Using sed utility
1- Display the lines that contain the word "lp" in /etc/passwd file.


```
basmala@basmala-Latitude-5590:~$ sed -n '/lp/p' /etc/passwd
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
cups-pk-helper:x:115:122:user for cups-pk-helper service,,,:/home/cups-pk-helper
:/usr/sbin/nologin
basmala@basmala-Latitude-5590:~$
```

2- Display /etc/passwd file except the third line.


```
basmala@basmala-Latitude-5590:~$ sed -n '3!p' /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
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
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
messagebus:x:102:105::/nonexistent:/usr/sbin/nologin
systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
syslog:x:104:111::/home/syslog:/usr/sbin/nologin
_apt:x:105:65534::/nonexistent:/usr/sbin/nologin
tss:x:106:113:TPM software stack,,,:/var/lib/tpm:/bin/false
uuidd:x:107:116::/run/uuidd:/usr/sbin/nologin
systemd-oom:x:108:117:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin
tcpdump:x:109:118::/nonexistent:/usr/sbin/nologin
avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
usbmux:x:111:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
kernoops:x:113:65534:Kernel Oops Tracking Daemon,,,:/:/usr/sbin/nologin
avahi:x:114:121:Avahi mDNS daemon,,,:/run/avahi-daemon:/usr/sbin/nologin
cups-pk-helper:x:115:122:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin
rtkit:x:116:123:RealtimeKit,,,:/proc:/usr/sbin/nologin
whoopsie:x:117:124::/nonexistent:/bin/false
sssd:x:118:125:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin
speech-dispatcher:x:119:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false
fwupd-refresh:x:120:126:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
nm-openvpn:x:121:127:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
saned:x:122:129::/var/lib/saned:/usr/sbin/nologin
colord:x:123:130:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
geoclue:x:124:131::/var/lib/geoclue:/usr/sbin/nologin
pulse:x:125:132:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin
gnome-initial-setup:x:126:65534::/run/gnome-initial-setup/:/bin/false
hplip:x:127:7:HPLIP system user,,,:/run/hplip:/bin/false
gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false
basmala:x:1000:1000:basmala,,,:/home/basmala:/bin/bash
mysql:x:129:137:MySQL Server,,,:/nonexistent:/bin/false
basmala@basmala-Latitude-5590:~$
```

3- Display /etc/passwd file except the last line.

```
basmala@basmala-Latitude-5590:~$ sed -n '$!p' /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/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
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
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
messagebus:x:102:105::/nonexistent:/usr/sbin/nologin
systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
syslog:x:104:111::/home/syslog:/usr/sbin/nologin
_apt:x:105:65534::/nonexistent:/usr/sbin/nologin
tss:x:106:113:TPM software stack,,,:/var/lib/tpm:/bin/false
uuidd:x:107:116::/run/uuidd:/usr/sbin/nologin
systemd-oom:x:108:117:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin
tcpdump:x:109:118::/nonexistent:/usr/sbin/nologin
avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
usbmux:x:111:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
kernoops:x:113:65534:Kernel Oops Tracking Daemon,,,:/:/usr/sbin/nologin
avahi:x:114:121:Avahi mDNS daemon,,,:/run/avahi-daemon:/usr/sbin/nologin
cups-pk-helper:x:115:122:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin
rtkit:x:116:123:RealtimeKit,,,:/proc:/usr/sbin/nologin
whoopsie:x:117:124::/nonexistent:/bin/false
sssd:x:118:125:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin
speech-dispatcher:x:119:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false
fwupd-refresh:x:120:126:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
nm-openvpn:x:121:127:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
saned:x:122:129::/var/lib/saned:/usr/sbin/nologin
colord:x:123:130:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
geoclue:x:124:131::/var/lib/geoclue:/usr/sbin/nologin
pulse:x:125:132:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin
gnome-initial-setup:x:126:65534::/run/gnome-initial-setup/:/bin/false
hplip:x:127:7:HPLIP system user,,,:/run/hplip:/bin/false
gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false
basmala:x:1000:1000:basmala,,,:/home/basmala:/bin/bash
basmala@basmala-Latitude-5590:~$
```

