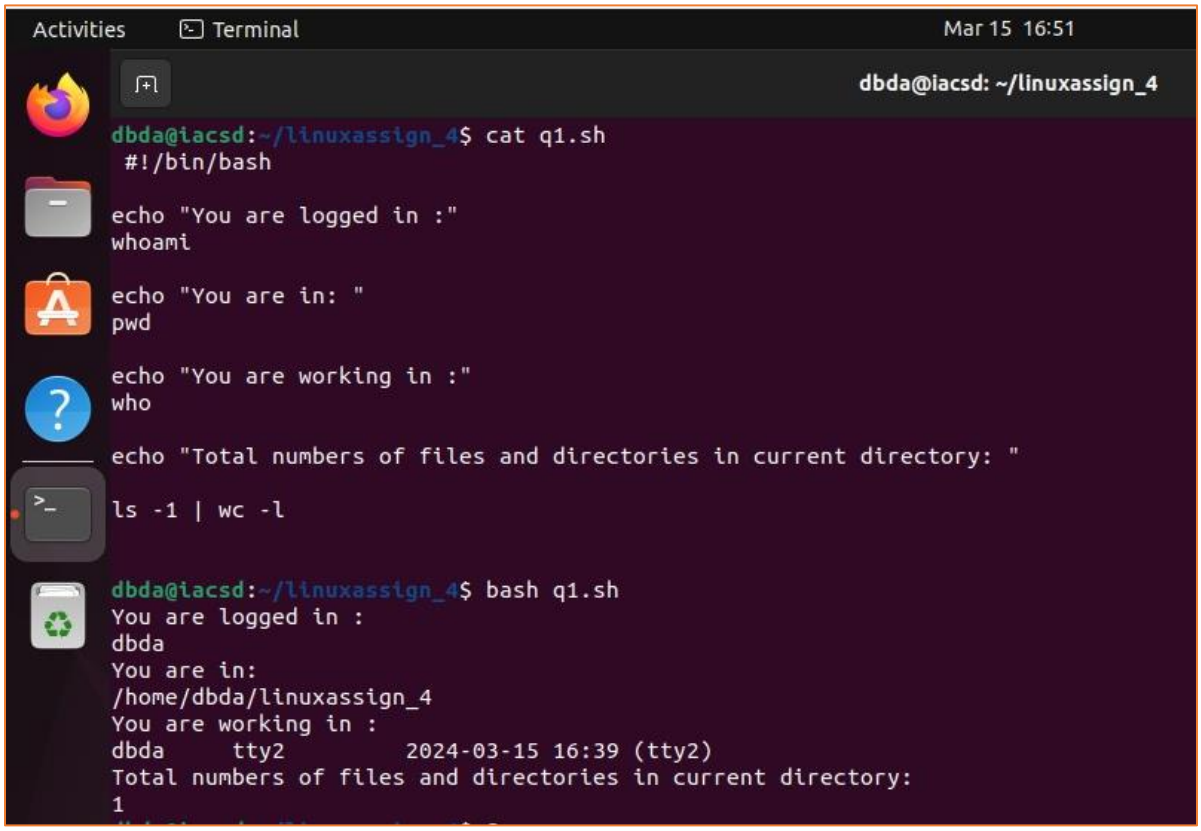
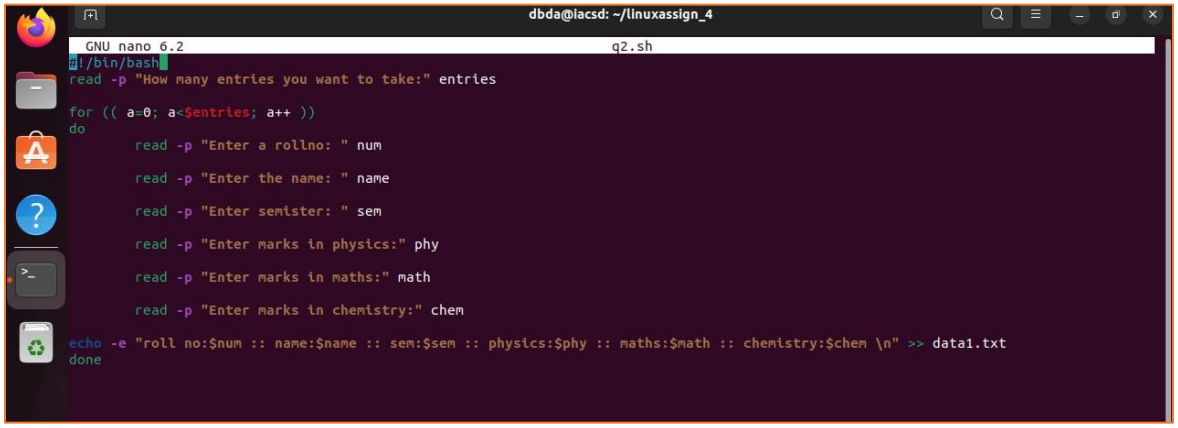
## ASS-4

