i ~/Documents/Csv/cars.csv >> honda1.csv
head: invalid option -- 'i'
Try 'head --help' for more information.
phernandez@cis106:~$ grep -i "honda" ~/Documents/Csv/cars.csv >> honda1.csv
phernandez@cis106:~$ sed 's/;/,/g' honda1.csv
Car,MPG,Cylinders,Displacement,Horsepower,Weight,Acceleration,Model,Origin
Honda Civic,24.0,4,120.0,97.00,2489.,15.0,74,Japan
Honda Civic CVCC,33.0,4,91.00,53.00,1795.,17.5,75,Japan
Honda Civic,33.0,4,91.00,53.00,1795.,17.4,76,Japan
Honda Accord CVCC,31.5,4,98.00,68.00,2045.,18.5,77,Japan
Honda Civic CVCC,36.1,4,91.00,60.00,1800.,16.4,78,Japan
Honda Accord LX,29.5,4,98.00,68.00,2135.,16.6,78,Japan
Honda Civic 1500 gl,44.6,4,91.00,67.00,1850.,13.8,80,Japan
Honda Accord,32.4,4,107.0,72.00,2290.,17.0,80,Japan
Honda Civic 1300,35.1,4,81.00,60.00,1760.,16.1,81,Japan
Honda Prelude,33.7,4,107.0,75.00,2210.,14.4,81,Japan
Honda Accord,36.0,4,107.0,75.00,2205.,14.5,82,Japan
Honda Civic,38.0,4,91.00,67.00,1965.,15.0,82,Japan
Honda Civic (auto),32.0,4,91.00,67.00,1965.,15.7,82,Japan
phernandez@cis106:~$ sed 's/;/,/g' honda1.csv > honda1.csv
phernandez@cis106:~$
```

```
phernandez@cis106:~$ awk -F"," 'NR > 1 {print $1,"",$3,"",$5}' honda2.csv | sed 's/ , /,/g' | sed 's/Honda /Honda_/g' >> honda3.csv
phernandez@cis106:~$ batcat honda3.csv
Command 'batcat' not found, did you mean:
  command 'batcat' from deb bat (0.19.0-1ubuntu0.1)
  command 'patat' from deb patat (0.8.6.1-1build3)
Try: sudo apt install <deb name>
phernandez@cis106:~$ batcat honda3.csv
```

	File: honda3.csv
1	model,cylindir,hp
2	Honda_Civic,4,97.00
3	Honda_Civic CVCC,4,53.00
4	Honda_Civic,4,53.00
5	Honda_Accord CVCC,4,68.00
6	Honda_Civic CVCC,4,60.00
7	Honda_Accord LX,4,68.00
8	Honda_Civic 1500 gl,4,67.00
9	Honda_Accord,4,72.00
10	Honda_Civic 1300,4,60.00
11	Honda_Prelude,4,75.00
12	Honda_Accord,4,75.00
13	Honda_Civic,4,67.00
14	Honda_Civic (auto),4,67.00

```
phernandez@cis106:~$
```