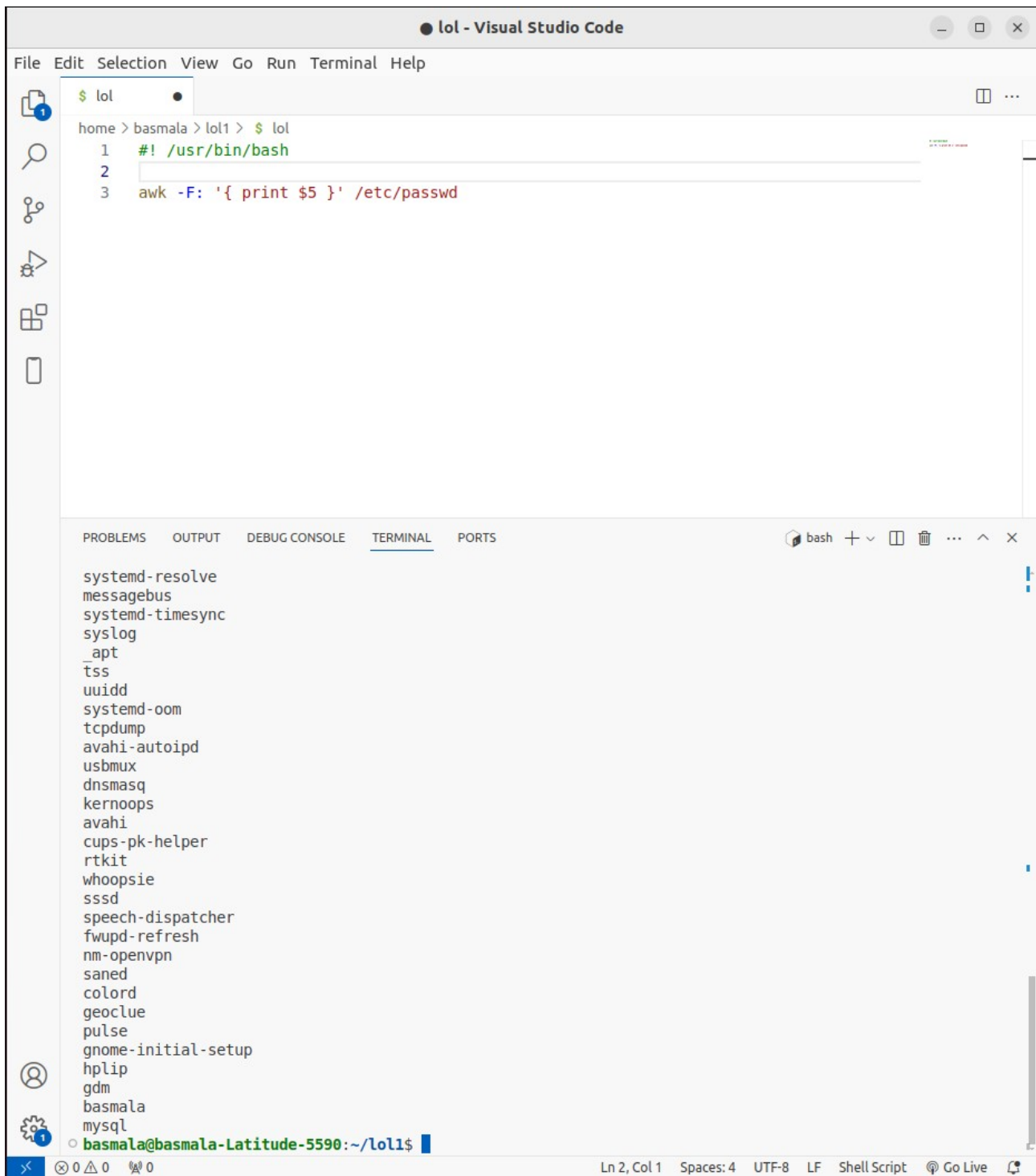4- Display /etc/passwd file except the lines that contain the word "lp".

```
basmala@basmala-Latitude-5590:~$ sed '/lp/d' /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/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
man:x:6:12:man:/var/cache/man:/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
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
messagebus:x:102:105::/nonexistent:/usr/sbin/nologin
systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
syslog:x:104:111::/home/syslog:/usr/sbin/nologin
_apt:x:105:65534::/nonexistent:/usr/sbin/nologin
tss:x:106:113:TPM software stack,,,:/var/lib/tpm:/bin/false
uuidd:x:107:116::/run/uuidd:/usr/sbin/nologin
systemd-oom:x:108:117:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin
tcpdump:x:109:118::/nonexistent:/usr/sbin/nologin
avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
usbmux:x:111:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
kernoops:x:113:65534:Kernel Oops Tracking Daemon,,,:/:/usr/sbin/nologin
avahi:x:114:121:Avahi mDNS daemon,,,:/run/avahi-daemon:/usr/sbin/nologin
rtkit:x:116:123:RealtimeKit,,,:/proc:/usr/sbin/nologin
whoopsie:x:117:124::/nonexistent:/bin/false
sssd:x:118:125:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin
speech-dispatcher:x:119:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false
fwupd-refresh:x:120:126:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
nm-openvpn:x:121:127:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
saned:x:122:129::/var/lib/saned:/usr/sbin/nologin
colord:x:123:130:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
geoclue:x:124:131::/var/lib/geoclue:/usr/sbin/nologin
pulse:x:125:132:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin
gnome-initial-setup:x:126:65534::/run/gnome-initial-setup/:/bin/false
hplip:x:127:7:HPLIP system user,,,:/run/hplip:/bin/false
gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false
basmala:x:1000:1000:basmala,,,:/home/basmala:/bin/bash
mysql:x:129:137:MySQL Server,,,:/nonexistent:/bin/false
basmala@basmala-Latitude-5590:~$
```

5- Substitute all the words that contain "lp" with "mylp" in /etc/passwd file.

basmala@basmala-Latitude-5590: ~

basmala@basmala-Latitude-5590:~$ sed -n 's/lp/mylp/gp' /etc/passwd
mylp:x:7:7:mylp:/var/spool/mylpd:/usr/sbin/nologin
cups-pk-hemylper:x:115:122:user for cups-pk-hemylper service,,,:/home/cups-pk-hemylper:/usr/sbin/nolo
gin
basmala@basmala-Latitude-5590:~$ ▮

Using awk utility
1- Print full name (comment) of all users in the system.