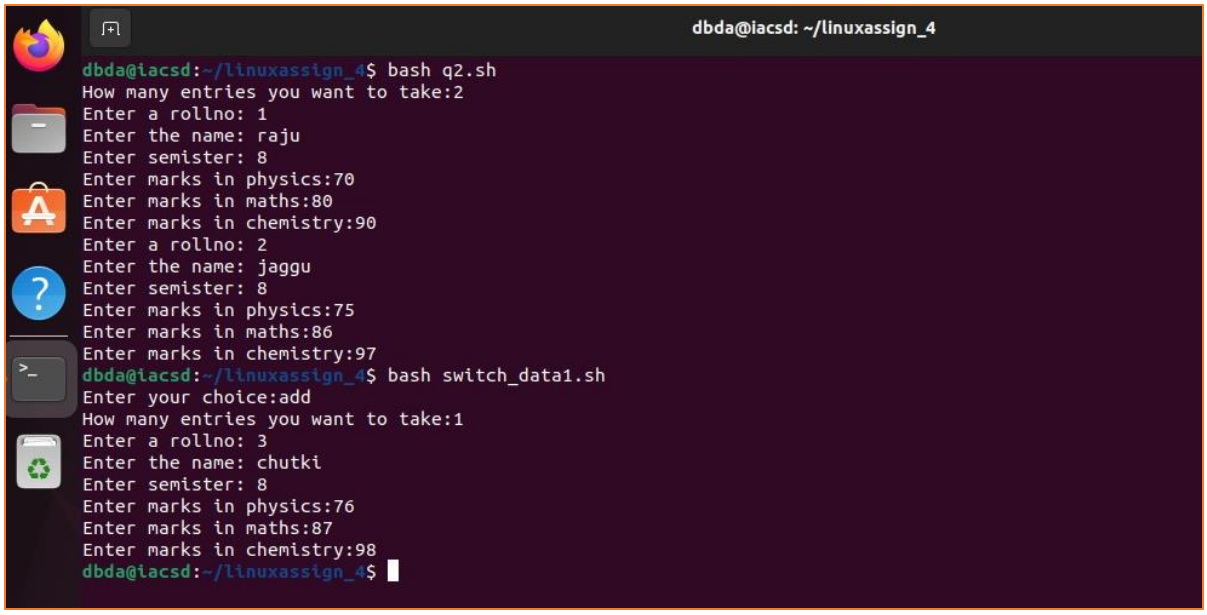
1) Write a shell script to print

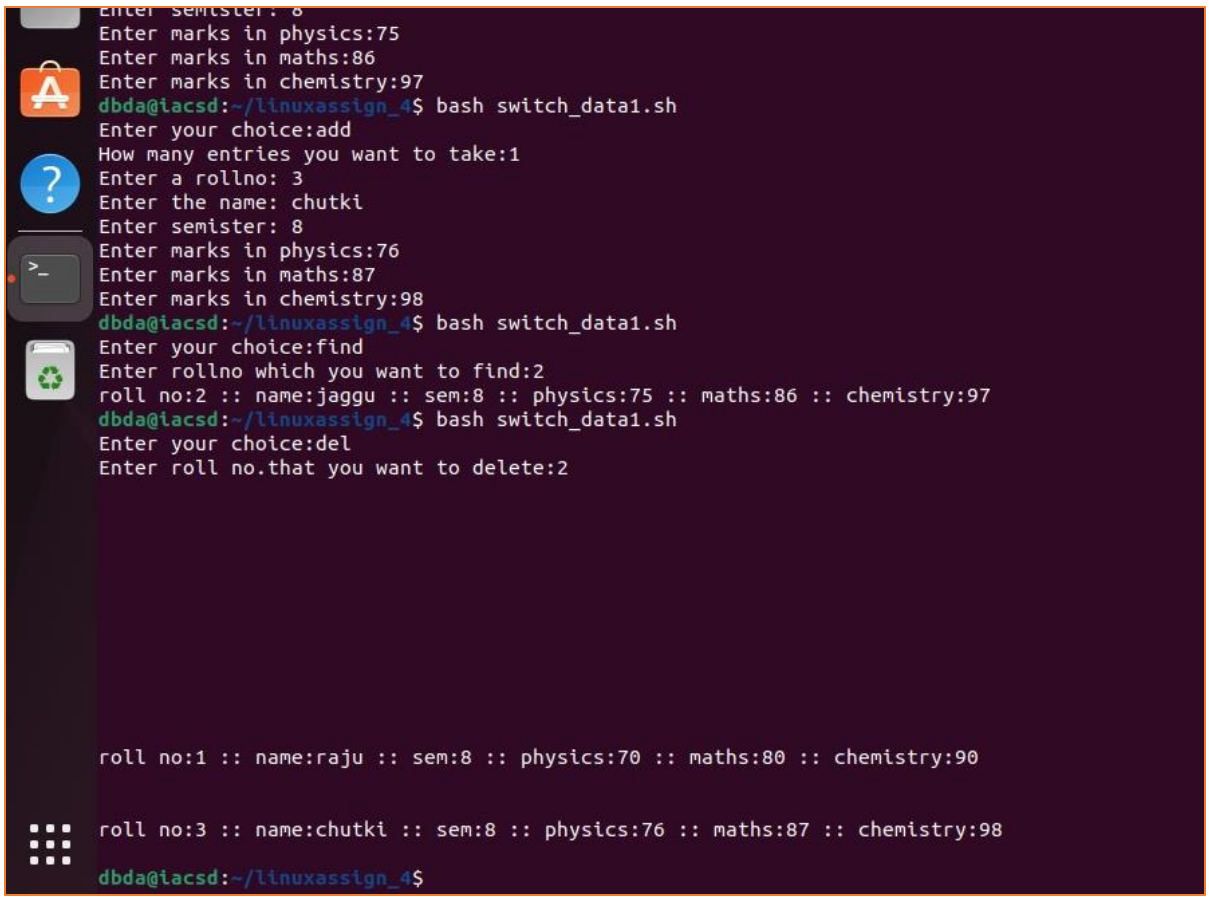
- your are logged in as which user
- in which directory you are
- and in which terminal you are working
- total number of files and directories in current directory



