

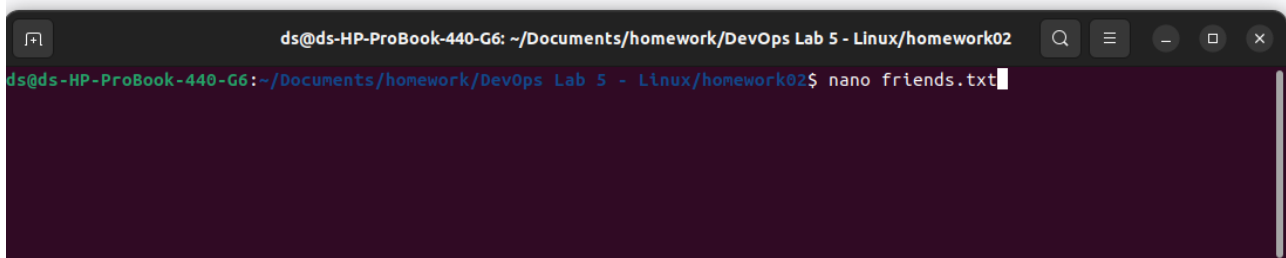
Exercise: Basic Linux & Bash commands

Exercise 01

Create a file `friends.txt` with a list of names of three of your friends on separate lines.

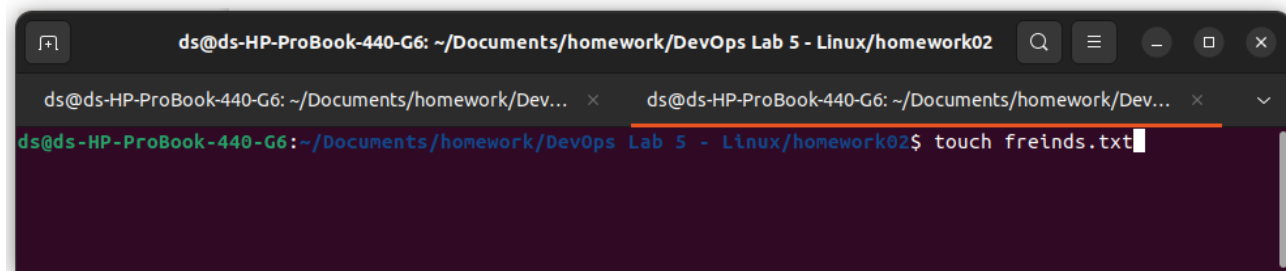
- Lets create new file using nano - text editor, open Terminal and type:

```
$ nano friends.txt
```




- Alternativly you can create new file using touch command

```
$ touch friends.txt
```



- Open the document in text editor and save using `ctrl + x` and select `y`

```
$ nano friends.txt
```



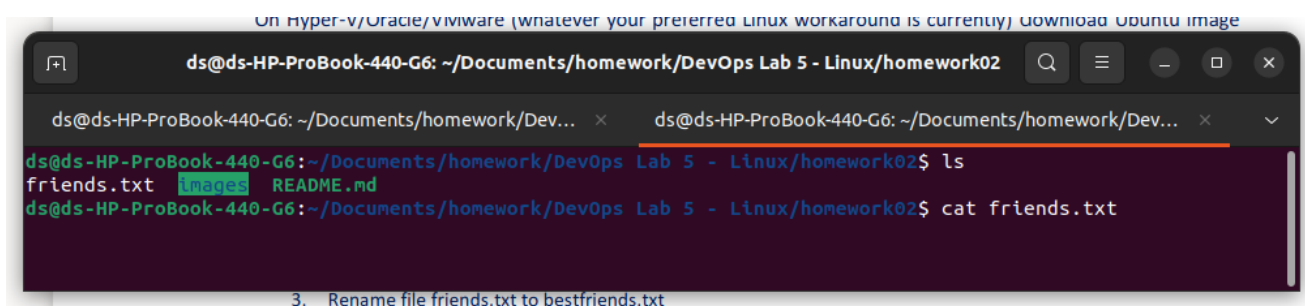
```
ds@ds-HP-ProBook-440-G6: ~/Documents/homework/DevOps Lab 5 ...
GNU nano 6.2 friends.txt *
James
Tina
Morris

Save modified buffer?
Y Yes
N No ^C Cancel
```