File   Edit   Selection   View   Go   Run   Terminal   Help

$ lol
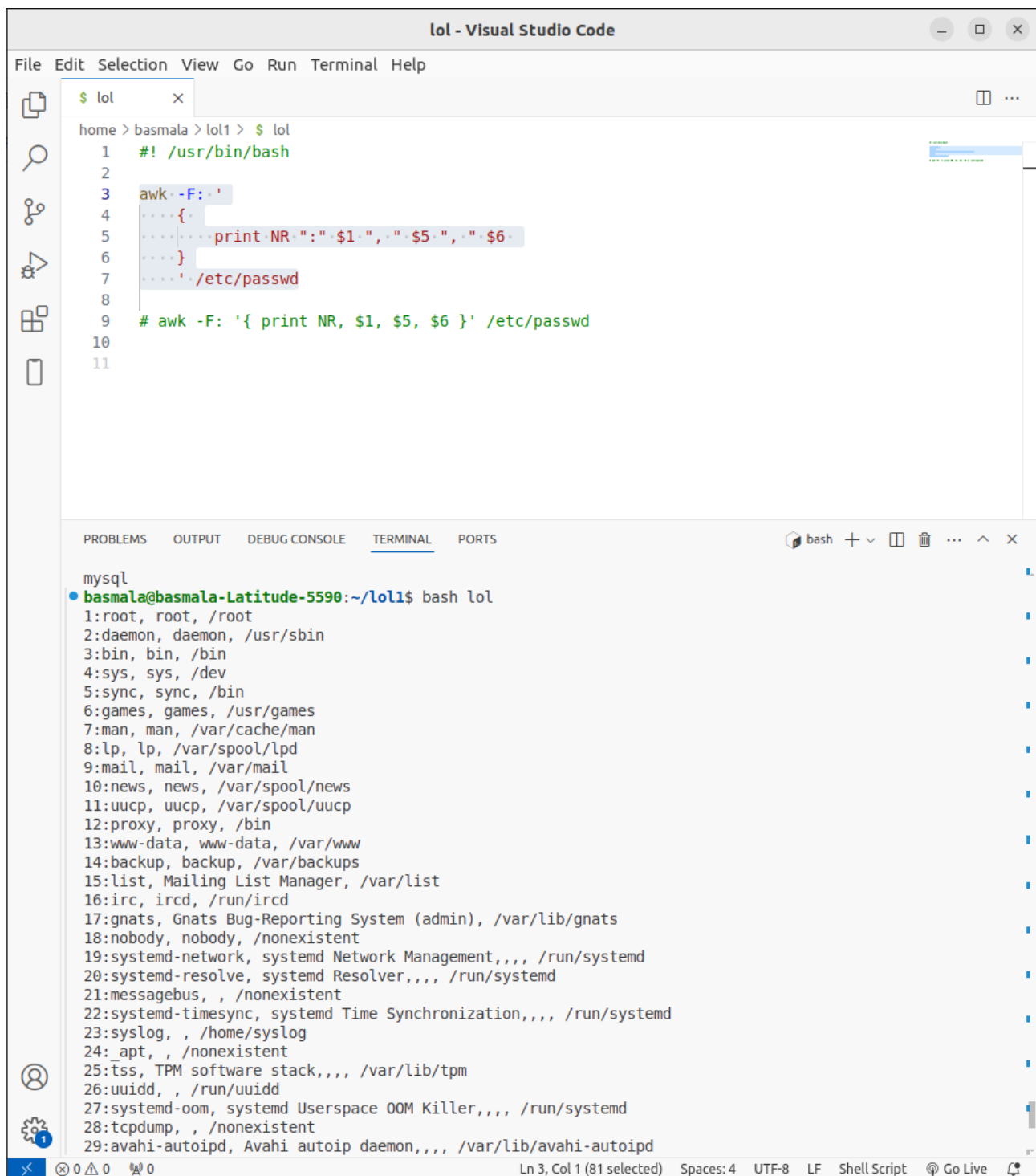
home > basmala > lol1 > $ lol

```bash
1   #! /usr/bin/bash
2
3   awk -F: '{ print $5 }' /etc/passwd
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS   bash

