

# Bash Script

## Lab3

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Q1

```
samaa@DESKTOP-HLF0E6L:~$ sed -n '/^lp/p' /etc/passwd
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
samaa@DESKTOP-HLF0E6L:~$
```

Q2

```
samaa@DESKTOP-HLF0E6L:~$ sed -n '3d' /etc/passwd
samaa@DESKTOP-HLF0E6L:~$
```

Q3

```
samaa@DESKTOP-HLF0E6L:~$ sed '$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
```

Q4

```
samaa@DESKTOP-HLF0E6L:~$ 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
```

Q5

```
samaa@DESKTOP-HLF0E6L:~$ sed 's/lp/mylp/g' /etc/passwd | cat>test.txt
samaa@DESKTOP-HLF0E6L:~$
```

#####

Q1

```
samaa@DESKTOP-HLF0E6L:~$ awk -F':' '{print $1}' /etc/passwd
root
daemon
bin
sys
sync
games
man
lp
mail
news
uucp
proxy
www-data
backup
list
irc
```

Q2

```
samaa@DESKTOP-HLF0E6L:~$ awk '{FS=" ";print $1}' /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
```

Q3

```
samaa@DESKTOP-HLF0E6L:~$ awk -F: '{if ($3>500) {print $1":"$3}}' /etc/passwd
nobody:65534
samaa:1000
```

## Q4

```
samaa@DESKTOP-HLF0E6L:~$ awk -F: '{if ($3=500) {print $1":"$3}}' /etc/passwd
root:500
daemon:500
bin:500
sys:500
sync:500
games:500
man:500
lp:500
mail:500
news:500
uucp:500
proxy:500
www-data:500
backup:500
list:500
irc:500
gnats:500
```

## Q5

```
samaa@DESKTOP-HLF0E6L:~$ awk -F: '{print $5,$3}' /etc/passwd
root 0
daemon 1
bin 2
sys 3
sync 4
games 5
man 6
lp 7
mail 8
news 9
uucp 10
proxy 13
www-data 33
backup 34
Mailing List Manager 38
ircd 39
Gnats Bug-Reporting System (admin) 41
nobody 65534
systemd Network Management,,, 100
systemd Resolver,,, 101
systemd Time Synchronization,,, 102
```

## Q6

```
samaa@DESKTOP-HLF0E6L:~$ awk -F: '{if ($1=="lp") $1="mylp" ; print $0}' /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
mylp x 7 7 lp /var/spool/lpd /usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
```

## Q7

```
samaa@DESKTOP-HLF0E6L:~$ cat /etc/passwd | awk -F: '{print $3,$1}' | sort -n | tail -n 1
65534 nobody
samaa@DESKTOP-HLF0E6L:~$
```

## Q8

```
samaa@DESKTOP-HLF0E6L:~$ awk -F: '{for(i=1;i<=NR;i++) {sum=sum+$3} {print sum}}' /etc/passwd
0
2
8
20
40
70
112
168
240
330
440
596
1025
```