Exercise 02

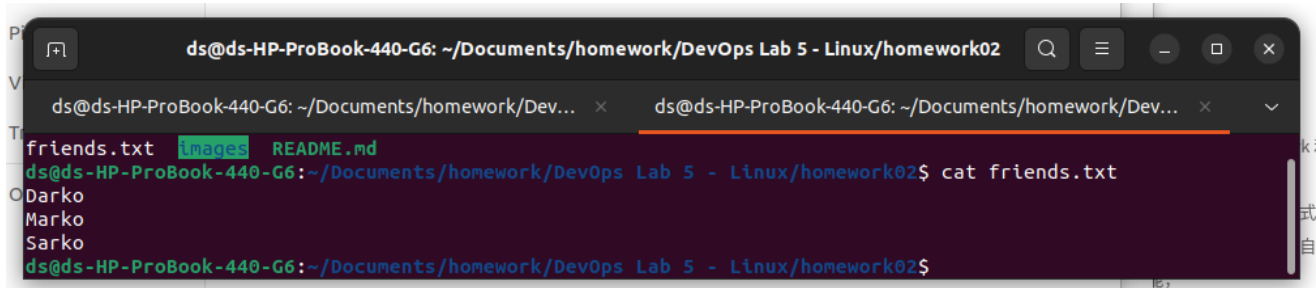
Display the contents of friends.txt on the console.

```
$ cat friends.txt
```



```
ds@ds-HP-ProBook-440-G6: ~/Documents/homework/DevOps Lab 5 - Linux/homework02
ds@ds-HP-ProBook-440-G6: ~/Documents/homework/DevOps Lab 5 - Linux/homework02$ ls
friends.txt images README.md
ds@ds-HP-ProBook-440-G6: ~/Documents/homework/DevOps Lab 5 - Linux/homework02$ cat friends.txt
James
Tina
Morris
```

3. Rename file friends.txt to bestfriends.txt



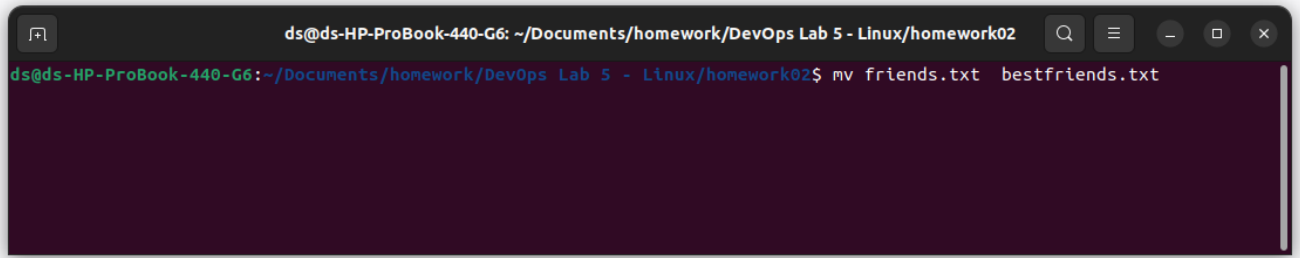
```
ds@ds-HP-ProBook-440-G6: ~/Documents/homework/DevOps Lab 5 - Linux/homework02
ds@ds-HP-ProBook-440-G6: ~/Documents/homework/DevOps Lab 5 - Linux/homework02$ ls
friends.txt images README.md
ds@ds-HP-ProBook-440-G6: ~/Documents/homework/DevOps Lab 5 - Linux/homework02$ cat friends.txt
Darko
Marko
Sarko
ds@ds-HP-ProBook-440-G6: ~/Documents/homework/DevOps Lab 5 - Linux/homework02$
```

