Homework 6

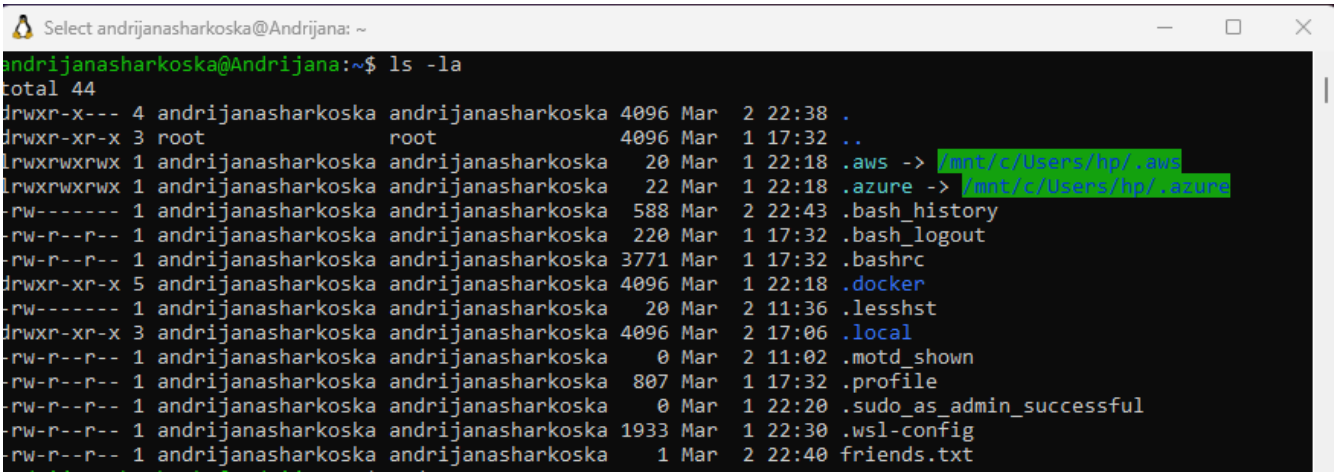
Exercise: Basic Linux & Bash commands

==========

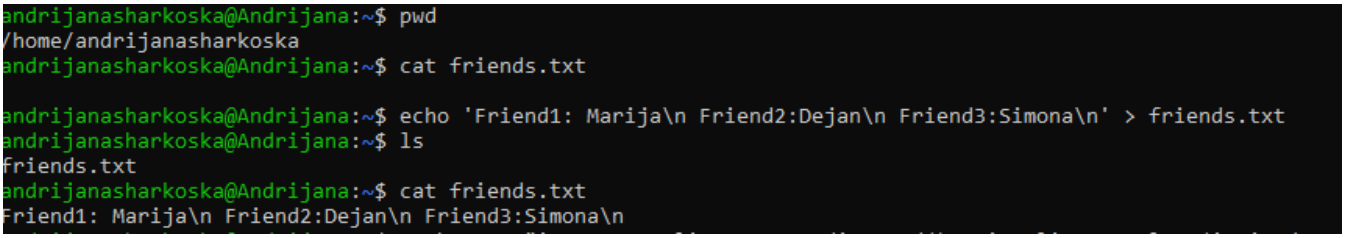
==========

On Hyper-V/Oracle/VMware (whatever your preferred Linux workaround is currently) download Ubuntu image and install it as a virtual machine or WSL2. After this is done:

Listing all files with the command **ls -la**



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



- **pwd** – for printing the writing directory
- **cat friends.txt** -> creating a file
- **ls** – for listing the files in the current directory

(Here I overlooked that the friends should be listed in separate lines and I fixed it later on.)

```
andrijanasharkoska@Andrijana:~$ sudo nano friends.txt
[sudo] password for andrijanasharkoska:
andrijanasharkoska@Andrijana:~$ cat friends.txt
Friend 1: Marija
Friend 2: Simona
Friend 3: Dejan
```

- **sudo nano friends.txt** -> to edit the text to display on separate lines (clicked CTRL + O for saving the changes)

2. Display the contents of friends.txt on the console.

```
andrijanasharkoska@Andrijana:~$ cat friends.txt
Friend 1: Marija
Friend 2: Simona
Friend 3: Dejan
```

- **cat friends.txt** -> display the contents

This is how the final file looks like.

3. Rename file friends.txt to bestfriends.txt

```
andrijanasharkoska@Andrijana:~$ mv friends.txt bestfriends.txt
andrijanasharkoska@Andrijana:~$ ls -la
total 44
drwxr-x--- 4 andrijanasharkoska andrijanasharkoska 4096 Mar  2 23:03 .
drwxr-xr-x 3 root               root               4096 Mar  1 17:32 ..
lrwxrwxrwx 1 andrijanasharkoska andrijanasharkoska   20 Mar  1 22:18 .aws -> /mnt/c/Users/hp/.aws
lrwxrwxrwx 1 andrijanasharkoska andrijanasharkoska   22 Mar  1 22:18 .azure -> /mnt/c/Users/hp/.azure
-rw------- 1 andrijanasharkoska andrijanasharkoska  588 Mar  2 22:43 .bash_history
-rw-r--r-- 1 andrijanasharkoska andrijanasharkoska  220 Mar  1 17:32 .bash_logout
-rw-r--r-- 1 andrijanasharkoska andrijanasharkoska 3771 Mar  1 17:32 .bashrc
drwxr-xr-x 5 andrijanasharkoska andrijanasharkoska 4096 Mar  1 22:18 .docker
-rw------- 1 andrijanasharkoska andrijanasharkoska   20 Mar  2 11:36 .lesshst
drwxr-xr-x 3 andrijanasharkoska andrijanasharkoska 4096 Mar  2 17:06 .local
-rw-r--r-- 1 andrijanasharkoska andrijanasharkoska    0 Mar  2 11:02 .motd_shown
-rw-r--r-- 1 andrijanasharkoska andrijanasharkoska  807 Mar  1 17:32 .profile
-rw-r--r-- 1 andrijanasharkoska andrijanasharkoska    0 Mar  1 22:20 .sudo_as_admin_successful
-rw-r--r-- 1 andrijanasharkoska andrijanasharkoska 1933 Mar  1 22:30 .wsl-config
-rw-r--r-- 1 andrijanasharkoska andrijanasharkoska   50 Mar  2 22:58 bestfriends.txt
```