```
systemd-resolve
messagebus
systemd-timesync
syslog
_apt
tss
uuidd
systemd-oom
tcpdump
avahi-autoipd
usbmux
dnsmasq
kernoops
avahi
cups-pk-helper
rtkit
whoopsie
sssd
speech-dispatcher
fwupd-refresh
nm-openvpn
saned
colord
geoclue
pulse
gnome-initial-setup
hplip
gdm
basmala
mysql
basmala@basmala-Latitude-5590:~/lol1$
```

⊗ 0 △ 0   ⚡ 0   Ln 2, Col 1   Spaces: 4   UTF-8   LF   Shell Script   Go Live

2- Print login, full name (comment) and home directory of all users.(Print each line preceded by a line number)

File Edit Selection View Go Run Terminal Help
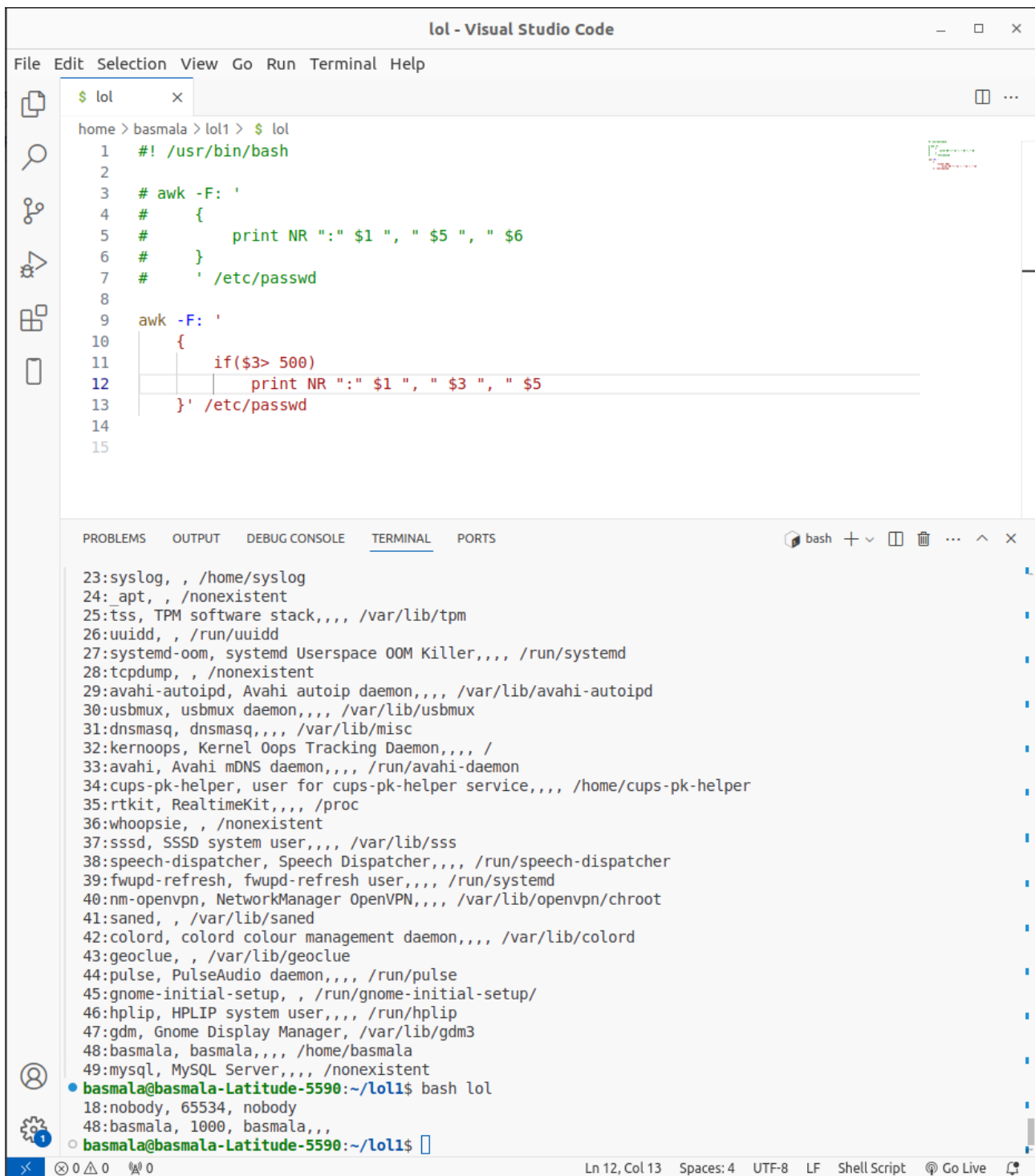
$ lol ×

home > basmala > lol1 > $ lol