Exercise 03

Rename file friends.txt to bestfriends.txt

- To change the of the use command mv

```
$ mv friends.txt bestfriends.txt
```



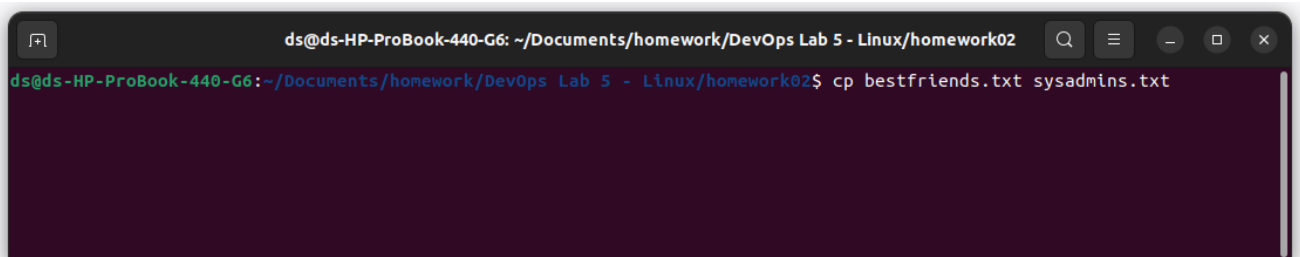
```
ds@ds-HP-ProBook-440-G6: ~/Documents/homework/DevOps Lab 5 - Linux/homework02
ds@ds-HP-ProBook-440-G6:~/Documents/homework/DevOps Lab 5 - Linux/homework02$ mv friends.txt bestfriends.txt
```

Exercise 04

Make a copy of bestfriends.txt under the name sysadmins.txt

- Copy bestfriends.txt sysadmins.txt using cp command

```
$ cp bestfriends.txt sysadmins.txt
```

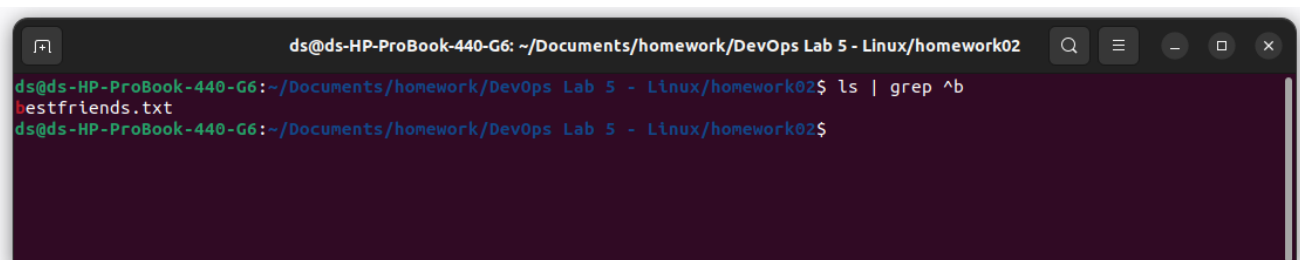


```
ds@ds-HP-ProBook-440-G6: ~/Documents/homework/DevOps Lab 5 - Linux/homework02
ds@ds-HP-ProBook-440-G6:~/Documents/homework/DevOps Lab 5 - Linux/homework02$ cp bestfriends.txt sysadmins.txt
```

Exercise 05

List all files whose name begins with letter 'b' and ends with extension txt.

```
$ ls | grep ^b
```



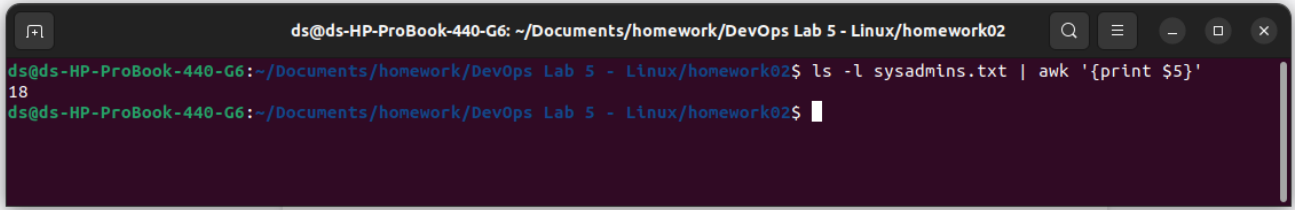
```
ds@ds-HP-ProBook-440-G6: ~/Documents/homework/DevOps Lab 5 - Linux/homework02
ds@ds-HP-ProBook-440-G6:~/Documents/homework/DevOps Lab 5 - Linux/homework02$ ls | grep ^b
bestfriends.txt
ds@ds-HP-ProBook-440-G6:~/Documents/homework/DevOps Lab 5 - Linux/homework02$
```

