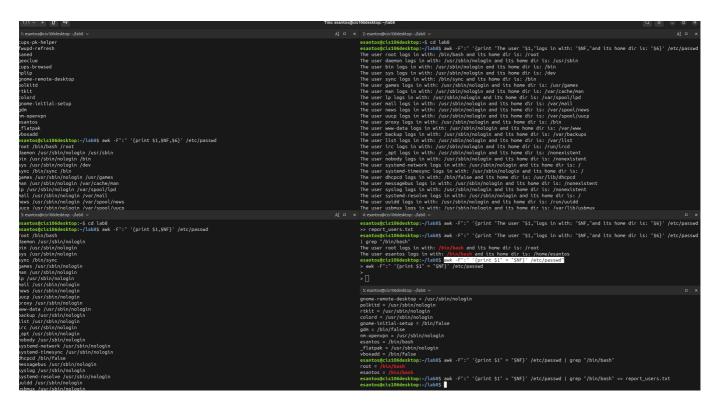# Lab 8

Question 1

```
1/1 ∨   +   ⬚   ⬚

1: esantos@cis106desktop: ~/lab8 ∨

esantos@cis106desktop:~$ mkdir lab8
esantos@cis106desktop:~$ cd lab8
esantos@cis106desktop:~/lab8$ echo "All files in my home directory" > file_report.txt
esantos@cis106desktop:~/lab8$ ls -Am ~ >> file_report.txt
esantos@cis106desktop:~/lab8$ cat file_report.txt
All files in my home directory
bash_aliases, .bash_history, .bash_logout, .bashrc, bashrc, bobsburgers, .cache,
challenge-Lab6, cis106, .config, Desktop, Documents, .dotnet, Downloads,
error_librewolfinstaller.log, .gitconfig, .gnupg, greeting.sh, lab4files, lab6,
lab8, .lesshst, .local, music, Music, Pictures, .pki, platanoSeller, potato,
practice, practice1, .profile, Public, Scripts, snap, .ssh,
.sudo_as_admin_successful, Templates, tfi.sh,
.vboxclient-clipboard-tty2-control.pid, .vboxclient-clipboard-tty2-service.pid,
.vboxclient-draganddrop-tty2-control.pid,
.vboxclient-hostversion-tty2-control.pid, .vboxclient-seamless-tty2-control.pid,
.vboxclient-vmsvga-session-tty2-control.pid,
.vboxclient-vmsvga-session-tty2-service.pid, Videos, .viminfo, .vscode, website,
website-lab5, .wget-hsts, wildcardpractice
esantos@cis106desktop:~/lab8$
```

Question 2

```
1/1 ∨   +   ⬚   ⬚                                                                    Tilix

1: esantos@cis106desktop: ~/lab8 ∨

esantos@cis106desktop:~/lab8$ echo "Total number of files in my home directory" >> file_report.txt
esantos@cis106desktop:~/lab8$ ls -lA ~ | grep "^-" | wc -l
21
esantos@cis106desktop:~/lab8$ ls -lA ~ | grep "^-" | wc -l >> file_report.txt
esantos@cis106desktop:~/lab8$ echo "Total number of directories in my home directory" >> file_report.txt
esantos@cis106desktop:~/lab8$ ls -lA ~ | grep "^d" | wc -l >> file_report.txt
esantos@cis106desktop:~/lab8$ tail file_report.txt
.vboxclient-clipboard-tty2-control.pid, .vboxclient-clipboard-tty2-service.pid,
.vboxclient-draganddrop-tty2-control.pid,
.vboxclient-hostversion-tty2-control.pid, .vboxclient-seamless-tty2-control.pid,
.vboxclient-vmsvga-session-tty2-control.pid,
.vboxclient-vmsvga-session-tty2-service.pid, Videos, .viminfo, .vscode, website,
website-lab5, .wget-hsts, wildcardpractice
Total number of files in my home directory
21
Total number of directories in my home directory
32
esantos@cis106desktop:~/lab8$
```

