

Working with filters: -

1. Put a sorted list of all bash users in bashusers.txt.

```
arun@arun-ubuntu:~$ grep '/bin/bash' /etc/passwd | cut -d: -f1 | sort > bashusers.txt
arun@arun-ubuntu:~$ cat bashusers.txt
arun
root
```

2. Put a sorted list of all logged on users in onlineusers.txt.

```
arun@arun-ubuntu:~$ who | cut -d' ' -f1 | sort | uniq > onlineusers.txt
arun@arun-ubuntu:~$ cat onlineusers.txt
arun
```

3. Make a list of all filenames in /etc that contain the string **conf** in their filename.

```
arun@arun-ubuntu:~$ ls /etc/*conf*
/etc/adduser.conf          /etc/logrotate.conf
/etc/apg.conf              /etc/manpath.config
/etc/appstream.conf        /etc/mke2fs.conf
/etc/brltty.conf           /etc/netconfig
/etc/ca-certificates.conf  /etc/nftables.conf
/etc/ca-certificates.conf.dpkg-old /etc/nsswitch.conf
/etc/debconf.conf          /etc/pam.conf
```

4. Make a sorted list of all files in /etc that contain the case insensitive string **conf** in their filename.

```
arun@arun-ubuntu:~$ find /etc -type f -iname '*conf*' | sort
find: '/etc/polkit-1/localauthority': Permission denied
find: '/etc/ssl/private': Permission denied
find: '/etc/cups/ssl': Permission denied
/etc/adduser.conf
/etc/alsa/conf.d/99-pulseaudio-default.conf.example
/etc/apg.conf
/etc/apparmor.d/abstractions/dconf
/etc/apparmor.d/local/usr.lib.snapd.snap-confine.real
```

5. Look at the output of /sbin/ifconfig. Write a line that displays only ip address and the subnet mask.

```
arun@arun-ubuntu:~$ /sbin/ifconfig | grep -Eo 'inet addr:[^ ]+|netmask [^ ]+' |
awk '{print $2}'
255.255.255.0
255.0.0.0
```

6. Write a line that removes all non-letters from a stream.

```
arun@arun-ubuntu:~$ echo "This is a test with numbers 123!" | tr -cd '[:alpha:]'
Thisisatestwithnumbersarun@arun-ubuntu:~$
```

7. Write a line that receives a text file, and outputs all words on a separate line.

```
arun@arun-ubuntu:~$ tr -s '[:space:]' '\n' < input.txt
hello
this
is
os
lab
how
are
you
tofdays
```