Exercise 06

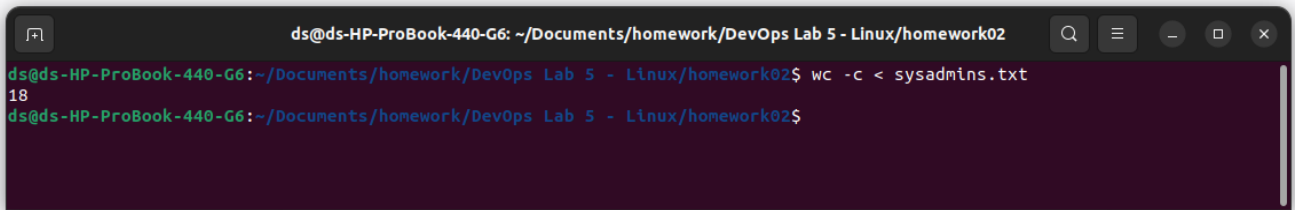
Write a command that will tell you how many bytes are taken up by file sysadmins.txt

- we can check the file size using commands

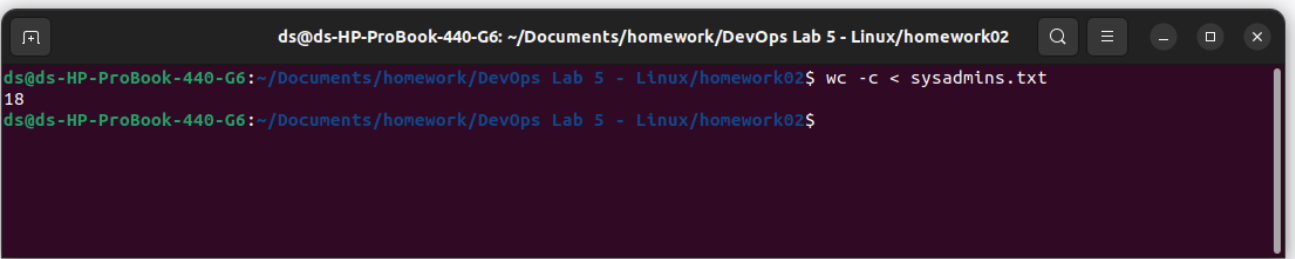
```
ls -l filename | awk '{print $5}'  
stat -c %s filename  
wc -c < filename
```



```
ds@ds-HP-ProBook-440-G6: ~/Documents/homework/DevOps Lab 5 - Linux/homework02  
ds@ds-HP-ProBook-440-G6:~/Documents/homework/DevOps Lab 5 - Linux/homework02$ ls -l sysadmins.txt | awk '{print $5}'  
18  
ds@ds-HP-ProBook-440-G6:~/Documents/homework/DevOps Lab 5 - Linux/homework02$
```



```
ds@ds-HP-ProBook-440-G6: ~/Documents/homework/DevOps Lab 5 - Linux/homework02  
ds@ds-HP-ProBook-440-G6:~/Documents/homework/DevOps Lab 5 - Linux/homework02$ wc -c < sysadmins.txt  
18  
ds@ds-HP-ProBook-440-G6:~/Documents/homework/DevOps Lab 5 - Linux/homework02$
```



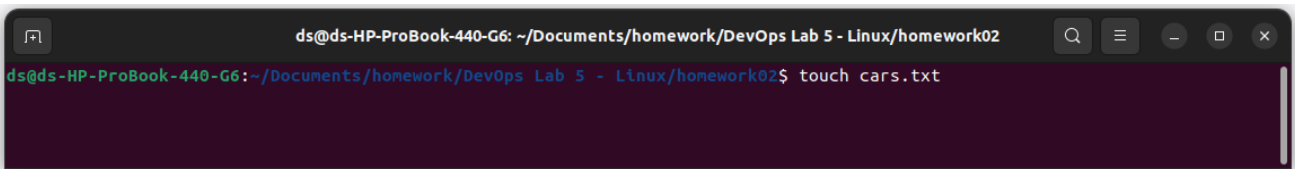
```
ds@ds-HP-ProBook-440-G6: ~/Documents/homework/DevOps Lab 5 - Linux/homework02  
ds@ds-HP-ProBook-440-G6:~/Documents/homework/DevOps Lab 5 - Linux/homework02$ wc -c < sysadmins.txt  
18  
ds@ds-HP-ProBook-440-G6:~/Documents/homework/DevOps Lab 5 - Linux/homework02$
```