2).Write a shell script to create a menu driven program for adding, deletion or finding a record in a database. Database should have the field like rollno, name, semester and marks of three subjects. Last option of the menu should be to exit the menu.





dbda@iacsd: ~/linuxassign_4
dbda@iacsd:~/linuxassign_4$ bash q2.sh
How many entries you want to take:2
Enter a rollno: 1
Enter the name: raju
Enter semister: 8
Enter marks in physics:70
Enter marks in maths:80
Enter marks in chemistry:90
Enter a rollno: 2
Enter the name: jaggu
Enter semister: 8
Enter marks in physics:75
Enter marks in maths:86
Enter marks in chemistry:97
dbda@iacsd:~/linuxassign_4$ bash switch_data1.sh
Enter your choice:add
How many entries you want to take:1
Enter a rollno: 3
Enter the name: chutki
Enter semister: 8
Enter marks in physics:76
Enter marks in maths:87
Enter marks in chemistry:98
dbda@iacsd:~/linuxassign_4$

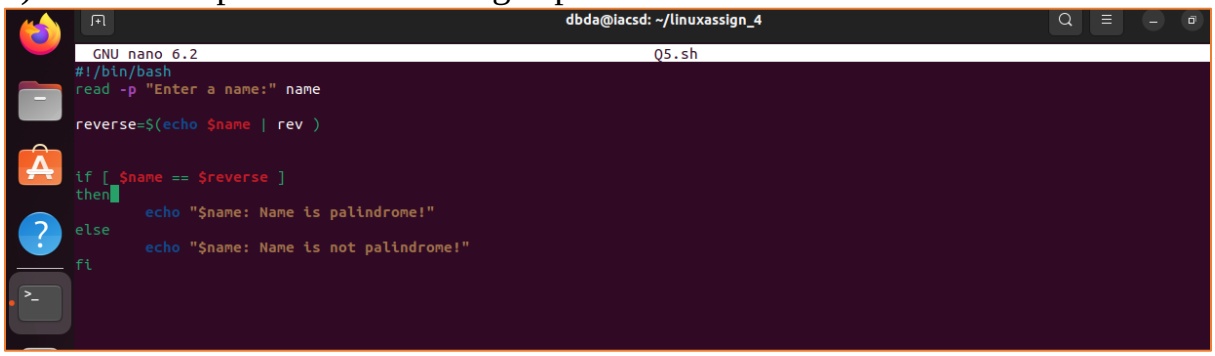

Enter marks in physics:75
Enter marks in maths:86
Enter marks in chemistry:97
dbda@iacsd:~/linuxassign_4$ bash switch_data1.sh
Enter your choice:add
How many entries you want to take:1
Enter a rollno: 3
Enter the name: chutki
Enter semister: 8
Enter marks in physics:76
Enter marks in maths:87
Enter marks in chemistry:98
dbda@iacsd:~/linuxassign_4$ bash switch_data1.sh
Enter your choice:find
Enter rollno which you want to find:2
roll no:2 :: name:jaggu :: sem:8 :: physics:75 :: maths:86 :: chemistry:97
dbda@iacsd:~/linuxassign_4$ bash switch_data1.sh
Enter your choice:del
Enter roll no.that you want to delete:2
roll no:1 :: name:raju :: sem:8 :: physics:70 :: maths:80 :: chemistry:90
roll no:3 :: name:chutki :: sem:8 :: physics:76 :: maths:87 :: chemistry:98
dbda@iacsd:~/linuxassign_4$

3) Write a Linux shell script to accept 10 number and tell how many are +tive, -tive and zero.



4) Write a shell script to accept five number and display max and min value.


5) Write a script to find out String is palindrome or not.