- **mv friends.txt bestfriends.txt** – to rename the file

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

```
andrijanasharkoska@Andrijana:~$ cp bestfriends.txt sysadmins.txt
andrijanasharkoska@Andrijana:~$ ls
```

- **cp bestfriends.txt sysadmins.txt** -> copy the file
- **ls** –> listing the files to check if it was copied

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

```
andrijanasharkoska@Andrijana:~$ ls b*.txt
bestfriends.txt
```

- **ls b*.txt ->** listing

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

```
andrijanasharkoska@Andrijana:~$ wc -c sysadmins.txt
50 sysadmins.txt
```

wc –c sysadmins.txt – for checking the bytes of the file

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

```
andrijanasharkoska@Andrijana:~$ touch cars.txt
andrijanasharkoska@Andrijana:~$ echo 'Ferarri, Polo, Audi, Opel, Ford' > cars.txt
andrijanasharkoska@Andrijana:~$ ls
bestfriends.txt  cars.txt  sysadmins.txt
andrijanasharkoska@Andrijana:~$ cat cars.txt
Ferarri, Polo, Audi, Opel, Ford
```

I tried a different set of commands here (Also fixed the file later on so that all of these are on separate lines):

- **touch cars.txt ->** for creating the file
- **echo 'Ferrari, Polo, Audi, Opel, Ford' > cars.txt ->** writing out the content in the file
- **ls ->** for checking the files

8. Check how many bytes are taken up by the file.

```
andrijanasharkoska@Andrijana:~$ wc -c cars.txt
32 cars.txt
```

9. Copy the file cars.txt into directory /tmp

```
andrijanasharkoska@Andrijana:~$ cp cars.txt /tmp
```

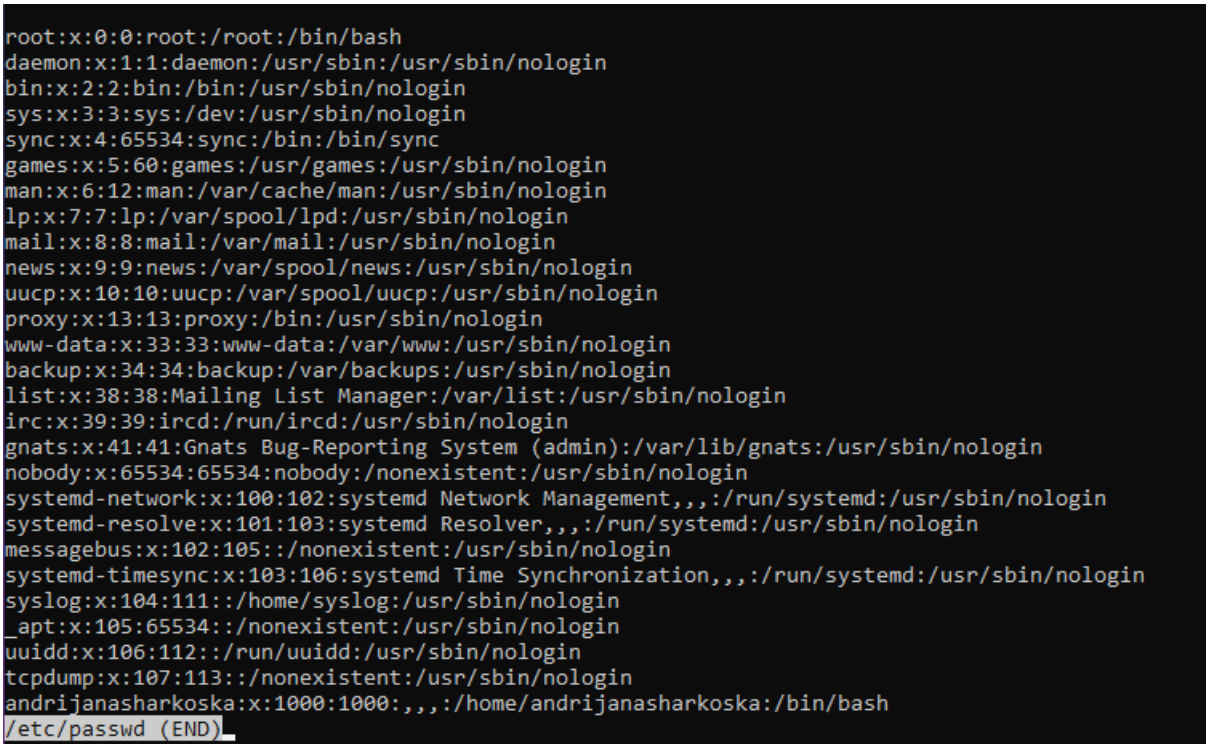
cp cars.txt /tmp -> command for copying files to a specified directory

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

- **ls /tmp/*txt ->** list all files with extension *.txt

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

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



- **less /etc/passwd ->** displaying the contents of the file