Question 3 part 1

Question 3 part 2

```
1: esantos@cis106desktop: ~/lab8 ∨

esantos@cis106desktop:~/lab8$ cat report_users.txt
The user root logs in with: /bin/bash and its home dir is: /root
The user daemon logs in with: /usr/sbin/nologin and its home dir is: /usr/sbin
The user bin logs in with: /usr/sbin/nologin and its home dir is: /bin
The user sys logs in with: /usr/sbin/nologin and its home dir is: /dev
The user sync logs in with: /bin/sync and its home dir is: /bin
The user games logs in with: /usr/sbin/nologin and its home dir is: /usr/games
The user man logs in with: /usr/sbin/nologin and its home dir is: /var/cache/man
The user lp logs in with: /usr/sbin/nologin and its home dir is: /var/spool/lpd
The user mail logs in with: /usr/sbin/nologin and its home dir is: /var/mail
The user news logs in with: /usr/sbin/nologin and its home dir is: /var/spool/news
The user uucp logs in with: /usr/sbin/nologin and its home dir is: /var/spool/uucp
The user proxy logs in with: /usr/sbin/nologin and its home dir is: /bin
The user www-data logs in with: /usr/sbin/nologin and its home dir is: /var/www
The user backup logs in with: /usr/sbin/nologin and its home dir is: /var/backups
The user list logs in with: /usr/sbin/nologin and its home dir is: /var/list
The user irc logs in with: /usr/sbin/nologin and its home dir is: /run/ircd
The user _apt logs in with: /usr/sbin/nologin and its home dir is: /nonexistent
The user nobody logs in with: /usr/sbin/nologin and its home dir is: /nonexistent
The user systemd-network logs in with: /usr/sbin/nologin and its home dir is: /
The user systemd-timesync logs in with: /usr/sbin/nologin and its home dir is: /
The user dhcpcd logs in with: /bin/false and its home dir is: /usr/lib/dhcpcd
The user messagebus logs in with: /usr/sbin/nologin and its home dir is: /nonexistent
The user syslog logs in with: /usr/sbin/nologin and its home dir is: /nonexistent
The user systemd-resolve logs in with: /usr/sbin/nologin and its home dir is: /
The user uuidd logs in with: /usr/sbin/nologin and its home dir is: /run/uuidd
The user usbmux logs in with: /usr/sbin/nologin and its home dir is: /var/lib/usbmux
The user tss logs in with: /bin/false and its home dir is: /var/lib/tpm
The user systemd-oom logs in with: /usr/sbin/nologin and its home dir is: /
The user kernoops logs in with: /usr/sbin/nologin and its home dir is: /
The user whoopsie logs in with: /bin/false and its home dir is: /nonexistent
The user dnsmasq logs in with: /usr/sbin/nologin and its home dir is: /var/lib/misc
The user avahi logs in with: /usr/sbin/nologin and its home dir is: /run/avahi-daemon
The user tcpdump logs in with: /usr/sbin/nologin and its home dir is: /nonexistent
The user sssd logs in with: /usr/sbin/nologin and its home dir is: /var/lib/sss
The user speech-dispatcher logs in with: /bin/false and its home dir is: /run/speech-dispatcher
The user cups-pk-helper logs in with: /usr/sbin/nologin and its home dir is: /nonexistent
The user fwupd-refresh logs in with: /usr/sbin/nologin and its home dir is: /var/lib/fwupd
The user saned logs in with: /usr/sbin/nologin and its home dir is: /var/lib/saned
The user geoclue logs in with: /usr/sbin/nologin and its home dir is: /var/lib/geoclue
The user cups-browsed logs in with: /usr/sbin/nologin and its home dir is: /nonexistent
The user hplip logs in with: /bin/false and its home dir is: /run/hplip
The user gnome-remote-desktop logs in with: /usr/sbin/nologin and its home dir is: /var/lib/gnome-remote-desktop
The user polkitd logs in with: /usr/sbin/nologin and its home dir is: /
The user rtkit logs in with: /usr/sbin/nologin and its home dir is: /proc
The user colord logs in with: /usr/sbin/nologin and its home dir is: /var/lib/colord
The user gnome-initial-setup logs in with: /bin/false and its home dir is: /run/gnome-initial-setup/
The user gdm logs in with: /bin/false and its home dir is: /var/lib/gdm3
The user nm-openvpn logs in with: /usr/sbin/nologin and its home dir is: /var/lib/openvpn/chroot
The user esantos logs in with: /bin/bash and its home dir is: /home/esantos
The user _flatpak logs in with: /usr/sbin/nologin and its home dir is: /nonexistent
The user vboxadd logs in with: /bin/false and its home dir is: /var/run/vboxadd
root = /bin/bash
esantos = /bin/bash
esantos@cis106desktop:~/lab8$
```

