

# Linux Exercise 8- I/O

1. Create alias for the rm command in the following way: each time file is removed prompt is provided for the user asking verification for the removal action. This alias should be permanent! Enable alias for the current logged in user. How would you enable the alias system wide for all system users?

```
jean@ubuntu:~$ alias remove='rm -i' >> ~/.bashrc
jean@ubuntu:~$ touch test.txt
jean@ubuntu:~$ remove test.txt
rm: remove regular empty file 'test.txt'?
```

To enable the alias for other users the alias should be stored in either `/etc/bashrc` or `/etc/bash.bashrc` depending on the system one is using.

Ex: **alias remove='rm -i' >> /etc/bash.bashrc**

2. Redirect the output from w command to the file users.txt

```
jean@ubuntu:~$ w > users.txt
jean@ubuntu:~$ cat users.txt
14:56:29 up 5:39, 1 user, load average: 0.01, 0.05, 0.02
USER  TTY      FROM          LOGIN@  IDLE   JCPU   PCPU WHAT
jean   tty1      -             Tue06   5.00s  0.33s  0.00s w
jean@ubuntu:~$
```

3. Redirect the output from id command to the end of users.txt file. Find out from the manual what id command does.

```
jean@ubuntu:~$ id >> users.txt
jean@ubuntu:~$ cat users.txt
14:56:29 up 5:39, 1 user, load average: 0.01, 0.05, 0.02
USER  TTY      FROM          LOGIN@  IDLE   JCPU   PCPU WHAT
jean   tty1      -             Tue06   5.00s  0.33s  0.00s w
uid=1000(jean) gid=1000(jean) groups=1000(jean),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),116(lxd)
jean@ubuntu:~$ _
```

4. How does the output from the following commands differ:

- a. `ls -l`
- b. `ls -l | sort`

After trying with files, I just noticed that `ls -l` will display files ordered by file names(ascending).  
`Ls -l | sort` will display files ordered by date of creation.

```
jean@ubuntu:~$ ls -l
total 4
-rw-r--r-- 1 root root 0 Jun 29 19:03 txt.txt
-rw-rw-r-- 1 jean jean 298 Jun 30 14:59 users.txt
jean@ubuntu:~$ ls -l | sort
-rw-r--r-- 1 root root 0 Jun 29 19:03 txt.txt
-rw-rw-r-- 1 jean jean 298 Jun 30 14:59 users.txt
total 4
jean@ubuntu:~$ touch av.txt
jean@ubuntu:~$ ls -l | sort
-rw-r--r-- 1 root root 0 Jun 29 19:03 txt.txt
-rw-rw-r-- 1 jean jean 0 Jun 30 15:01 av.txt
-rw-rw-r-- 1 jean jean 298 Jun 30 14:59 users.txt
total 4
jean@ubuntu:~$ ls -l
total 4
-rw-rw-r-- 1 jean jean 0 Jun 30 15:01 av.txt
-rw-r--r-- 1 root root 0 Jun 29 19:03 txt.txt
-rw-rw-r-- 1 jean jean 298 Jun 30 14:59 users.txt
jean@ubuntu:~$ ls -l
total 4
-rw-rw-r-- 1 jean jean 0 Jun 30 15:01 av.txt
-rw-r--r-- 1 root root 0 Jun 29 19:03 txt.txt
-rw-rw-r-- 1 jean jean 298 Jun 30 14:59 users.txt
jean@ubuntu:~$ ls -l | sort
-rw-r--r-- 1 root root 0 Jun 29 19:03 txt.txt
-rw-rw-r-- 1 jean jean 0 Jun 30 15:01 av.txt
-rw-rw-r-- 1 jean jean 298 Jun 30 14:59 users.txt
total 4
jean@ubuntu:~$ touch b.txt
jean@ubuntu:~$ ls -l
total 4
-rw-rw-r-- 1 jean jean 0 Jun 30 15:01 av.txt
-rw-rw-r-- 1 jean jean 0 Jun 30 15:03 b.txt
-rw-r--r-- 1 root root 0 Jun 29 19:03 txt.txt
-rw-rw-r-- 1 jean jean 298 Jun 30 14:59 users.txt
jean@ubuntu:~$ ls -l | sort
-rw-r--r-- 1 root root 0 Jun 29 19:03 txt.txt
-rw-rw-r-- 1 jean jean 0 Jun 30 15:01 av.txt
-rw-rw-r-- 1 jean jean 0 Jun 30 15:03 b.txt
-rw-rw-r-- 1 jean jean 298 Jun 30 14:59 users.txt
total 4
jean@ubuntu:~$ _
```

5. Create global variable called linuxinfo, which includes the following content:

- a. Timestamp: *current\_date\_and\_time* | hostname is *hostname* and logged in user is *username*
- b. Example: *Thu Oct 08 13:17:04 | hostname is ubuntu-PC and logged in user is testuser*
- c. Verify the content of global variable using echo command.

```
jean@ubuntu:~$ linuxinfo="$(date +%d-%m-%y" "%T" | hostname is $(hostname) and logged in user is $(whoami))"
jean@ubuntu:~$ export linuxinfo
jean@ubuntu:~$ echo $linuxinfo
30-06-21 15:24:30 | hostname is ubuntu and logged in user is jean
jean@ubuntu:~$ _
```

6. Take backup from the current command line prompt and edit the current prompt to be like in the example below.

- a. Time (24h) *current\_logged\_in\_user* own-prompt \$
- b. Example: *09:28:11 ubuntu own-prompt \$*
- c. Return the original prompt back after verifying the operation of your temporary prompt.

```
jean@ubuntu:~$ prompt_backup=$PS1
jean@ubuntu:~$ PS1="$(date +%T) $(whoami) own-prompt $"
15:42:23 jean own-prompt $ls
av.txt b.txt txt.txt users.txt
15:42:23 jean own-prompt $PS1=prompt_backup
prompt_backup$PS1=$prompt_backup
jean@ubuntu:~$ _
```

7. Install cowsay program to your Ubuntu if it is not yet installed. Chain the following three commands:

- a. Cow tells the name of the computer AND
- b. if the creation of directory called dataset cannot be done into the root directory /, sheep will report it.

```
jean@ubuntu:~$ echo $(hostname) && mkdir /dataset | cowsay
ubuntu
mkdir: cannot create directory '/dataset': Permission denied
  __
<  >
  __
    \   ^__^
     \  (oo)\_______
        (__)\       )\/\
           ||----w |
           ||     ||

jean@ubuntu:~$ _
```