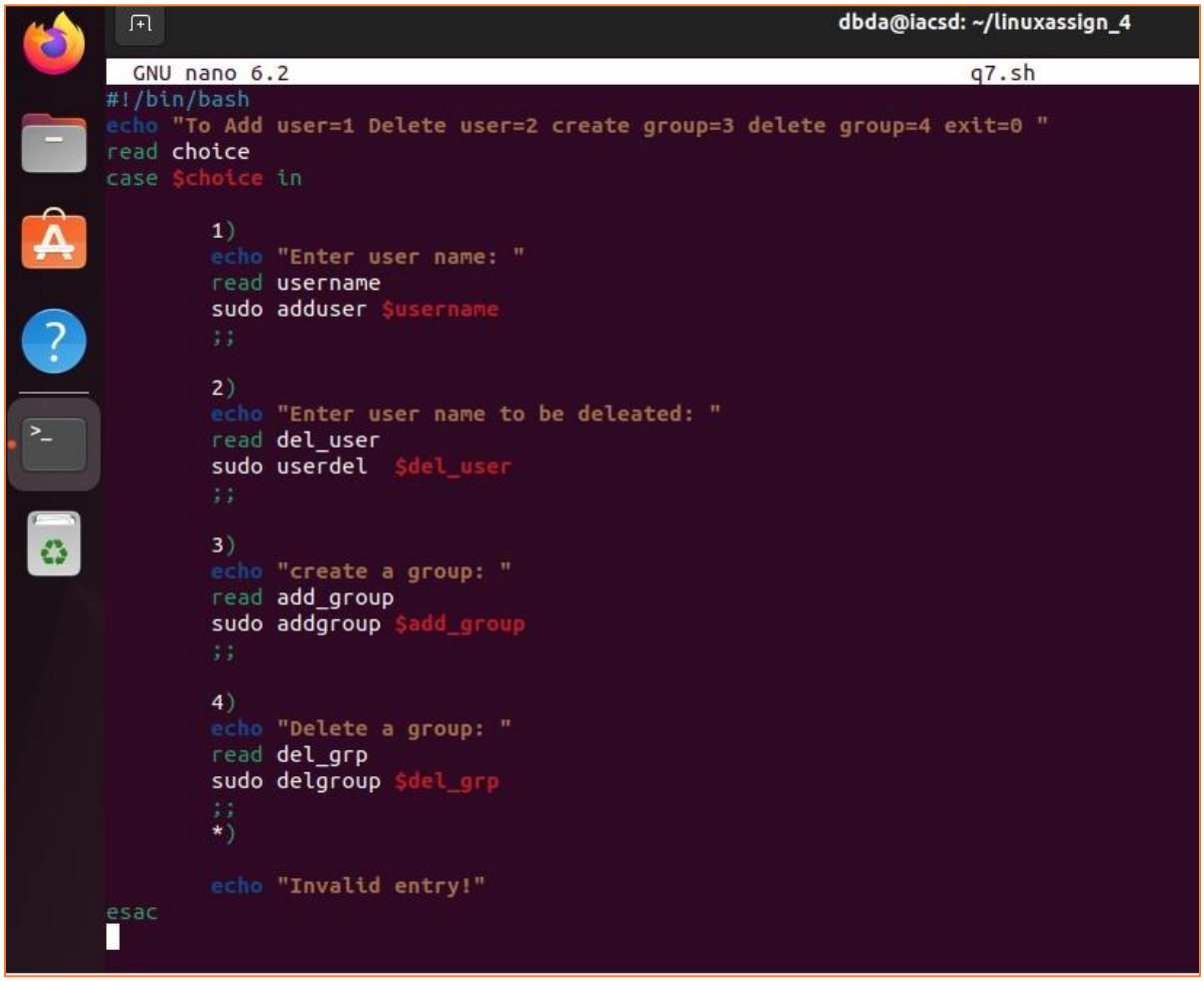


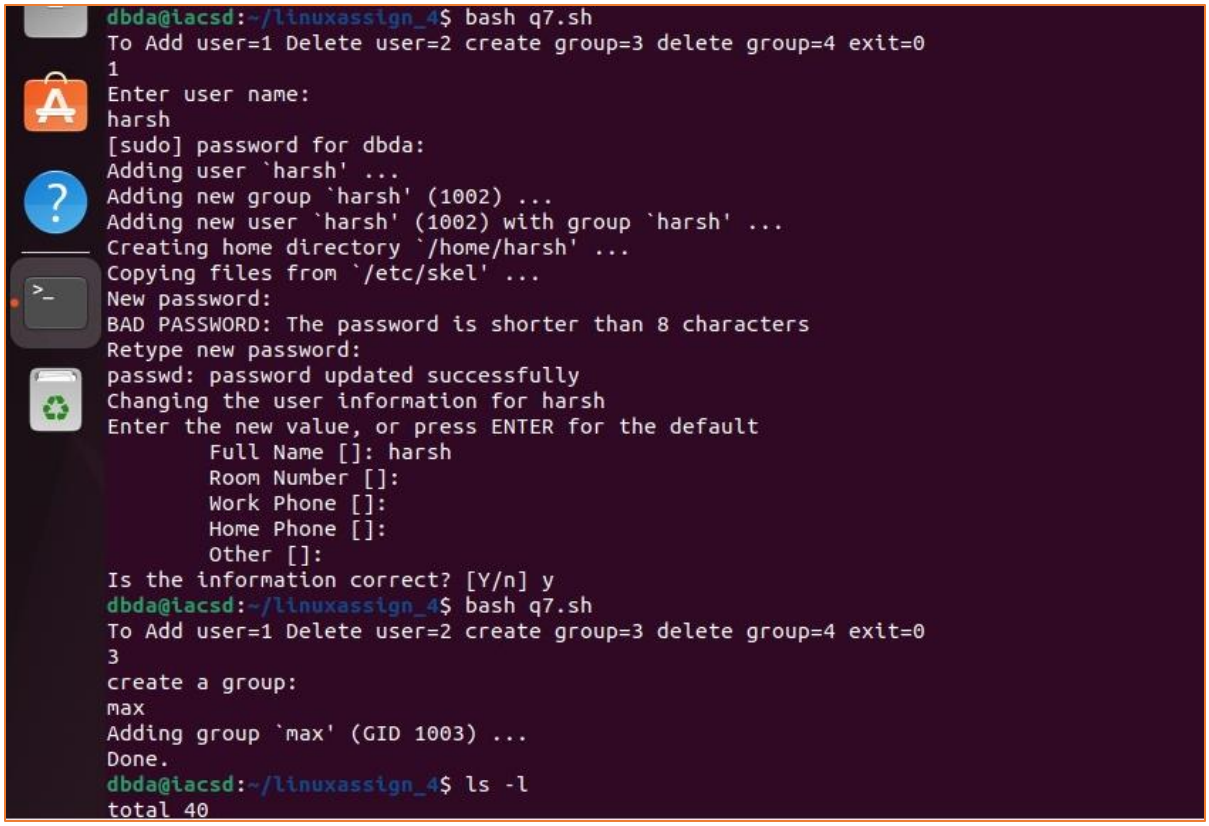

6) Write a shell script to print given number's sum of all digits (eg. If number is 123, then it's sum of all digits will be 1+2+3=6)

