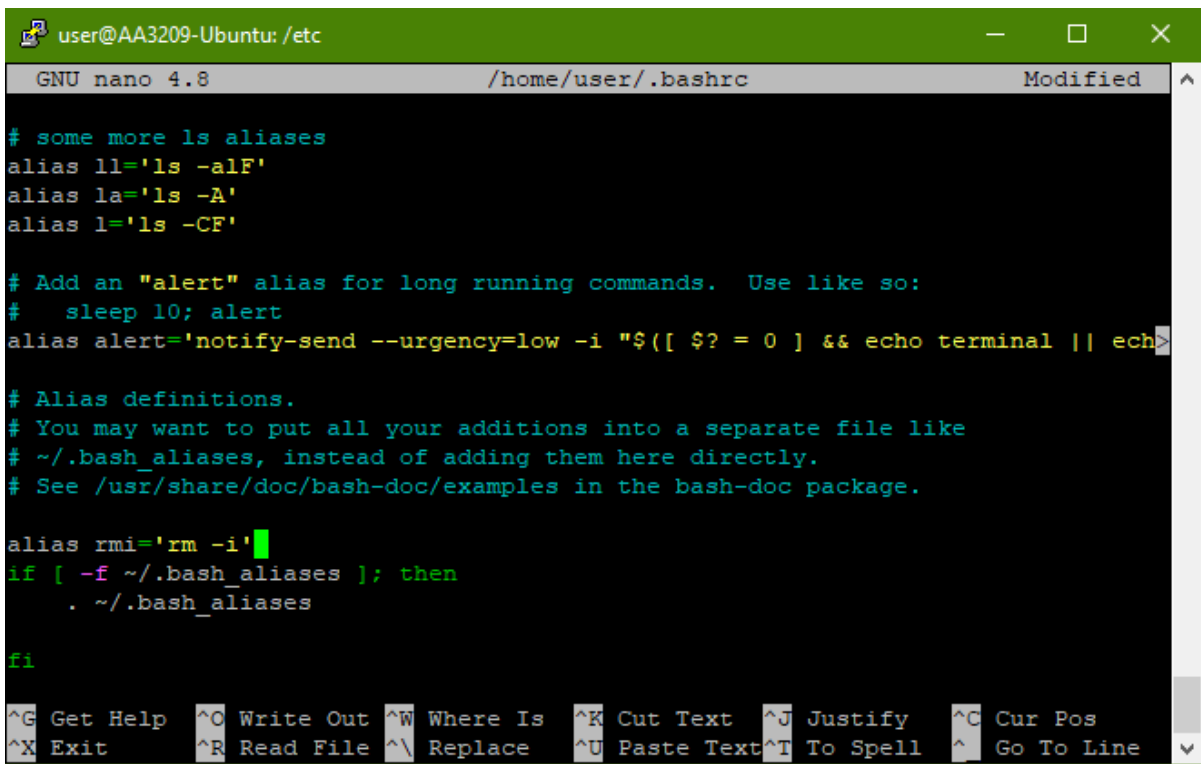


T1

```
user@AA3209-Ubuntu:~$ alias rmi='rm -i'
user@AA3209-Ubuntu:~$ ls
apache      funet      kansiol    pehmeelinkki.txt  testi.txt  tmp
first.txt   hl         kovalinkki.txt  second              third.txt
user@AA3209-Ubuntu:~$ rmi testi.txt
rm: remove regular empty file 'testi.txt'? y
user@AA3209-Ubuntu:~$ ls
apache      funet      kansiol    pehmeelinkki.txt  third.txt
first.txt   hl         kovalinkki.txt  second              tmp
user@AA3209-Ubuntu:~$
```