```bash
1   #! /usr/bin/bash
2
3   awk -F: '
4   {
5       print NR ":" $1 "," $5 "," $6
6   }
7   ' /etc/passwd
8
9   # awk -F: '{ print NR, $1, $5, $6 }' /etc/passwd
10
11
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
mysql
basmala@basmala-Latitude-5590:~/lol1$ bash lol
1:root, root, /root
2:daemon, daemon, /usr/sbin
3:bin, bin, /bin
4:sys, sys, /dev
5:sync, sync, /bin
6:games, games, /usr/games
7:man, man, /var/cache/man
8:lp, lp, /var/spool/lpd
9:mail, mail, /var/mail
10:news, news, /var/spool/news
11:uucp, uucp, /var/spool/uucp
12:proxy, proxy, /bin
13:www-data, www-data, /var/www
14:backup, backup, /var/backups
15:list, Mailing List Manager, /var/list
16:irc, ircd, /run/ircd
17:gnats, Gnats Bug-Reporting System (admin), /var/lib/gnats
18:nobody, nobody, /nonexistent
19:systemd-network, systemd Network Management,,,, /run/systemd
20:systemd-resolve, systemd Resolver,,,, /run/systemd
21:messagebus, , /nonexistent
22:systemd-timesync, systemd Time Synchronization,,,, /run/systemd
23:syslog, , /home/syslog
24:_apt, , /nonexistent
25:tss, TPM software stack,,,, /var/lib/tpm
26:uuidd, , /run/uuidd
27:systemd-oom, systemd Userspace OOM Killer,,,, /run/systemd
28:tcpdump, , /nonexistent
29:avahi-autoipd, Avahi autoip daemon,,,, /var/lib/avahi-autoipd
```

⊗ 0 ⚠ 0   📢 0   Ln 3, Col 1 (81 selected)   Spaces: 4   UTF-8   LF   Shell Script   Go Live

3- Print login, uid and full name (comment) of those uid is greater than 500
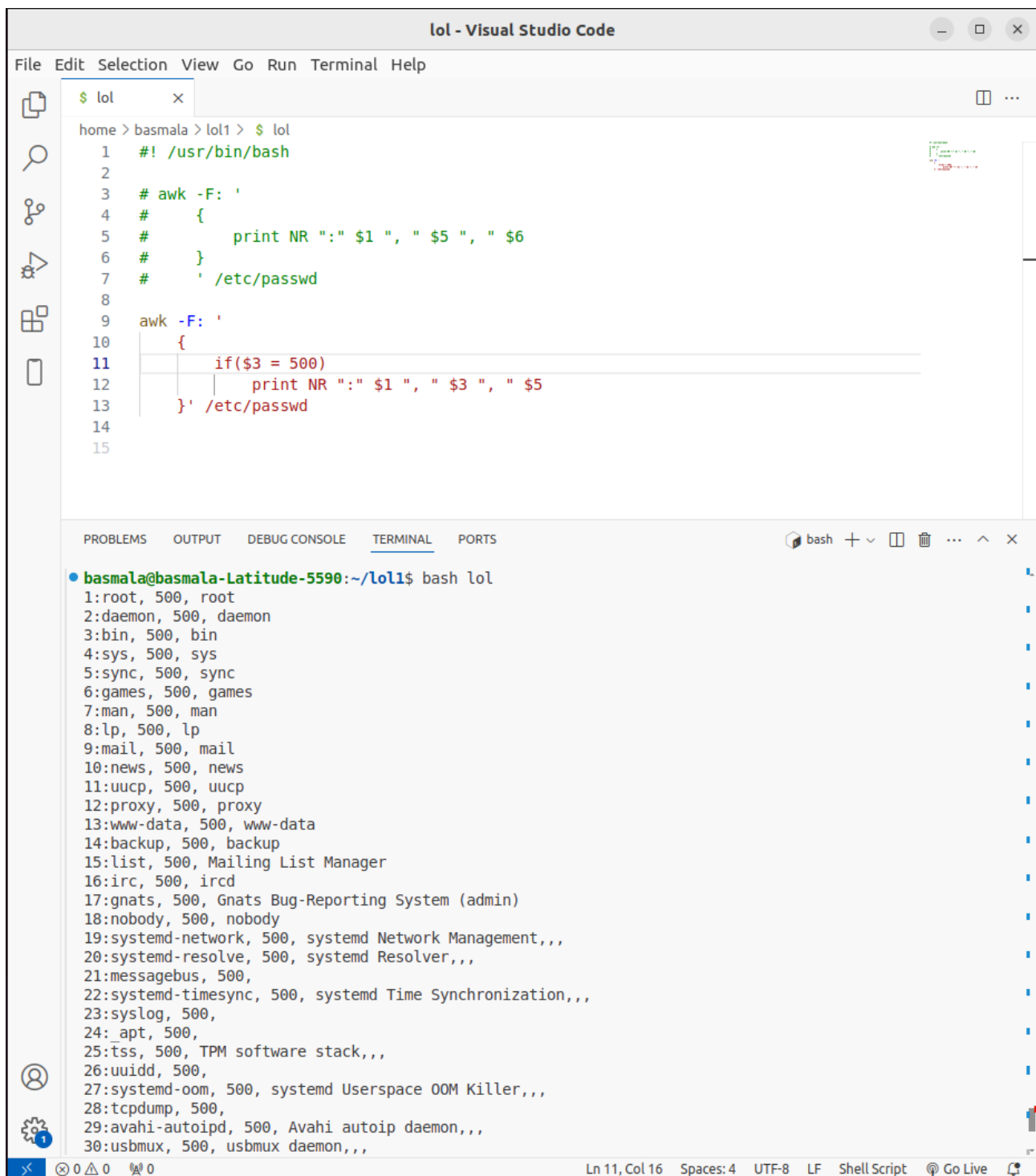
```bash
#! /usr/bin/bash

