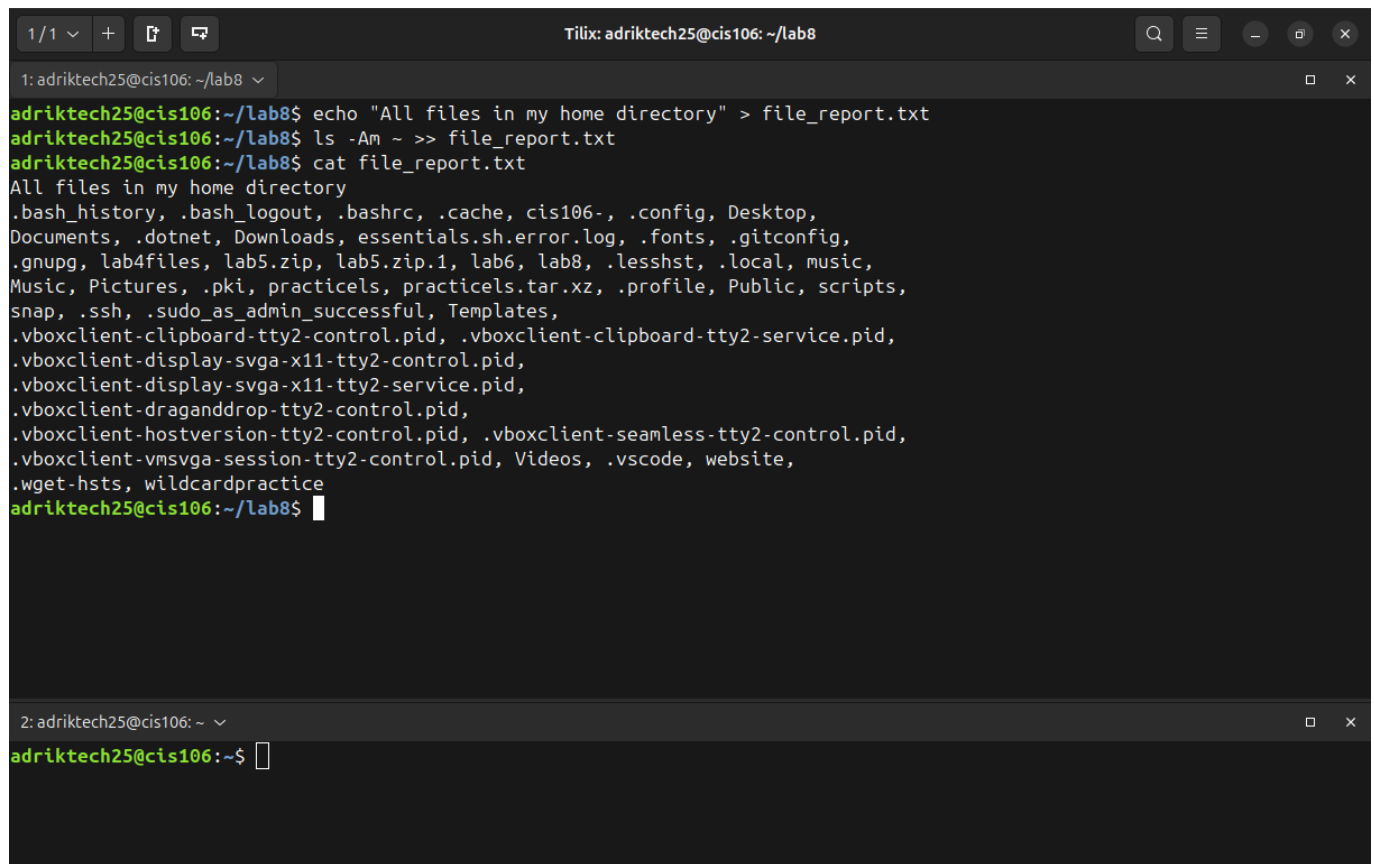


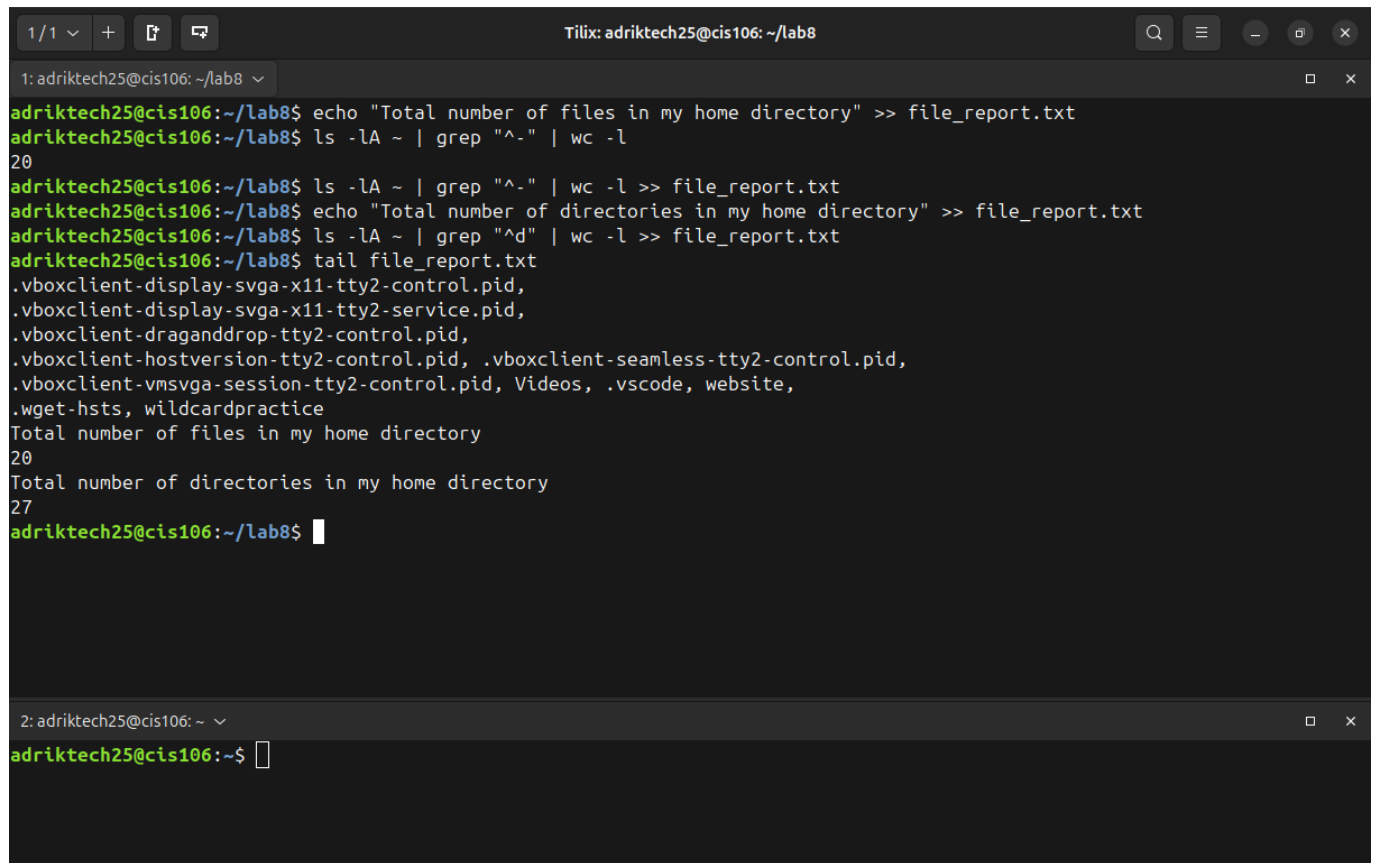
Lab 8

q1



```
Tilix: adriktech25@cis106: ~/lab8
1: adriktech25@cis106: ~/lab8
adriktech25@cis106:~/lab8$ echo "All files in my home directory" > file_report.txt
adriktech25@cis106:~/lab8$ ls -Am ~ >> file_report.txt
adriktech25@cis106:~/lab8$ cat file_report.txt
All files in my home directory
.bash_history, .bash_logout, .bashrc, .cache, cis106-, .config, Desktop,
Documents, .dotnet, Downloads, essentials.sh.error.log, .fonts, .gitconfig,
.gnupg, lab4files, lab5.zip, lab5.zip.1, lab6, lab8, .lessht, .local, music,
Music, Pictures, .pki, practicels, practicels.tar.xz, .profile, Public, scripts,
snap, .ssh, .sudo_as_admin_successful, Templates,
.vboxclient-clipboard-tty2-control.pid, .vboxclient-clipboard-tty2-service.pid,
.vboxclient-display-svgx-x11-tty2-control.pid,
.vboxclient-display-svgx-x11-tty2-service.pid,
.vboxclient-draganddrop-tty2-control.pid,
.vboxclient-hostversion-tty2-control.pid, .vboxclient-seamless-tty2-control.pid,
.vboxclient-vmvga-session-tty2-control.pid, Videos, .vscode, website,
.wget-hsts, wildcardpractice