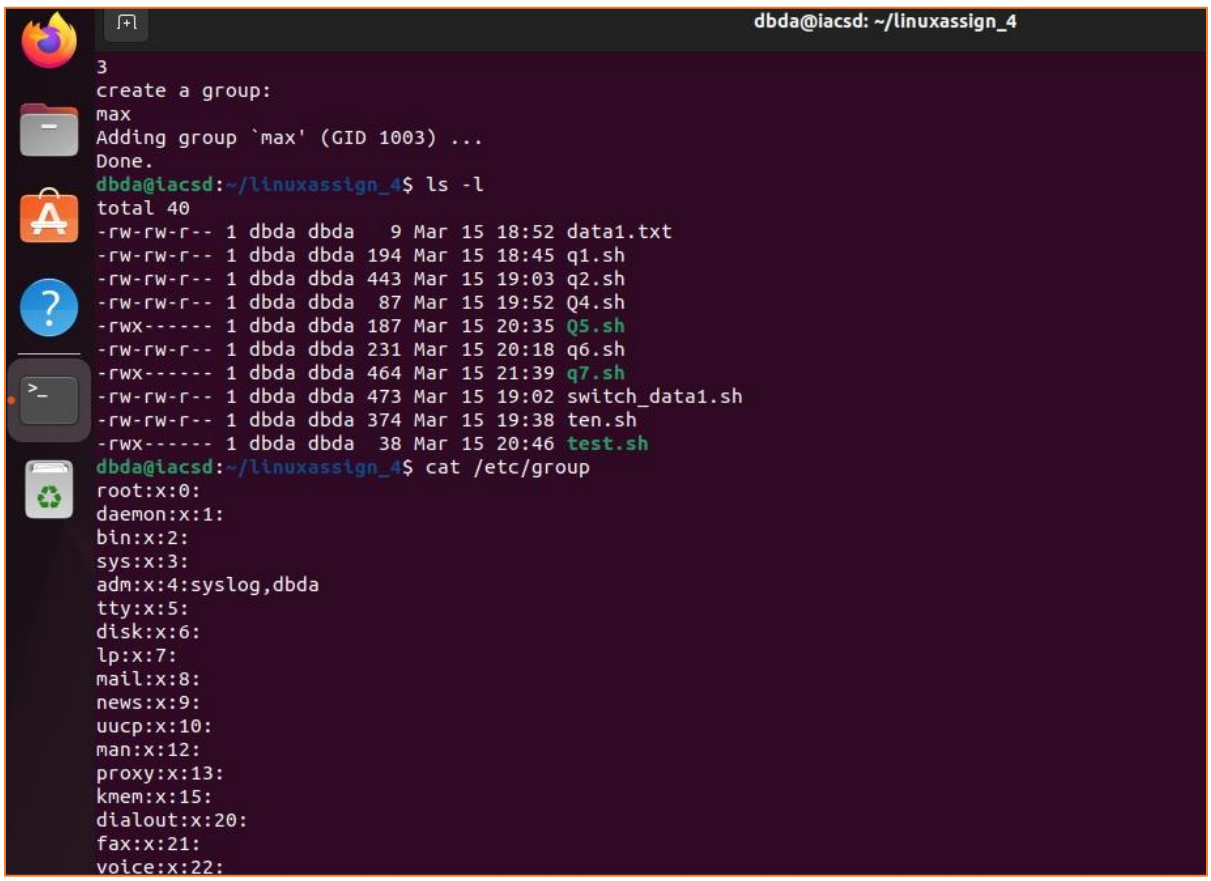
```
dbda@iacsd:~/linuxassign_4$ cat q6.sh
#!/bin/bash
read -p "Enter a number:" num
sum=0
mod=0
add=0
while [ $num != 0 ]
do
        mod=` expr $num % 10 `
        #sum=` expr $sum + $mod `
        num=` expr $num / 10 `
        add=` expr $mod + $add `
done
echo " sum of all digits will be: $add "
dbda@iacsd:~/linuxassign_4$ bash q6.sh
Enter a number:123
 sum of all digits will be: 6
dbda@iacsd:~/linuxassign_4$
```