Exercise 07

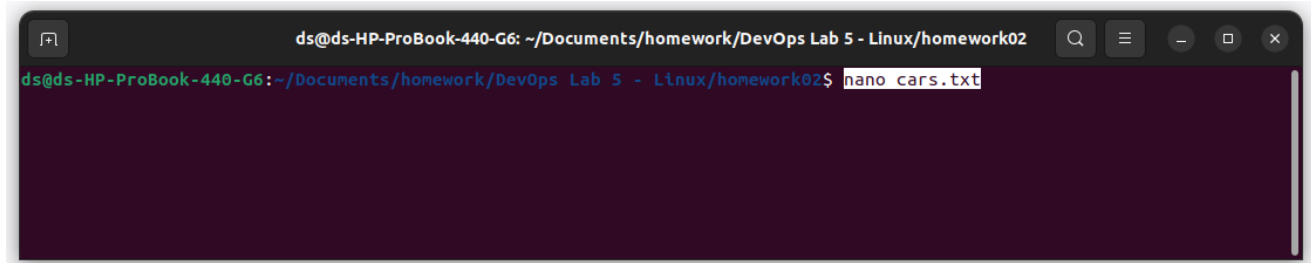
Create file cars.txt with a list of 5 brands of cars on separate lines.

- Open terminal and type

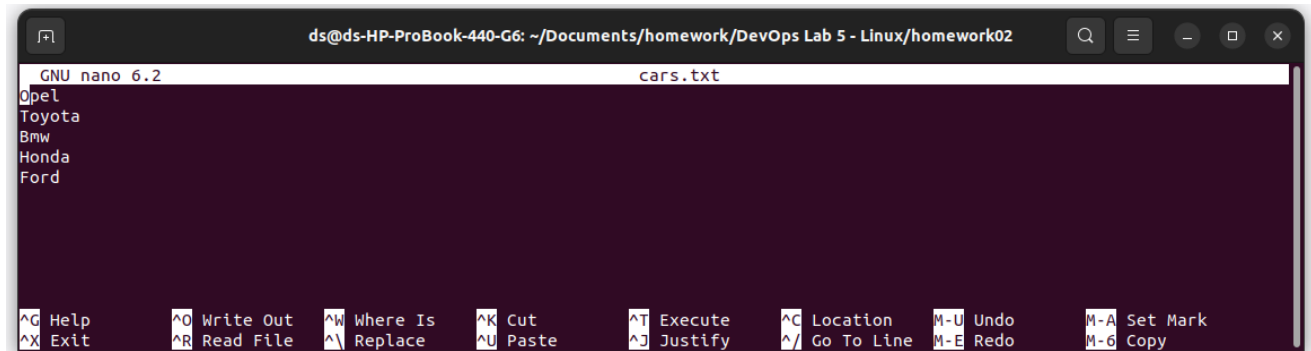
```
nano cars.txt  
touch cars.txt
```



```
ds@ds-HP-ProBook-440-G6: ~/Documents/homework/DevOps Lab 5 - Linux/homework02  
ds@ds-HP-ProBook-440-G6:~/Documents/homework/DevOps Lab 5 - Linux/homework02$ touch cars.txt
```



```
ds@ds-HP-ProBook-440-G6: ~/Documents/homework/DevOps Lab 5 - Linux/homework02
ds@ds-HP-ProBook-440-G6:~/Documents/homework/DevOps Lab 5 - Linux/homework02$ nano cars.txt
```



```
GNU nano 6.2 cars.txt
Opel
Toyota
BMW
Honda
Ford

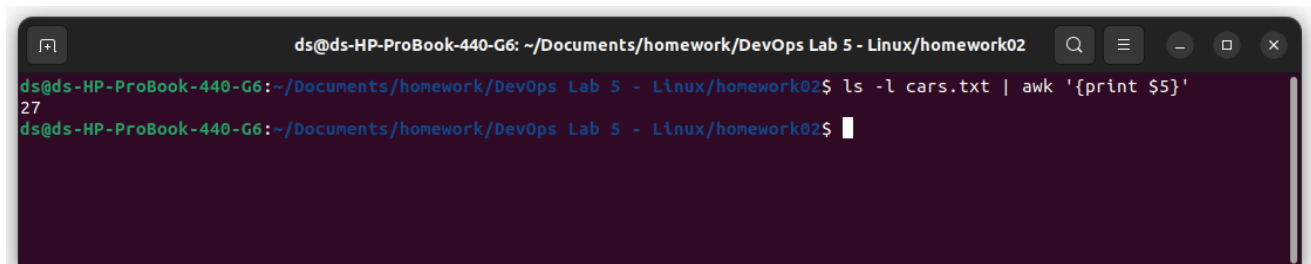
^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location  ^U Undo      ^A Set Mark
^X Exit      ^R Read File ^\ Replace  ^U Paste     ^J Justify   ^_/ Go To Line ^-E Redo     ^-6 Copy
```