adriktech25@cis106:~/lab8$
2: adriktech25@cis106: ~
adriktech25@cis106:~$
```

q2



The image shows a terminal window titled "Tilix: adriktech25@cis106: ~/lab8". It contains two tabs. The first tab, labeled "1: adriktech25@cis106: ~/lab8", shows a series of commands and their outputs. The commands are:
1. `echo "Total number of files in my home directory" >> file_report.txt`
2. `ls -lA ~ | grep "^-" | wc -l`, which outputs `20`.
3. `ls -lA ~ | grep "^-" | wc -l >> file_report.txt`
4. `echo "Total number of directories in my home directory" >> file_report.txt`
5. `ls -lA ~ | grep "^d" | wc -l >> file_report.txt`
6. `tail file_report.txt`, which outputs:
 `.vboxclient-display-svgx-x11-tty2-control.pid,`
 `.vboxclient-display-svgx-x11-tty2-service.pid,`
 `.vboxclient-draganddrop-tty2-control.pid,`
 `.vboxclient-hostversion-tty2-control.pid, .vboxclient-seamless-tty2-control.pid,`
 `.vboxclient-vmvga-session-tty2-control.pid, Videos, .vscode, website,`
 `.wget-hsts, wildcardpractice`
 Total number of files in my home directory
 20
 Total number of directories in my home directory
 27
