

Sed

1-

```
faresedres@faresedres:/media/faresedres/Hard Drive/ITI/Bash/Lab1$ sed -n '/lp/p' /etc/passwd
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
cups-pk-helper:x:111:114:user for cups-pk-helper service,,,:/usr/sbin/nologin
```

2-

```
faresedres@faresedres:/media/faresedres/Hard Drive/ITI/Bash/Lab1$ sed '3d' /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
```

3-

```
faresedres@faresedres:/media/faresedres/Hard Drive/ITI/Bash/Lab1$ sed '$d' /etc/passwd
root:x:0:0:root:/root:/bin/bash
```

4-

```
faresedres@faresedres:/media/faresedres/Hard Drive/ITI/Bash/Lab1$ sed '/lp/!p' /etc/passwd
root:x:0:0:root:/root:/bin/bash
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
```

5-

```
faresedres@faresedres:/media/faresedres/Hard Drive/ITI/Bash/Lab1$ sed 's/lp/mylp/' /etc/passwd | grep "mylp"
mylp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
cups-pk-hemylper:x:111:114:user for cups-pk-helper service,,,:/usr/sbin/nologin
```

Awk

1-

```
awk '
BEGIN{
FS=":"
OFS=" "
}
{
print $5
}
END{
}' /etc/passwd

faresedres@faresedres:/media/faresedres/Hard Drive/ITI/Bash/Lab1$ ./test
root
daemon
bin
sys
sync
games
man
lp
mail
news
uucp
proxy
```

2-

```
awk '
BEGIN{
FS=":"
OFS=" "
}
{
print NR " " $1 " " $3 " " $6
}
END{
}' /etc/passwd
```

See snap info <snapname> for additional versions.

```
faresedres@faresedres:/media/faresedres/Hard Drive/ITI/Bash/Lab1$ ./test
1 root 0 /root
2 daemon 1 /usr/sbin
3 bin 2 /bin
4 sys 3 /dev
5 sync 4 /bin
6 games 5 /usr/games
7 man 6 /var/cache/man
8 lp 7 /var/spool/lpd
9 mail 8 /var/mail
10 news 9 /var/spool/news
11 uucp 10 /var/spool/uucp
12 proxy 13 /bin
13 www-data 33 /var/www
14 backup 34 /var/backups
15 list 38 /var/list
16 irc 39 /run/ircd
17 _apt 42 /nonexistent
18 nobody 65534 /nonexistent
19 systemd-network 998 /
```

3-

```
awk '
BEGIN{
FS=":"
OFS=" "
}
{
if($3>500)
print NR " " $1 " " $3 " " $6
}
END{
}' /etc/passwd
```

```
faresedres@faresedres:/media/faresedres/Hard Drive/ITI/Bash/Lab1$ ./test
18 nobody 65534 /nonexistent
19 systemd-network 998 /
20 systemd-timesync 996 /
24 systemd-resolve 991 /
28 systemd-oom 990 /
30 dnsmasq 999 /var/lib/misc
36 fwupd-refresh 989 /var/lib/fwupd
41 gnome-remote-desktop 988 /var/lib/gnome-remote-desktop
42 polkitd 987 /
48 faresedres 1000 /home/faresedres
49 snapd-range-524288-root 524288 /nonexistent
50 snap_daemon 584788 /nonexistent
51 ollama 997 /usr/share/ollama
faresedres@faresedres:/media/faresedres/Hard Drive/ITI/Bash/Lab1$
```

4-

```
faresedres@faresedres:/media/faresedres/Hard Drive/ITI/Bash/Lab1$ ./test
No users have been found
faresedres@faresedres:/media/faresedres/Hard Drive/ITI/Bash/Lab1$

awk '
BEGIN{
FS=":"
OFS=" "
isFound=0
}
{
if($3==500){
print NR " " $1 " " $3 " " $6
isFound=1
}
}
END{
if(isFound==0)
print "No users have been found"
}' /etc/passwd
```

5-

```
faresedres@faresedres:/media/faresedres/Hard Drive/ITI/Bash/Lab1$ ./test
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
faresedres@faresedres:/media/faresedres/Hard Drive/ITI/Bash/Lab1$

awk '
BEGIN{
FS=":"
OFS=" "
isFound=0
}
{
if(NR>=5 && NR<=15){
print $0
isFound=1
}
}
END{
if(isFound==0)
print "No users have been found"
}' /etc/passwd
```

6-

```
Example.js
faresedres@faresedres:/media/faresedres/Hard Drive/ITI/Bash/Lab1$ ./test
awk '
BEGIN{
FS=":"
OFS=" "
isFound=0
}
{
if(gsub(/lp/,"mylp")){
print $0
isFound=1
}
}
END{
if(isFound==0)
print "No users have been found"
}' /etc/passwd
mylp:x:7:7:mylp:/var/spool/mylpd:/usr/sbin/nologin
cups-pk-hemylper:x:111:114:user for cups-pk-hemylper service,,,:/nonexist
faresedres@faresedres:/media/faresedres/Hard Drive/ITI/Bash/Lab1$
```

7-

```
faresedres@faresedres:/media/faresedres/Hard Drive/ITI/Bash/Lab1$ ./test
584788
faresedres@faresedres:/media/faresedres/Hard Drive/ITI/Bash/Lab1$
awk '
BEGIN{
FS=":"
OFS=" "
max=-1
}
{
if(max<$3){
max=$3
}
}
END{
print max
}' /etc/passwd
```

8-

```
faresedres@faresedres:/media/faresedres/Hard Drive/ITI/Bash/Lab1$ ./test
awk '
1 BEGIN{
2   FS=":"
3   OFS=" "
4   sum=0
5 }
6 {
7   sum+=$3
8 }
9 END{
10  print sum
11 }' /etc/passwd
1187109
faresedres@faresedres:/media/faresedres/Hard Drive/ITI/Bash/Lab1$
```