# awk -F: '
#     {
#           print NR ":" $1 ", " $5 ", " $6
#     }
#     ' /etc/passwd

awk -F: '
    {
        if($3> 500)
            print NR ":" $1 ", " $3 ", " $5
    }' /etc/passwd

```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
23:syslog, , /home/syslog
24:_apt, , /nonexistent
25:tss, TPM software stack,,,, /var/lib/tpm
26:uuidd, , /run/uuidd
27:systemd-oom, systemd Userspace OOM Killer,,,, /run/systemd
28:tcpdump, , /nonexistent
29:avahi-autoipd, Avahi autoip daemon,,,, /var/lib/avahi-autoipd
30:usbmux, usbmux daemon,,,, /var/lib/usbmux
31:dnsmasq, dnsmasq,,,, /var/lib/misc
32:kernoops, Kernel Oops Tracking Daemon,,,, /
33:avahi, Avahi mDNS daemon,,,, /run/avahi-daemon
34:cups-pk-helper, user for cups-pk-helper service,,,, /home/cups-pk-helper
35:rtkit, RealtimeKit,,,, /proc
36:whoopsie, , /nonexistent
37:sssd, SSSD system user,,,, /var/lib/sss
38:speech-dispatcher, Speech Dispatcher,,,, /run/speech-dispatcher
39:fwupd-refresh, fwupd-refresh user,,,, /run/systemd
40:nm-openvpn, NetworkManager OpenVPN,,,, /var/lib/openvpn/chroot
41:saned, , /var/lib/saned
42:colord, colord colour management daemon,,,, /var/lib/colord
43:geoclue, , /var/lib/geoclue
44:pulse, PulseAudio daemon,,,, /run/pulse
45:gnome-initial-setup, , /run/gnome-initial-setup/
46:hplip, HPLIP system user,,,, /run/hplip
47:gdm, Gnome Display Manager, /var/lib/gdm3
48:basmala, basmala,,,, /home/basmala
49:mysql, MySQL Server,,,, /nonexistent
basmala@basmala-Latitude-5590:~/lol1$ bash lol
18:nobody, 65534, nobody
48:basmala, 1000, basmala,,,
basmala@basmala-Latitude-5590:~/lol1$
```

4- Print login, uid and full name (comment) of those uid is exactly 500

File Edit Selection View Go Run Terminal Help

$ lol   ×

home > basmala > lol1 > $ lol

```bash
 1   #! /usr/bin/bash
 2
 3   # awk -F: '
 4   #     {
 5   #         print NR ":" $1 ", " $5 ", " $6
 6   #     }
 7   #     ' /etc/passwd
 8
 9   awk -F: '
10       {
11           if($3 = 500)
12               print NR ":" $1 ", " $3 ", " $5
13       }' /etc/passwd
14
15
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS   bash + ∨ ☐ 🗑 ⋯ ∧ ×

```
basmala@basmala-Latitude-5590:~/lol1$ bash lol
1:root, 500, root
2:daemon, 500, daemon
3:bin, 500, bin
4:sys, 500, sys
5:sync, 500, sync
6:games, 500, games
7:man, 500, man
8:lp, 500, lp
9:mail, 500, mail
10:news, 500, news
11:uucp, 500, uucp
12:proxy, 500, proxy
13:www-data, 500, www-data
14:backup, 500, backup
15:list, 500, Mailing List Manager
16:irc, 500, ircd
17:gnats, 500, Gnats Bug-Reporting System (admin)
18:nobody, 500, nobody
19:systemd-network, 500, systemd Network Management,,,
20:systemd-resolve, 500, systemd Resolver,,,
21:messagebus, 500,
22:systemd-timesync, 500, systemd Time Synchronization,,,
23:syslog, 500,
24:_apt, 500,
25:tss, 500, TPM software stack,,,
26:uuidd, 500,
27:systemd-oom, 500, systemd Userspace OOM Killer,,,
28:tcpdump, 500,
29:avahi-autoipd, 500, Avahi autoip daemon,,,
30:usbmux, 500, usbmux daemon,,,
```

Ln 11, Col 16   Spaces: 4   UTF-8   LF   Shell Script   Go Live

5- Print line from 5 to 15 from /etc/passwd

