

Lab1 Bash

Using sed utility

1- Display the lines that contain the word “lp” in /etc/passwd file.

```
File Edit View Search Terminal Help
[Ehassouna@localhost ~]$ sed '/lp/p' /etc/passwd
root:x:0:0:root:/root:/bin/bash
bin:x:1:1:bin:/bin:/sbin/nologin
daemon:x:2:2:daemon:/sbin:/sbin/nologin
adm:x:3:4:adm:/var/adm:/sbin/nologin
lp:x:4:7:lp:/var/spool/lpd:/sbin/nologin
lp:x:4:7:lp:/var/spool/lpd:/sbin/nologin
sync:x:5:0:sync:/sbin:/bin/sync
shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown
halt:x:7:0:halt:/sbin:/sbin/halt
mail:x:8:12:mail:/var/spool/mail:/sbin/nologin
operator:x:11:0:operator:/root:/sbin/nologin
games:x:12:100:games:/usr/games:/sbin/nologin
ftp:x:14:50:FTP User:/var/ftp:/sbin/nologin
nobody:x:65534:65534:Kernel Overflow User:/sbin/nologin
dbus:x:81:81:System message bus:/sbin/nologin
systemd-coredump:x:999:997:systemd Core Dumper:/sbin/nologin
systemd-resolve:x:193:193:systemd Resolver:/sbin/nologin
tss:x:59:59:Account used for TPM access:/dev/null:/sbin/nologin
polkitd:x:998:996:User for polkitd:/sbin/nologin
geoclue:x:997:995:User for geoclue:/var/lib/geoclue:/sbin/nologin
rtkit:x:172:172:RealtimeKit:/proc:/sbin/nologin
pipewire:x:996:992:PipeWire System Daemon:/var/run/pipewire:/sbin/nologin
pulse:x:171:171:PulseAudio System Daemon:/var/run/pulse:/sbin/nologin
qemu:x:107:107:qemu user:/sbin/nologin
clevis:x:995:989:Clevis Encryption Framework unprivileged user:/var/cache/
clevis:/sbin/nologin
usbmuxd:x:113:113:usbmuxd user:/sbin/nologin
unbound:x:994:988:Unbound DNS resolver:/etc/unbound:/sbin/nologin
gluster:x:993:987:GlusterFS daemons:/run/gluster:/sbin/nologin
rpc:x:32:32:Rpcbind Daemon:/var/lib/rpcbind:/sbin/nologin
avahi:x:70:70:Avahi mDNS/DNS-SD Stack:/var/run/avahi-daemon:/sbin/nologin
chrony:x:992:986:./var/lib/chrony:/sbin/nologin
setroubleshoot:x:991:984:./var/lib/setroubleshoot:/sbin/nologin
sasauth:x:990:76:Sasauthd user:/run/sasauthd:/sbin/nologin
libstoragemgmt:x:989:983:daemon account for libstoragemgmt:/var/run/lsm:/s
bin/nologin
dmgm:x:991:991:Dmgm user:/var/lib/dmgm:/sbin/nologin
```

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

The terminal window shows the command `sed -n '3d' /etc/passwd` being executed. The LibreOffice Writer window displays the output of this command, which is the `/etc/passwd` file with the third line removed. The document is titled "lab1 bash.odt - LibreOffice Writer".

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

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

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

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

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

The terminal window shows the command `sed -d' /etc/passwd` being executed. The LibreOffice Writer window displays the output of this command, which is the `/etc/passwd` file with the last line removed. The document is titled "lab1 bash.odt - LibreOffice Writer".

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

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

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

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

Using `awk` utility

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

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

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

Activities Terminal Dec 4 14:02

EHassouna@localhost:~

```
[EHassouna@localhost ~]$ sed 's/lp/d' /etc/passwd
root:x:0:0:root:/root:/bin/bash
bin:x:1:1:bin:/bin:/sbin/nologin
daemon:x:2:2:daemon:/sbin:/sbin/nologin
adm:x:3:4:adm:/var/adm:/sbin/nologin
sync:x:5:0:sync:/sbin:/bin/sync
shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown
halt:x:7:0:halt:/sbin:/sbin/halt
mail:x:8:12:mail:/var/spool/mail:/sbin/nologin
operator:x:11:0:operator:/root:/sbin/nologin
games:x:12:100:games:/usr/games:/sbin/nologin
ftp:x:14:50:FTP User:/var/ftp:/sbin/nologin
nobody:x:65534:65534:Kernel Overflow User:/:/sbin/nologin
dbus:x:81:81:system message bus:/:/sbin/nologin
systemd-coredump:x:999:997:systemd Core Dumper:/:/sbin/nologin
systemd-resolve:x:193:193:systemd Resolver:/:/sbin/nologin
tss:x:59:59:Account used for TPM access:/dev/null:/sbin/nologin
polkitd:x:998:996:User for polkitd:/:/sbin/nologin
geoclue:x:997:995:User for geoclue:/var/lib/geoclue:/sbin/nologin
rtkit:x:172:172:RealtimeKit:/proc:/sbin/nologin
pipewire:x:996:992:PipeWire System Daemon:/var/run/pipewire:/sbin/nologin
pulse:x:171:171:PulseAudio System Daemon:/var/run/pulse:/sbin/nologin
qemu:x:107:107:qemu user:/:/sbin/nologin
clevis:x:995:989:clevis Decryption Framework unprivileged user:/var/cache/
clevis:/sbin/nologin
usbmuxd:x:113:113:usbmuxd user:/:/sbin/nologin
unbound:x:994:988:Unbound DNS resolver:/etc/unbound:/sbin/nologin
gluster:x:993:987:GlusterFS daemons:/run/gluster:/sbin/nologin
rpc:x:32:32:Rpcbind Daemon:/var/lib/rpcbind:/sbin/nologin
avahi:x:70:70:Avahi mDNS/DNS-SD Stack:/var/run/avahi-daemon:/sbin/nologin
chrony:x:992:986:/var/lib/chrony:/sbin/nologin
setroubleshoot:x:991:984:/var/lib/setroubleshoot:/sbin/nologin
sasauthd:x:990:76:Sasauthd user:/run/sasauthd:/sbin/nologin
libstoragemgmt:x:989:983:daemon account for libstoragemgmt:/var/run/lsm:/s
bin/nologin
dnsmasq:x:981:981:Dnsmasq DHCP and DNS server:/var/lib/dnsmasq:/sbin/nolog
in
```