The second tab, labeled "2: adriktech25@cis106: ~", shows the prompt `adriktech25@cis106:~$` with a cursor.

```
1/1 + [T] [Q] Tilix: adriktech25@cis106: ~/lab8
1: adriktech25@cis106: ~/lab8
adriktech25@cis106:~/lab8$ echo "Total number of files in my home directory" >> file_report.txt
adriktech25@cis106:~/lab8$ ls -lA ~ | grep "^-" | wc -l
20
adriktech25@cis106:~/lab8$ ls -lA ~ | grep "^-" | wc -l >> file_report.txt
adriktech25@cis106:~/lab8$ echo "Total number of directories in my home directory" >> file_report.txt
adriktech25@cis106:~/lab8$ ls -lA ~ | grep "^d" | wc -l >> file_report.txt
adriktech25@cis106:~/lab8$ tail file_report.txt
.vboxclient-display-svgx-x11-tty2-control.pid,
.vboxclient-display-svgx-x11-tty2-service.pid,
.vboxclient-draganddrop-tty2-control.pid,
.vboxclient-hostversion-tty2-control.pid, .vboxclient-seamless-tty2-control.pid,
.vboxclient-vmvga-session-tty2-control.pid, Videos, .vscode, website,
.wget-hsts, wildcardpractice
Total number of files in my home directory
20
Total number of directories in my home directory
27
adriktech25@cis106:~/lab8$

2: adriktech25@cis106: ~
adriktech25@cis106:~$
```