```
    4   #      {
    5   #            print NR ":" $1 ", " $5 ", " $6
    6   #      }
    7   #      ' /etc/passwd
    8
    9   # awk -F: '
   10   #      {
   11   #            if($3 = 500)
   12   #                  print NR ":" $1 ", " $3 ", " $5
   13   #      }' /etc/passwd
   14
   15   awk -F: '
   16       NR >= 5 && NR<15' /etc/passwd
```
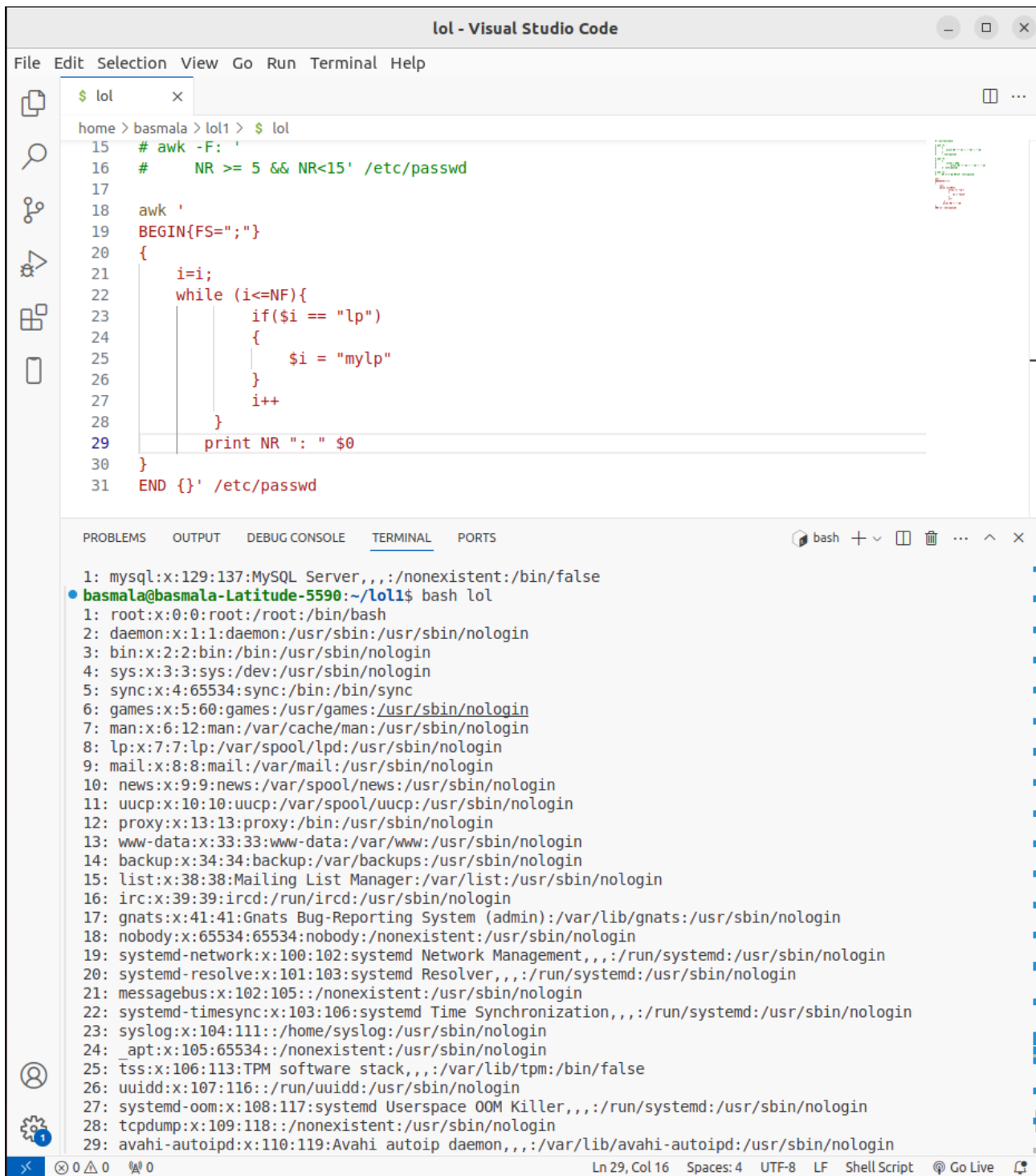
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
12
13
14
basmala@basmala-Latitude-5590:~/lol1$ bash lol
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
basmala@basmala-Latitude-5590:~/lol1$ bash lol
awk: line 2: extra ')'
basmala@basmala-Latitude-5590:~/lol1$ bash lol
basmala@basmala-Latitude-5590:~/lol1$ bash lol
basmala@basmala-Latitude-5590:~/lol1$ bash lol
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
basmala@basmala-Latitude-5590:~/lol1$
basmala@basmala-Latitude-5590:~/lol1$
```

6- Change lp to mylp

```
15    # awk -F: '
16    #      NR >= 5 && NR<15' /etc/passwd
17
18    awk '
19    BEGIN{FS=";"}
20    {
21        i=i;
22        while (i<=NF){
23              if($i == "lp")
24              {
25                  $i = "mylp"
26              }
27              i++
28          }
29        print NR ": " $0
30    }
31    END {}' /etc/passwd
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
1: mysql:x:129:137:MySQL Server,,,:/nonexistent:/bin/false
basmala@basmala-Latitude-5590:~/lol1$ bash lol
1: root:x:0:0:root:/root:/bin/bash
2: daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
3: bin:x:2:2:bin:/bin:/usr/sbin/nologin
4: sys:x:3:3:sys:/dev:/usr/sbin/nologin
5: sync:x:4:65534:sync:/bin:/bin/sync
6: games:x:5:60:games:/usr/games:/usr/sbin/nologin
7: man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
8: lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
9: mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
10: news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
11: uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
12: proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
13: www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
14: backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
15: list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
16: irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
17: gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
18: nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
19: systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin
20: systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
21: messagebus:x:102:105::/nonexistent:/usr/sbin/nologin
22: systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
23: syslog:x:104:111::/home/syslog:/usr/sbin/nologin
24: _apt:x:105:65534::/nonexistent:/usr/sbin/nologin
25: tss:x:106:113:TPM software stack,,,:/var/lib/tpm:/bin/false
26: uuidd:x:107:116::/run/uuidd:/usr/sbin/nologin
27: systemd-oom:x:108:117:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin
28: tcpdump:x:109:118::/nonexistent:/usr/sbin/nologin
29: avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
```

7- Print all information about greatest uid.