Question 4 part 1

```
1: esantos@cis106desktop: ~/lab8 ∨

esantos@cis106desktop:~/lab8$ head -1 ~/Documents/Csv/cars.csv > honda1.csv
esantos@cis106desktop:~/lab8$ cat honda1.csv
Car;MPG;Cylinders;Displacement;Horsepower;Weight;Acceleration;Model;Origin
esantos@cis106desktop:~/lab8$ grep -i "honda" ~/Documents/Csv/cars.csv >> honda1.csv
esantos@cis106desktop:~/lab8$ sed 's/;/,/g' honda1.csv > honda2.csv
esantos@cis106desktop:~/lab8$ cat honda2.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
esantos@cis106desktop:~/lab8$ █
```

```
2: esantos@cis106desktop: ~/Documents/Csv ∨

esantos@cis106desktop:~$ cd ~/Documents/Csv/
esantos@cis106desktop:~/Documents/Csv$ cat ~/lab8/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
esantos@cis106desktop:~/Documents/Csv$ █
```

Question 4 part 2

```
Preparing to unpack .../bat_0.24.0-1build1_amd64.deb ...
Unpacking bat (0.24.0-1build1) ...
Setting up libhttp-parser2.9:amd64 (2.9.4-6build1) ...
Setting up libgit2-1.7:amd64 (1.7.2+ds-1ubuntu3) ...
Setting up bat (0.24.0-1build1) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.3) ...
esantos@cis106desktop:~/lab8$ batcat honda3.csv
```

```
       File: honda3.csv
   1   model,cylinder,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
```

```
esantos@cis106desktop:~/lab8$
```

2: esantos@cis106desktop: ~/Documents/Csv ∨

```
Err:6 https://deb.librewolf.net focal InRelease
  400  Deprecated - Please see https://librewolf.net/debian-migration [IP: 188.245.173.137 443]
Get:7 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [7,188 B]
Get:8 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [212 B]
Get:9 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [51.9 kB]
Get:10 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [212 B]
Get:11 http://us.archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [706 kB]
Get:12 http://us.archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [151 kB]
Get:13 http://us.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 B]
Get:14 http://us.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [729 kB]
Get:15 http://us.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [309 kB]
Get:16 http://us.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 B]
Get:17 http://us.archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [208 B]
Get:18 http://us.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
Get:19 http://us.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [11.7 kB]
Get:20 http://us.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Reading package lists... Done
E: Failed to fetch https://deb.librewolf.net/dists/focal/InRelease  400  Deprecated - Please see h
E: The repository 'https://deb.librewolf.net focal InRelease' is no longer signed.
N: Updating from such a repository can't be done securely, and is therefore disabled by default.
N: See apt-secure(8) manpage for repository creation and user configuration details.
esantos@cis106desktop:~/Documents/Csv$ sudo apt install batcat
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
E: Unable to locate package batcat
esantos@cis106desktop:~/Documents/Csv$
```