q3

```
Tilix: adriktech25@cis106: ~  
1: adriktech25@cis106: ~/lab8  
adriktech25@cis106:~/lab8$ awk -F":" '{print $1}' /etc/passwd  
root  
daemon  
bin  
sys  
sync  
games  
man  
lp  
mail  
news  
uucp  
proxy  
www-data  
backup  
list  
irc  
_apt  
nobody  
systemd-network  
systemd-timesync  
dhcpd  
messagebus  
syslog  
systemd-resolve  
uidd  
usbmux  
tss  
systemd-oom  
kernoops  
whoopsie  
2: adriktech25@cis106: ~  
adriktech25@cis106:~$ awk -F":" '{print $1, $NF}'  
/etc/passwd  
root /bin/bash  
daemon /usr/sbin/nologin  
bin /usr/sbin/nologin  
sys /usr/sbin/nologin  
sync /bin/sync  
games /usr/sbin/nologin  
man /usr/sbin/nologin  
lp /usr/sbin/nologin  
mail /usr/sbin/nologin  
news /usr/sbin/nologin  
uucp /usr/sbin/nologin  
proxy /usr/sbin/nologin  
www-data /usr/sbin/nologin  
backup /usr/sbin/nologin  
list /usr/sbin/nologin  
irc /usr/sbin/nologin  
_apt /usr/sbin/nologin  
nobody /usr/sbin/nologin  
systemd-network /usr/sbin/nologin  
systemd-timesync /usr/sbin/nologin  
dhcpd /bin/false  
messagebus /usr/sbin/nologin  
syslog /usr/sbin/nologin  
systemd-resolve /usr/sbin/nologin  
uidd /usr/sbin/nologin  
usbmux /usr/sbin/nologin  
tss /bin/false  
systemd-oom /usr/sbin/nologin  
kernoops /usr/sbin/nologin  
1: adriktech25@cis106: ~/lab8  
adriktech25@cis106:~/lab8$ 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  
news /usr/sbin/nologin /var/spool/news  
uucp /usr/sbin/nologin /var/spool/uucp  
proxy /usr/sbin/nologin /bin  
www-data /usr/sbin/nologin /var/www  
backup /usr/sbin/nologin /var/backups  
list /usr/sbin/nologin /var/list  
irc /usr/sbin/nologin /run/ircd  
_apt /usr/sbin/nologin /nonexistent  
nobody /usr/sbin/nologin /nonexistent  
systemd-network /usr/sbin/nologin /  
systemd-timesync /usr/sbin/nologin /  
dhcpd /bin/false /usr/lib/dhcpd  
messagebus /usr/sbin/nologin /nonexistent  
syslog /usr/sbin/nologin /nonexistent  
systemd-resolve /usr/sbin/nologin /  
uidd /usr/sbin/nologin /run/uidd  
usbmux /usr/sbin/nologin /var/lib/usbmux  
tss /bin/false /var/lib/tpm  
systemd-oom /usr/sbin/nologin /  
kernoops /usr/sbin/nologin /  
whoopsie /bin/false /nonexistent
```

```
1/1 + [T] [C] Tilix: adriktech25@cis106: ~/lab8
1: adriktech25@cis106: ~/lab8
adriktech25@cis106:~/lab8$ awk -F":" '{print "The user "$1,"logs in with: "$NF,"and its home dir is: "$6}' /etc/passwd
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 uidd logs in with: /usr/sbin/nologin and its home dir is: /run/uidd
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

1/1 + [T] [C] Tilix: adriktech25@cis106: ~/lab8
1: adriktech25@cis106: ~/lab8
adriktech25@cis106:~/lab8$ awk -F":" '{print "The user "$1,"logs in with: "$NF,"and its home dir is: "$6}' /etc/passwd > report_users.txt
adriktech25@cis106:~/lab8$ awk -F":" '{print "The user "$1,"logs in with: "$NF,"and its home dir is: "$6}' /etc/passwd | grep "/bin/bash" \> ^C
adriktech25@cis106:~/lab8$ awk -F":" '{print "The user "$1,"logs in with: "$NF,"and its home dir is: "$6}' /etc/passwd | grep "/bin/bash"
The user root logs in with: /bin/bash and its home dir is: /root
The user adriktech25 logs in with: /bin/bash and its home dir is: /home/adriktech25
adriktech25@cis106:~/lab8$ 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
proxy = /usr/sbin/nologin
www-data = /usr/sbin/nologin
backup = /usr/sbin/nologin

2: adriktech25@cis106: ~/lab8
adriktech25@cis106:~/lab8$ awk -F":" '{print $1" = "$NF}' /etc/passwd | grep "/bin/bash" >> report_users.txt
adriktech25@cis106:~/lab8$
```

```
Tilix: adriktech25@cis106: ~/lab8
1: adriktech25@cis106: ~/lab8
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 uidd logs in with: /usr/sbin/nologin and its home dir is: /run/uidd
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 adriktech25 logs in with: /bin/bash and its home dir is: /home/adriktech25
root = /bin/bash
adriktech25 = /bin/bash
adriktech25@cis106:~/lab8$
```