File Edit Selection View Go Run Terminal Help

$ lol   ×

home > basmala > lol1 > $ lol

```
13   #      }' /etc/passwd
14
15   # awk -F: '
16   #      NR >= 5 && NR<15' /etc/passwd
17
18   awk -F: '
19   BEGIN{max = 1}
20   {
21       if ($3 > max)
22       max = $3;
23       maxuser= $0
24   }
25   END {print maxuser}' /etc/passwd
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS   bash + ∨ ⧉ 🗑 ··· ∧ ✕

```
22: systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
23: syslog:x:104:111::/home/syslog:/usr/sbin/nologin
24: _apt:x:105:65534::/nonexistent:/usr/sbin/nologin
25: tss:x:106:113:TPM software stack,,,:/var/lib/tpm:/bin/false
26: uuidd:x:107:116::/run/uuidd:/usr/sbin/nologin
27: systemd-oom:x:108:117:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin
28: tcpdump:x:109:118::/nonexistent:/usr/sbin/nologin
29: avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
30: usbmux:x:111:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
31: dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
32: kernoops:x:113:65534:Kernel Oops Tracking Daemon,,,:/:/usr/sbin/nologin
33: avahi:x:114:121:Avahi mDNS daemon,,,:/run/avahi-daemon:/usr/sbin/nologin
34: cups-pk-helper:x:115:122:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin
35: rtkit:x:116:123:RealtimeKit,,,:/proc:/usr/sbin/nologin
36: whoopsie:x:117:124::/nonexistent:/bin/false
37: sssd:x:118:125:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin
38: speech-dispatcher:x:119:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false
39: fwupd-refresh:x:120:126:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
40: nm-openvpn:x:121:127:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
41: saned:x:122:129::/var/lib/saned:/usr/sbin/nologin
42: colord:x:123:130:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
43: geoclue:x:124:131::/var/lib/geoclue:/usr/sbin/nologin
44: pulse:x:125:132:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin
45: gnome-initial-setup:x:126:65534::/run/gnome-initial-setup/:/bin/false
46: hplip:x:127:7:HPLIP system user,,,:/run/hplip:/bin/false
47: gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false
48: basmala:x:1000:1000:basmala,,,:/home/basmala:/bin/bash
49: mysql:x:129:137:MySQL Server,,,:/nonexistent:/bin/false
● basmala@basmala-Latitude-5590:~/lol1$ bash lol
mysql:x:129:137:MySQL Server,,,:/nonexistent:/bin/false
○ basmala@basmala-Latitude-5590:~/lol1$ ▊
```

⊗ 0 ⚠ 0   ⁗ 0   Ln 23, Col 16   Spaces: 4   UTF-8   LF   Shell Script   ⊚ Go Live   ⌕

8- Get the sum of all accounts id's.

File Edit Selection View Go Run Terminal Help

$ lol ×

home > basmala > lol1 > $ lol

```
13    #      }' /etc/passwd
14
15    # awk -F: '
16    #      NR >= 5 && NR<15' /etc/passwd
17
18    awk -F: '
19    BEGIN{sum = 0}
20    {
21        sum += $3;
22    }
23    END {print sum}' /etc/passwd
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS   bash + ∨ ☐ 🗑 ··· ∧ ✕

```
24: _apt:x:105:65534::/nonexistent:/usr/sbin/nologin
25: tss:x:106:113:TPM software stack,,,:/var/lib/tpm:/bin/false
26: uuidd:x:107:116::/run/uuidd:/usr/sbin/nologin
27: systemd-oom:x:108:117:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin
28: tcpdump:x:109:118::/nonexistent:/usr/sbin/nologin
29: avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
30: usbmux:x:111:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
31: dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
32: kernoops:x:113:65534:Kernel Oops Tracking Daemon,,,:/:/usr/sbin/nologin
33: avahi:x:114:121:Avahi mDNS daemon,,,:/run/avahi-daemon:/usr/sbin/nologin
34: cups-pk-helper:x:115:122:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin
35: rtkit:x:116:123:RealtimeKit,,,:/proc:/usr/sbin/nologin
36: whoopsie:x:117:124::/nonexistent:/bin/false
37: sssd:x:118:125:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin
38: speech-dispatcher:x:119:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false
39: fwupd-refresh:x:120:126:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
40: nm-openvpn:x:121:127:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
41: saned:x:122:129::/var/lib/saned:/usr/sbin/nologin
42: colord:x:123:130:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
43: geoclue:x:124:131::/var/lib/geoclue:/usr/sbin/nologin
44: pulse:x:125:132:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin
45: gnome-initial-setup:x:126:65534::/run/gnome-initial-setup/:/bin/false
46: hplip:x:127:7:HPLIP system user,,,:/run/hplip:/bin/false
47: gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false
48: basmala:x:1000:1000:basmala,,,:/home/basmala:/bin/bash
49: mysql:x:129:137:MySQL Server,,,:/nonexistent:/bin/false
● basmala@basmala-Latitude-5590:~/lol1$ bash lol
mysql:x:129:137:MySQL Server,,,:/nonexistent:/bin/false
● basmala@basmala-Latitude-5590:~/lol1$ bash lol
70222
○ basmala@basmala-Latitude-5590:~/lol1$ ▯
```

⊗ 0 ⚠ 0   ⓘ 0   Ln 23, Col 15   Spaces: 4   UTF-8   LF   Shell Script   Go Live   ⏻