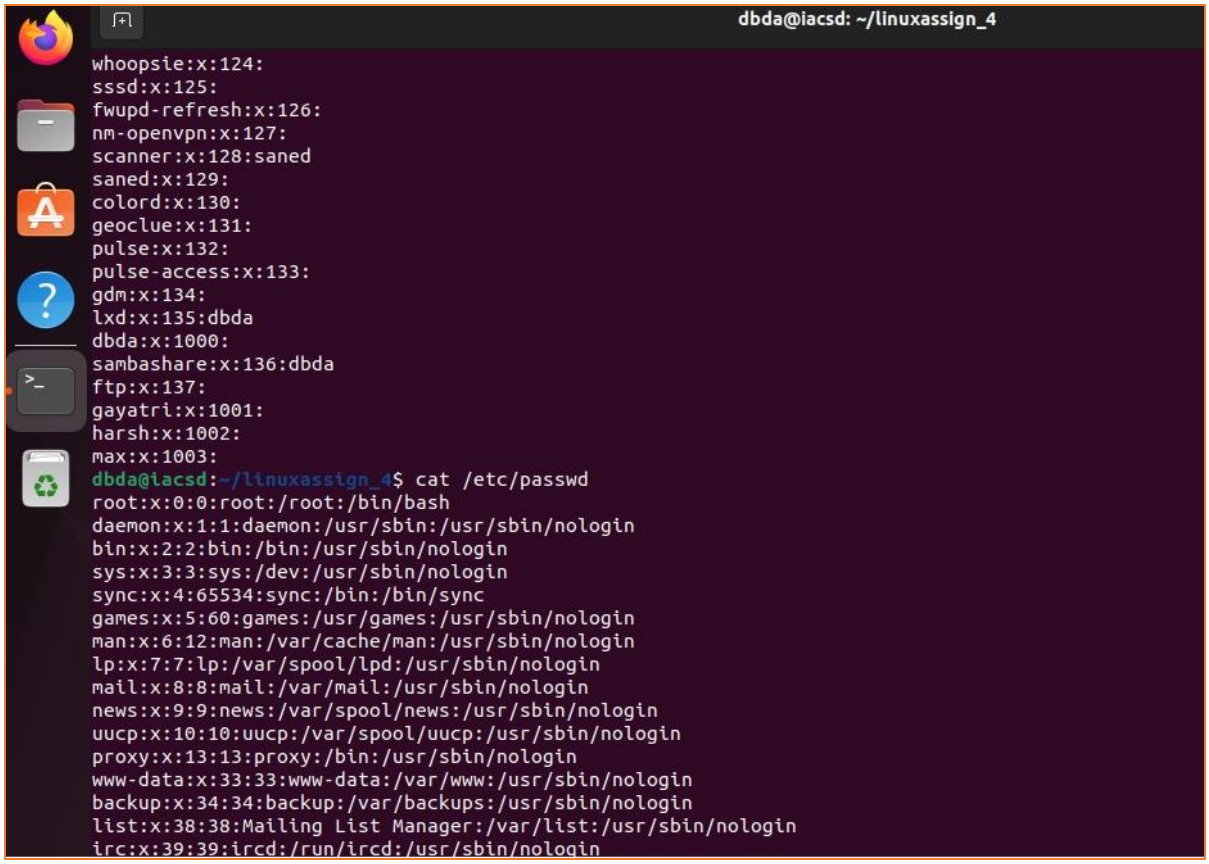
7) Create a script to

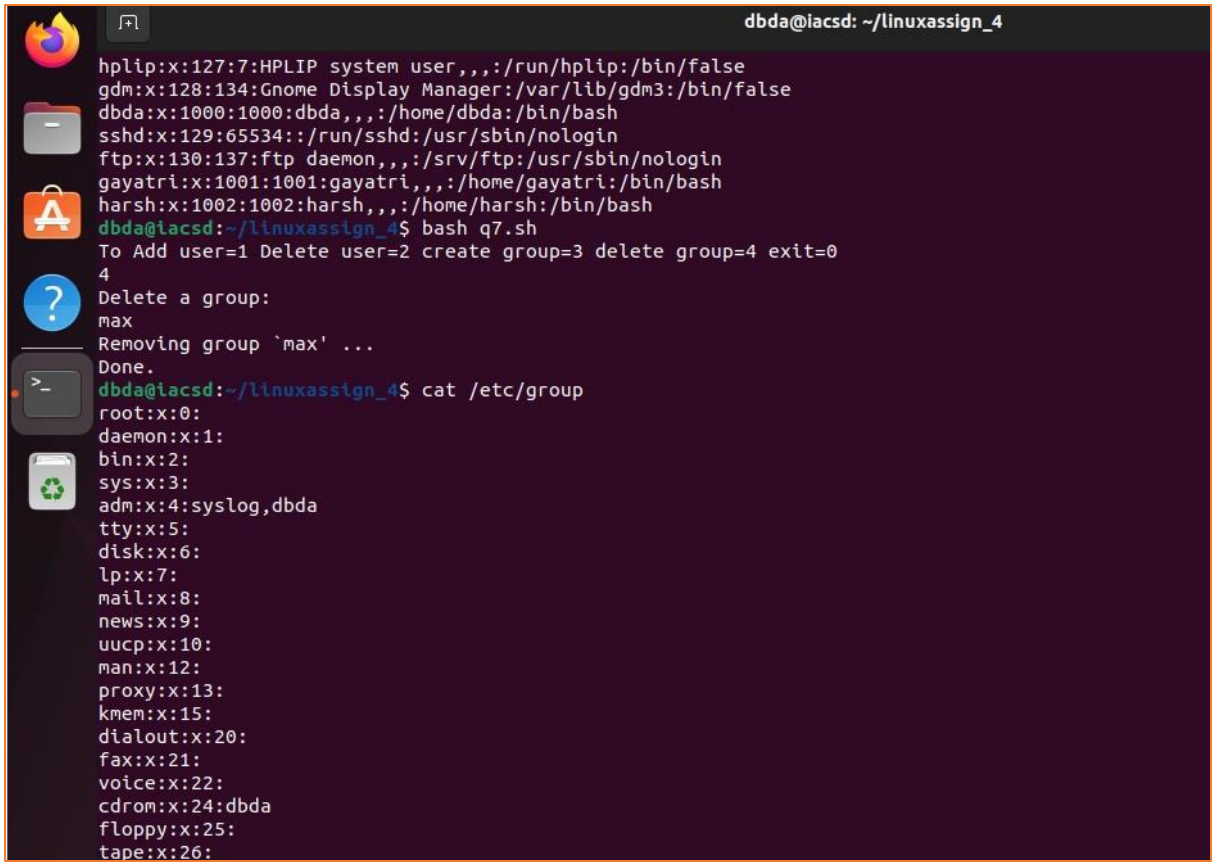
Create user , Delete user , Create group , delete Group using case