Exercise 08

Check how many bytes are taken up by the file.

- Open terminal and type

```
$ ls -l cars.txt | awk '{print $5}'
```

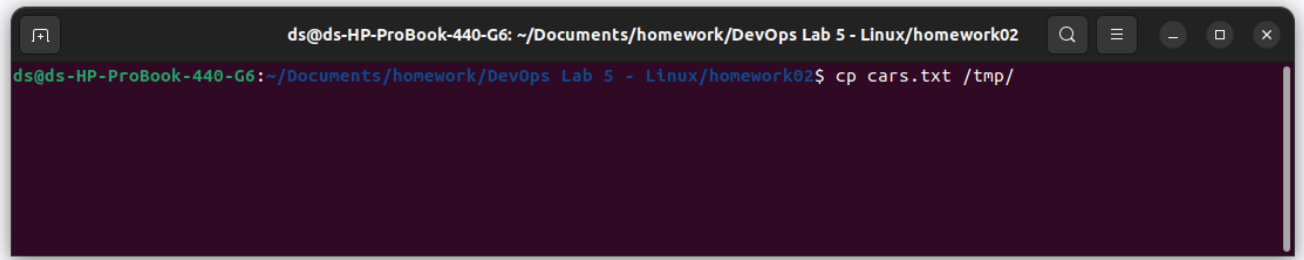


```
ds@ds-HP-ProBook-440-G6: ~/Documents/homework/DevOps Lab 5 - Linux/homework02
ds@ds-HP-ProBook-440-G6:~/Documents/homework/DevOps Lab 5 - Linux/homework02$ ls -l cars.txt | awk '{print $5}'
27
ds@ds-HP-ProBook-440-G6:~/Documents/homework/DevOps Lab 5 - Linux/homework02$
```

Exercise 09

Copy the file cars.txt into directory /tmp.

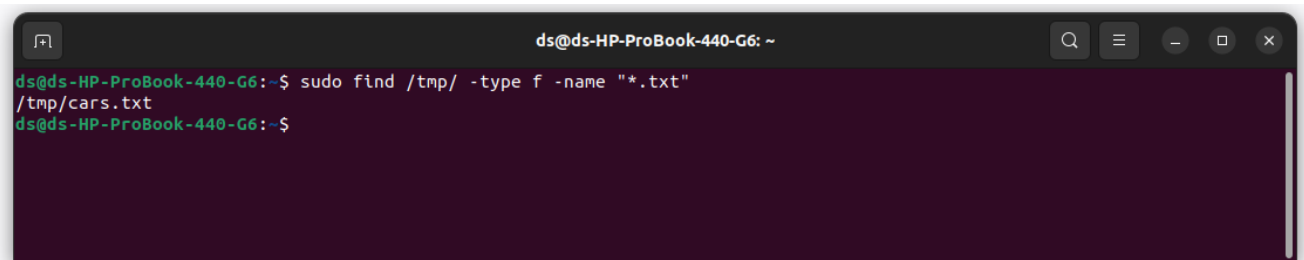
```
$ cp cars.txt /tmp/
```

A terminal window with a dark background. The title bar shows the user 'ds' on a machine named 'ds-HP-ProBook-440-G6' in the directory '~/Documents/homework/DevOps Lab 5 - Linux/homework02'. The command prompt shows the user has executed 'cp cars.txt /tmp/'.