I edited the .bashrc file so it now contains my “rmi” alias



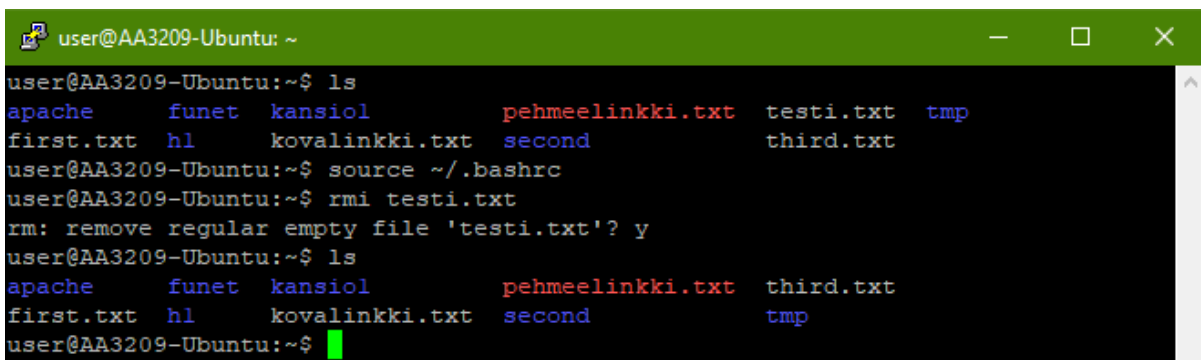
```
user@AA3209-Ubuntu: /etc
GNU nano 4.8 /home/user/.bashrc Modified
# some more ls aliases
alias ll='ls -alF'
alias la='ls -A'
alias l='ls -CF'

# Add an "alert" alias for long running commands.  Use like so:
# sleep 10; alert
alias alert='notify-send --urgency=low -i "$([ $? = 0 ] && echo terminal || ech>

# Alias definitions.
# You may want to put all your additions into a separate file like
# ~/.bash_aliases, instead of adding them here directly.
# See /usr/share/doc/bash-doc/examples in the bash-doc package.

alias rmi='rm -i'
if [ -f ~/.bash_aliases ]; then
    . ~/.bash_aliases
fi

^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify ^C Cur Pos
^X Exit ^R Read File ^\ Replace ^U Paste Text ^T To Spell ^_ Go To Line
```



```
user@AA3209-Ubuntu: ~
user@AA3209-Ubuntu:~$ ls
apache      funet      kansiol    pehmeelinkki.txt  testi.txt  tmp
first.txt   hl         kovalinkki.txt  second              third.txt
user@AA3209-Ubuntu:~$ source ~/.bashrc
user@AA3209-Ubuntu:~$ rmi testi.txt
rm: remove regular empty file 'testi.txt'? y
user@AA3209-Ubuntu:~$ ls
apache      funet      kansiol    pehmeelinkki.txt  third.txt
first.txt   hl         kovalinkki.txt  second              tmp
user@AA3209-Ubuntu:~$
```

If I would like to enable my aliases for all user I think I'd have to change .bashrc file as a root user and maybe edit /etc/profile.

T2

```
user@AA3209-Ubuntu:~$ w
 23:52:35 up 69 days, 12:02,  2 users,  load average: 0.00, 0.00, 0.00
USER      TTY      FROM            LOGIN@   IDLE   JCPU   PCPU WHAT
user      pts/1    192.168.53.10   23:34   16:51   0.02s   0.02s -bash
user      pts/2    192.168.53.13   23:36    1.00s   0.07s   0.00s w
user@AA3209-Ubuntu:~$ w > users.txt
user@AA3209-Ubuntu:~$ ls
apache      funet      kansiol      pehmeelinkki.txt  third.txt  users.txt
first.txt   hl         kovalinkki.txt  second              tmp
user@AA3209-Ubuntu:~$ cat user.txt
cat: user.txt: No such file or directory
user@AA3209-Ubuntu:~$ cat users.txt
 23:54:39 up 69 days, 12:05,  2 users,  load average: 0.00, 0.00, 0.00
USER      TTY      FROM            LOGIN@   IDLE   JCPU   PCPU WHAT
user      pts/1    192.168.53.10   23:34   18:55   0.02s   0.02s -bash
user      pts/2    192.168.53.13   23:36    4.00s   0.07s   0.00s w
user@AA3209-Ubuntu:~$
```

T3

```
user@AA3209-Ubuntu:~$ id --help
Usage: id [OPTION]... [USER]
Print user and group information for the specified USER,
or (when USER omitted) for the current user.
```

```
user@AA3209-Ubuntu:~$ id
uid=1000(user) gid=1000(user) groups=1000(user),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),116(lxd)
user@AA3209-Ubuntu:~$ id >> users.txt
user@AA3209-Ubuntu:~$ cat users.txt
 23:54:39 up 69 days, 12:05,  2 users,  load average: 0.00, 0.00, 0.00
USER      TTY      FROM            LOGIN@   IDLE   JCPU   PCPU WHAT
user      pts/1    192.168.53.10   23:34   18:55   0.02s   0.02s -bash
user      pts/2    192.168.53.13   23:36    4.00s   0.07s   0.00s w
uid=1000(user) gid=1000(user) groups=1000(user),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),116(lxd)
user@AA3209-Ubuntu:~$
```