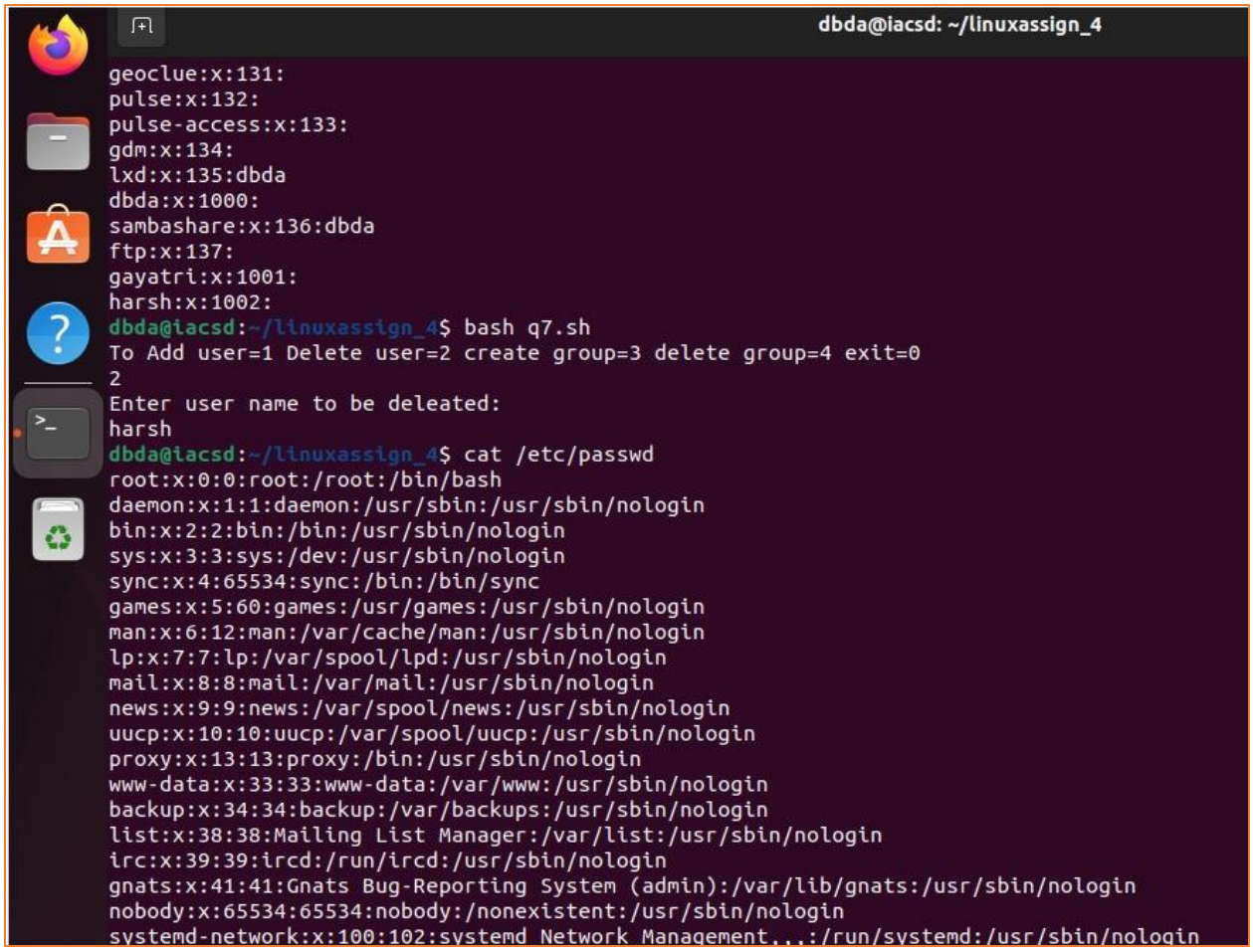


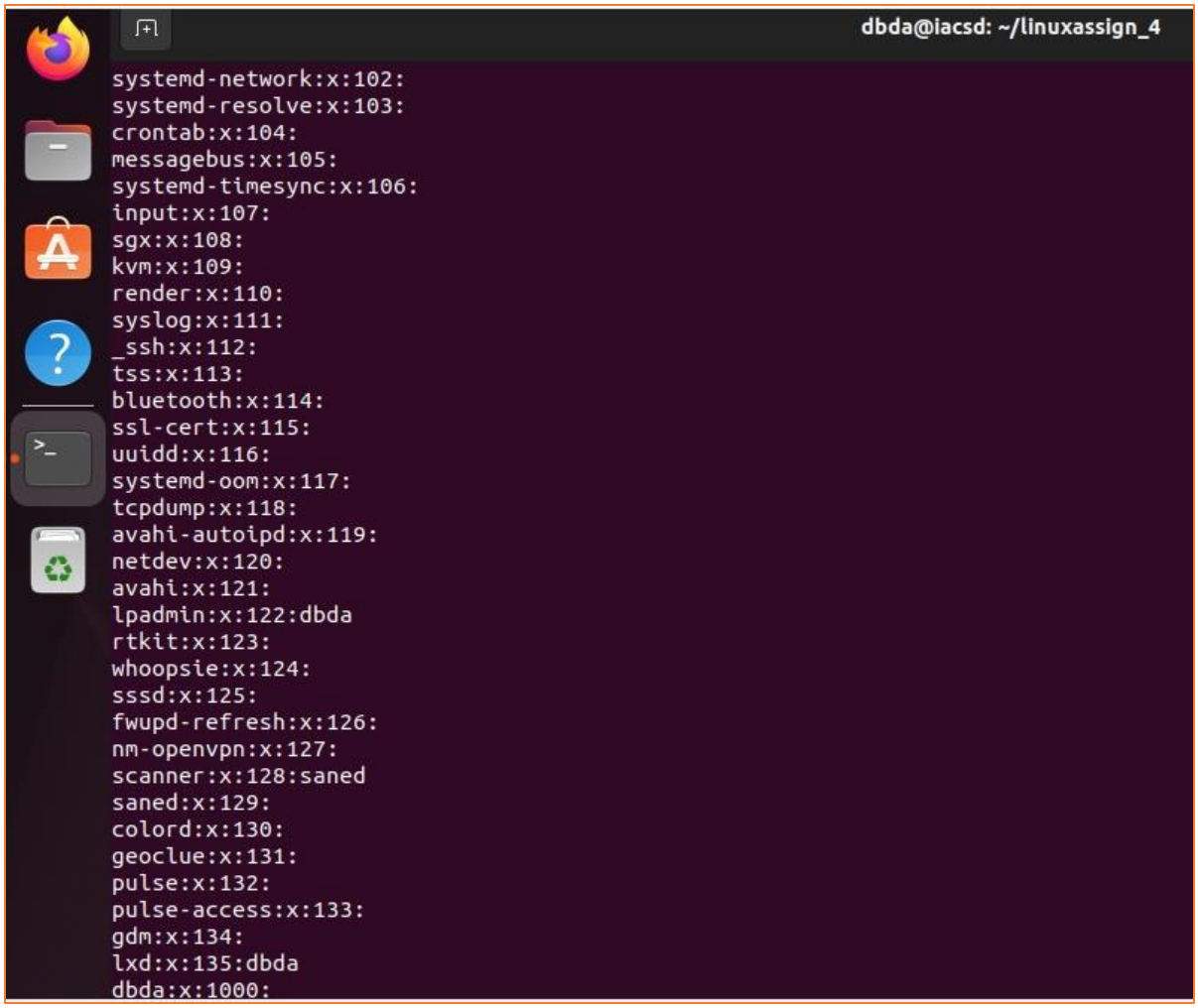

dbda@iacsd:~/linuxassign_4$ bash q7.sh
To Add user=1 Delete user=2 create group=3 delete group=4 exit=0
1
Enter user name:
harsh
[sudo] password for dbda:
Adding user `harsh' ...
Adding new group `harsh' (1002) ...
Adding new user `harsh' (1002) with group `harsh' ...
Creating home directory `/home/harsh' ...
Copying files from `/etc/skel' ...
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: password updated successfully
Changing the user information for harsh
Enter the new value, or press ENTER for the default
Full Name []: harsh
Room Number []:
Work Phone []:
Home Phone []:
Other []:
Is the information correct? [Y/n] y
dbda@iacsd:~/linuxassign_4$ bash q7.sh
To Add user=1 Delete user=2 create group=3 delete group=4 exit=0
3
create a group:
max
Adding group `max' (GID 1003) ...
Done.
dbda@iacsd:~/linuxassign_4$ ls -l
total 40


dbda@iacsd: ~/linuxassign_4
3
create a group:
max
Adding group `max' (GID 1003) ...
Done.
dbda@iacsd:~/linuxassign_4$ ls -l
total 40
-rw-rw-r-- 1 dbda dbda 9 Mar 15 18:52 data1.txt
-rw-rw-r-- 1 dbda dbda 194 Mar 15 18:45 q1.sh
-rw-rw-r-- 1 dbda dbda 443 Mar 15 19:03 q2.sh
-rw-rw-r-- 1 dbda dbda 87 Mar 15 19:52 Q4.sh
-rwx------ 1 dbda dbda 187 Mar 15 20:35 Q5.sh
-rw-rw-r-- 1 dbda dbda 231 Mar 15 20:18 q6.sh