q4

```

1/1  +  [Icons]  Tilix: adriktech25@cis106: ~/lab8
1: adriktech25@cis106: ~/lab8
adriktech25@cis106:~/lab8$ grep -i "honda" ~/Documents/Csv/cars.csv >> honda1.csv
adriktech25@cis106:~/lab8$ 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
adriktech25@cis106:~/lab8$ sed 's/;/,/g' honda1.csv > honda2.csv
adriktech25@cis106:~/lab8$

2: adriktech25@cis106: ~
adriktech25@cis106:~$ 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

1/1  +  [Icons]  Tilix: adriktech25@cis106: ~
1: adriktech25@cis106: ~/lab8
Honda_Civic ,4 ,53.00
Honda_Accord CVCC ,4 ,68.00
Honda_Civic CVCC ,4 ,60.00
Honda_Accord LX ,4 ,68.00
Honda_Civic 1500 gl ,4 ,67.00
Honda_Accord ,4 ,72.00
Honda_Civic 1300 ,4 ,60.00
Honda_Prelude ,4 ,75.00
Honda_Accord ,4 ,75.00
Honda_Civic ,4 ,67.00
Honda_Civic (auto) ,4 ,67.00
adriktech25@cis106:~/lab8$ awk -F"," 'NR > 1 {print $1,"",$3,"",$5}' honda2.csv | sed 's/ , /,/g' | sed 's/Honda /Honda_/g'
Honda_Civic,4,97.00
Honda_Civic CVCC,4,53.00
Honda_Civic,4,53.00
Honda_Accord CVCC,4,68.00
Honda_Civic CVCC,4,60.00
Honda_Accord LX,4,68.00
Honda_Civic 1500 gl,4,67.00
Honda_Accord,4,72.00
Honda_Civic 1300,4,60.00
Honda_Prelude,4,75.00
Honda_Accord,4,75.00
Honda_Civic,4,67.00
Honda_Civic (auto),4,67.00
adriktech25@cis106:~/lab8$ awk -F"," 'NR > 1 {print $1,"",$3,"",$5}' honda2.csv | sed 's/ , /,/g' | sed 's/Honda /Honda_/g' >> honda3.csv
adriktech25@cis106:~/lab8$

2: adriktech25@cis106: ~
adriktech25@cis106:~$ cat ~/lab8/honda3.csv
model,cylinder,hp
Honda_Civic,4,97.00
Honda_Civic CVCC,4,53.00
Honda_Civic,4,53.00
Honda_Accord CVCC,4,68.00
Honda_Civic CVCC,4,60.00
Honda_Accord LX,4,68.00
Honda_Civic 1500 gl,4,67.00
Honda_Accord,4,72.00
Honda_Civic 1300,4,60.00
Honda_Prelude,4,75.00
Honda_Accord,4,75.00
Honda_Civic,4,67.00
Honda_Civic (auto),4,67.00
adriktech25@cis106:~$

```

1/1 +

Tilix: adriktech25@cis106: ~/lab8

Q ≡ -

✖

1: adriktech25@cis106: ~/lab8

adriktech25@cis106:~/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

adriktech25@cis106:~/lab8\$