lab1 bash.odt - LibreOffice Writer

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

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

Using **awk** utility

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

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

Activities Terminal Dec 4 14:09

EHassouna@localhost:~

```
[EHassouna@localhost ~]$ sed 's/lp/mylp/g' /etc/passwd
root:x:0:0:root:/root:/bin/bash
bin:x:1:1:bin:/bin:/sbin/nologin
daemon:x:2:2:daemon:/sbin:/sbin/nologin
adm:x:3:4:adm:/var/adm:/sbin/nologin
lp:x:4:7:lp:/var/spool/lpd:/sbin/nologin
sync:x:5:0:sync:/sbin:/bin/sync
shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown
halt:x:7:0:halt:/sbin:/sbin/halt
mail:x:8:12:mail:/var/spool/mail:/sbin/nologin
operator:x:11:0:operator:/root:/sbin/nologin
games:x:12:100:games:/usr/games:/sbin/nologin
ftp:x:14:50:FTP User:/var/ftp:/sbin/nologin
nobody:x:65534:65534:Kernel Overflow User:/:/sbin/nologin
dbus:x:81:81:system message bus:/:/sbin/nologin
systemd-coredump:x:999:997:systemd Core Dumper:/:/sbin/nologin
systemd-resolve:x:193:193:systemd Resolver:/:/sbin/nologin
tss:x:59:59:Account used for TPM access:/dev/null:/sbin/nologin
polkitd:x:998:996:User for polkitd:/:/sbin/nologin
geoclue:x:997:995:User for geoclue:/var/lib/geoclue:/sbin/nologin
rtkit:x:172:172:RealtimeKit:/proc:/sbin/nologin
pipewire:x:996:992:PipeWire System Daemon:/var/run/pipewire:/sbin/nologin
pulse:x:171:171:PulseAudio System Daemon:/var/run/pulse:/sbin/nologin
qemu:x:107:107:qemu user:/:/sbin/nologin
clevis:x:995:989:clevis Decryption Framework unprivileged user:/var/cache/
clevis:/sbin/nologin
usbmuxd:x:113:113:usbmuxd user:/:/sbin/nologin
unbound:x:994:988:Unbound DNS resolver:/etc/unbound:/sbin/nologin
gluster:x:993:987:GlusterFS daemons:/run/gluster:/sbin/nologin
rpc:x:32:32:Rpcbind Daemon:/var/lib/rpcbind:/sbin/nologin
avahi:x:70:70:Avahi mDNS/DNS-SD Stack:/var/run/avahi-daemon:/sbin/nologin
chrony:x:992:986:/var/lib/chrony:/sbin/nologin
setroubleshoot:x:991:984:/var/lib/setroubleshoot:/sbin/nologin
sasauthd:x:990:76:Sasauthd user:/run/sasauthd:/sbin/nologin
libstoragemgmt:x:989:983:daemon account for libstoragemgmt:/var/run/lsm:/s
bin/nologin
dnsmasq:x:981:981:Dnsmasq DHCP and DNS server:/var/lib/dnsmasq:/sbin/nolog
in
```

lab1 bash.odt - LibreOffice Writer

File Edit View Insert Format Styles Table Form Tools Window Help

Default Style Liberation Se 12 B I U S A² A₂

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

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

Using **awk** utility

- 1- Print full name (comment) of all users in the system

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Using awk utility

- 1- Print full name (comment) of all users in the system.
- 2- Print login, full name (comment) and home directory of all users.(Print each line preceded by a line number)
- 3- Print login, uid and full name (comment) of those uid is greater than 500
- 4- Print login, uid and full name (comment) of those uid is exactly 500
- 5- Print line from 5 to 15 from /etc/passwd
- 6- Change lp to mylp
- 7- Print all information about greatest uid.
- 8- Get the sum of all accounts id's.

Bonus

1. Get the sum of accounts id's that has the same group.
12. Make the following report:

User-Group Report

Group1 Name:

User1

User2

Group2 Name:

User3

User4

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