T4

```
user@AA3209-Ubuntu:~$ ls -l
total 28
drwxrwxr-x 3 user user 4096 Feb 22 01:22 apache
-rw-rw-r-- 1 user user  0 Mar  7 19:21 first.txt
drwxrwxr-x 2 user user 4096 Feb 22 01:54 funet
drwxrwxr-x 5 user user 4096 Feb 21 23:56 hl
drwxrwxr-x 3 user user 4096 Feb 14 13:58 kansiol
-rw-rw-r-- 1 user user  0 Mar  7 20:14 kovalinkki.txt
lrwxrwxrwx 1 user user  13 Mar  7 20:21 pehmeelinkki.txt -> soft_link.txt
drwx----- 2 root user 4096 Mar  7 19:22 second
-rw-rw-r-- 1 root user  0 Mar  7 21:29 third.txt
drwxrwxr-x 2 user user 4096 Feb 14 14:48 tmp
-rw-rw-r-- 1 user user  378 Mar 21 23:58 users.txt
user@AA3209-Ubuntu:~$
```

```
user@AA3209-Ubuntu:~$ ls -l | sort
-rw-rw-r-- 1 root user  0 Mar  7 21:29 third.txt
-rw-rw-r-- 1 user user  0 Mar  7 19:21 first.txt
-rw-rw-r-- 1 user user  0 Mar  7 20:14 kovalinkki.txt
-rw-rw-r-- 1 user user 378 Mar 21 23:58 users.txt
drwx----- 2 root user 4096 Mar  7 19:22 second
drwxrwxr-x 2 user user 4096 Feb 14 14:48 tmp
drwxrwxr-x 2 user user 4096 Feb 22 01:54 funet
drwxrwxr-x 3 user user 4096 Feb 14 13:58 kansiol
drwxrwxr-x 3 user user 4096 Feb 22 01:22 apache
drwxrwxr-x 5 user user 4096 Feb 21 23:56 hl
lrwxrwxrwx 1 user user  13 Mar  7 20:21 pehmeelinkki.txt -> soft_link.txt
total 28
```

With `ls -l | sort` you can sort directorys contents. For example, I sorted by users.

```
user@AA3209-Ubuntu:~$ ls -l | sort -k 3
total 28
-rw-rw-r-- 1 root user  0 Mar  7 21:29 third.txt
drwx----- 2 root user 4096 Mar  7 19:22 second
-rw-rw-r-- 1 user user  0 Mar  7 19:21 first.txt
-rw-rw-r-- 1 user user  0 Mar  7 20:14 kovalinkki.txt
lrwxrwxrwx 1 user user  13 Mar  7 20:21 pehmeelinkki.txt -> soft_link.txt
-rw-rw-r-- 1 user user 378 Mar 21 23:58 users.txt
drwxrwxr-x 3 user user 4096 Feb 14 13:58 kansiol
drwxrwxr-x 2 user user 4096 Feb 14 14:48 tmp
drwxrwxr-x 5 user user 4096 Feb 21 23:56 hl
drwxrwxr-x 3 user user 4096 Feb 22 01:22 apache
drwxrwxr-x 2 user user 4096 Feb 22 01:54 funet
user@AA3209-Ubuntu:~$
```

T5

```
user@AA3209-Ubuntu:~$ linuxinfo="$(date) | hostname is $(hostname) and logged user is $(whoami)"
user@AA3209-Ubuntu:~$ echo $linuxinfo
Mon Mar 22 01:16:57 EET 2021 | hostname is AA3209-Ubuntu and logged user is user
user@AA3209-Ubuntu:~$
```

T6

```
user@AA3209-Ubuntu:~$ linuxinfo="$(date +%H:%M:%S) $(whoami) own-prompt $"
user@AA3209-Ubuntu:~$ echo $linuxinfo
00:40:34 user own-prompt $
user@AA3209-Ubuntu:~$
```

T7

```
user@AA3209-Ubuntu:/$ cowsay $(hostname) && mkdir dataset && echo "Directory was created!" || echo "Directory couldn't be created" | cowsay -f sheep

< AA3209-Ubuntu >
-----
      \   ^__^
       \  (oo)\_______
          (__)\       )\/\
             ||----w |
             ||     ||

mkdir: cannot create directory 'dataset': Permission denied

< Directory couldn't be created >
-----
      \
       \
        UooU\.'@@@@@'.
        \_/(@@@@@@@@@)
           (@@@@@@@@)
          `YY~~~~YY'
             ||    ||

user@AA3209-Ubuntu:/$
```