Exercise 10

List all files with extension *.txt in directory /tmp and verify that the file was copied properly.

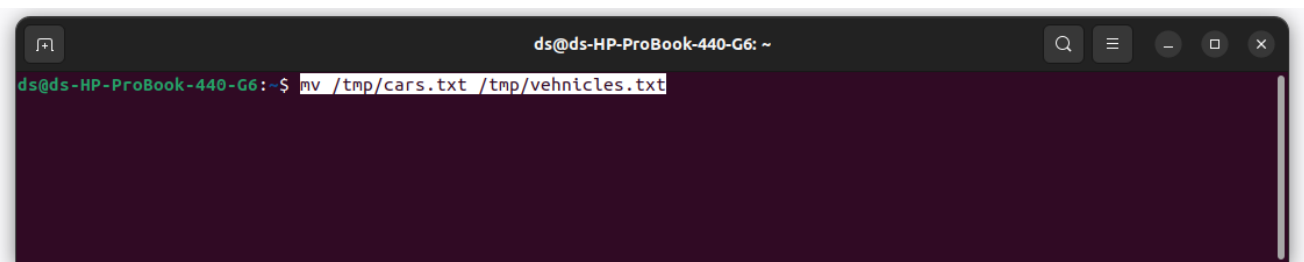
```
$ sudo find /tmp -type f -name "*.txt"
```

A terminal window showing the execution of the command 'sudo find /tmp/ -type f -name "*.txt"'. The output shows the file '/tmp/cars.txt'.

Exercise 11

Without leaving your home directory rename file cars.txt located in /tmp to vehicles.txt in /tmp

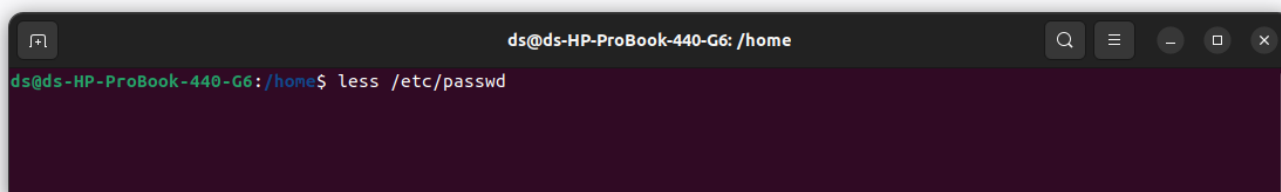
```
$ mv /tmp/cars.txt /tmp/vehnicles.txt
```

A terminal window showing the execution of the command 'mv /tmp/cars.txt /tmp/vehnicles.txt'. The command is highlighted in the prompt.

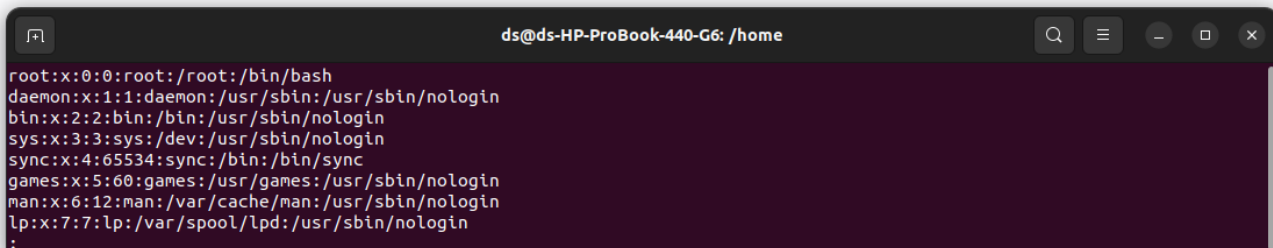
Exercise 12

Display the contents of /etc/passwd file on the screen interactively (so you can search, scroll up and down).

```
$ less /etc/passwd
```



```
ds@ds-HP-ProBook-440-G6: /home
ds@ds-HP-ProBook-440-G6: /home$ less /etc/passwd
```



```
ds@ds-HP-ProBook-440-G6: /home
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
:
```