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?**

```
user@AC4892-Ubuntu:~$ alias remove='rm -i'
user@AC4892-Ubuntu:~$ remove example.txt
rm: remove regular empty file 'example.txt'? no
user@AC4892-Ubuntu:~$ nano .bashrc
```

```
user@AC4892-Ubuntu:~$ remove example.txt
rm: remove regular empty file 'example.txt'? no
```

```
user@AC4892-Ubuntu:~$ sudo touch etc/profile.d/alias.sh
[sudo] password for user:
```

```
user@AC4892-Ubuntu:~$ sudo touch /etc/profile.d/alias.sh
```

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

```
user@AC4892-Ubuntu:~$ touch users.txt
user@AC4892-Ubuntu:~$ w > users.txt
user@AC4892-Ubuntu:~$ cat user.txt
cat: user.txt: No such file or directory
user@AC4892-Ubuntu:~$ cat users.txt
 07:41:32 up 38 days, 13:30,  2 users,  load average: 0.00, 0.05, 0.02
USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
user     pts/0    192.168.53.13    06:25   48:36   0.07s  0.07s -bash
user     pts/1    192.168.53.29    07:36    4.00s  0.03s  0.00s w
user@AC4892-Ubuntu:~$
```

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

```
user@AC4892-Ubuntu: $ man id
user@AC4892-Ubuntu: $ id >> users.txt
user@AC4892-Ubuntu: $ cat users.txt
 07:41:32 up 38 days, 13:30,  2 users,  load average: 0.00, 0.05, 0.02
USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
user     pts/0    192.168.53.13    06:25    48:36  0.07s  0.07s -bash
user     pts/1    192.168.53.29    07:36    4.00s  0.03s  0.00s w
uid=1000(user) gid=1000(user) groups=1000(user),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),116(lxd)
```

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

- **ls -l**

- **ls -l | sort**

```
user@AC4892-Ubuntu:~$ ls -l
total 276
-rw-rw-r-- 1 user user 54509 Feb  5  2020  322868_1100-800x825.jpg
-rw-rw-r-- 1 user user 54509 Feb  5  2020  dog.jpg
-rw-rw-r-- 1 user user 54509 Oct  5 17:24  dog2.jpg
-rw-rw-r-- 1 user user     0 Oct 27 06:32  example.txt
drwxrwxr-x 3 user user  4096 Oct  5 17:00  f1
-rw-rw-r-- 1 user user     0 Oct 27 06:26  first.txt
drwx------ 5 user user  4096 Oct  5 17:53  h1
-rw-rw-r-- 1 user user     0 Oct  5 17:01  isthisworking.txt
-rw-rw-r-- 1 user user 61440 Oct  5 17:38  newtext.tar
-rw-rw-r-- 1 user user    64 Oct  5 18:58  newtext.txt
-rw-rw-r-- 1 user user    55 Oct  5 18:32  newtext1.txt
drwxrwxr-x 2 user user  4096 Sep 19 11:20  sand
drwxrwxr-x 2 root user  4096 Oct 27 06:27  second
lrwxrwxrwx 1 user user    13 Oct 27 06:36  soft.txt -> soft_link.txt
-rw-rw-r-- 1 user user   120 Oct  5 17:43  text.tar.gz
drwxrwxr-x 3 user user  4096 Oct 27 06:45  tmp
-rw-rw-r-- 1 user user  1439 Oct  5 17:16  'url?sa=i'
-rw-rw-r-- 1 user user   378 Oct 27 07:43  users.txt
drwxrwxr-x 3 user user  4096 Oct 13 07:31  var
-rw-rw-r-- 1 user user   634 Oct  5 17:16  wget-log
user@AC4892-Ubuntu:~$
```

```
user@AC4892-Ubuntu:~$ ls -l | sort
-rw-rw-r-- 1 user user        0 Oct  5 17:01 isthisworking.txt
-rw-rw-r-- 1 user user        0 Oct 27 06:26 first.txt
-rw-rw-r-- 1 user user        0 Oct 27 06:32 example.txt
-rw-rw-r-- 1 user user       55 Oct  5 18:32 newtext1.txt
-rw-rw-r-- 1 user user       64 Oct  5 18:58 newtext.txt
-rw-rw-r-- 1 user user      120 Oct  5 17:43 text.tar.gz
-rw-rw-r-- 1 user user      378 Oct 27 07:43 users.txt
-rw-rw-r-- 1 user user      634 Oct  5 17:16 wget-log
-rw-rw-r-- 1 user user     1439 Oct  5 17:16 url?sa=i
-rw-rw-r-- 1 user user    54509 Feb  5  2020 322868_1100-800x825.jpg
-rw-rw-r-- 1 user user    54509 Feb  5  2020 dog.jpg
-rw-rw-r-- 1 user user    54509 Oct  5 17:24 dog2.jpg
-rw-rw-r-- 1 user user    61440 Oct  5 17:38 newtext.tar
drwx------ 5 user user     4096 Oct  5 17:53 h1
drwxrwxr-x 2 root user     4096 Oct 27 06:27 second
drwxrwxr-x 2 user user     4096 Sep 19 11:20 sand
drwxrwxr-x 3 user user     4096 Oct  5 17:00 f1
drwxrwxr-x 3 user user     4096 Oct 13 07:31 var
drwxrwxr-x 3 user user     4096 Oct 27 06:45 tmp
lrwxrwxrwx 1 user user       13 Oct 27 06:36 soft.txt -> soft_link.txt
total 276
```

Without sort it clearly shows the different in color for the directories and the
softlink

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

- **Timestamp:** *current_date_and_time* | **hostname is** *hostname* **and logged in
  user is** *username*

- **Example:** Thu Oct 08 13:17:04 | hostname is ubuntu-PC and logged in user
  is testuser

- **Verify the content of global variable using echo command.**

```
user@AC4892-Ubuntu: $ linuxinfo="$(date) | hostname is $(uname -n) and logged in user is $(whoami)"
user@AC4892-Ubuntu: $ echo $linuxinfo
Thu Oct 27 07:54:40 EEST 2022 | hostname is AC4892-Ubuntu and logged in user is user
user@AC4892-Ubuntu: $ export linuxinfo
```

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

   - **Time (24h)** *current_logged_in_user* **own-prompt $**

   - **Example: 09:28:11 ubuntu own-prompt $**

   - **Return the original prompt back after verifying the operation of your temporary prompt.**

```
user@AC4892-Ubuntu:~$ PS1=" \t \u own-prompt $"
 07:56:02 user own-prompt $
```

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

   - **Cow tells the name of the computer AND**

   - **if the creation of directory called dataset cannot be done into the root directory /, sheep will report it.**

```
user@AC4892-Ubuntu:~$ uname -n | cowsay && mkdir /datasheet | cowsay -f sheep
 _____
< AC4892-Ubuntu >
 ---------------
        \   ^__^
         \  (oo)_____
            (__)\       )\/\
                ||----w |
                ||     ||
mkdir: cannot create directory '/datasheet': Permission denied
 ___
<   >
 --
   \
    \
       __
      UooU\.'@@@@@@`.
      \__/(@@@@@@@@@@)
           (@@@@@@@@)
           `YY~~~~YY'
            ||     ||
user@AC4892-Ubuntu:~$
```