-rwx------ 1 dbda dbda 464 Mar 15 21:39 q7.sh
-rw-rw-r-- 1 dbda dbda 473 Mar 15 19:02 switch_data1.sh
-rw-rw-r-- 1 dbda dbda 374 Mar 15 19:38 ten.sh
-rwx------ 1 dbda dbda 38 Mar 15 20:46 test.sh
dbda@iacsd:~/linuxassign_4$ cat /etc/group
root:x:0:
daemon:x:1:
bin:x:2:
sys:x:3:
adm:x:4:syslog,dbda
tty:x:5:
disk:x:6:
lp:x:7:
mail:x:8:
news:x:9:
uucp:x:10:
man:x:12:
proxy:x:13:
kmem:x:15:
dialout:x:20:
fax:x:21:
voice:x:22:


dbda@iacsd: ~/linuxassign_4
whoopsie:x:124:
sssd:x:125:
fwupd-refresh:x:126:
nm-openvpn:x:127:
scanner:x:128:saned
saned:x:129:
colord:x:130:
geoclue:x:131:
pulse:x:132:
pulse-access:x:133:
gdm:x:134:
lxd:x:135:dbda
dbda:x:1000:
sambashare:x:136:dbda
ftp:x:137:
gayatri:x:1001:
harsh:x:1002:
max:x:1003:
dbda@iacsd:~/linuxassign_4$ cat /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


dbda@iacsd: ~/linuxassign_4
hplip:x:127:7:HPLIP system user,,,:/run/hplip:/bin/false
gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false
dbda:x:1000:1000:dbda,,,:/home/dbda:/bin/bash
sshd:x:129:65534::/run/sshd:/usr/sbin/nologin
ftp:x:130:137:ftp daemon,,,:/srv/ftp:/usr/sbin/nologin
gayatri:x:1001:1001:gayatri,,,:/home/gayatri:/bin/bash
harsh:x:1002:1002:harsh,,,:/home/harsh:/bin/bash
dbda@iacsd:~/linuxassign_4$ bash q7.sh
To Add user=1 Delete user=2 create group=3 delete group=4 exit=0
4
Delete a group:
max
Removing group `max' ...
Done.
dbda@iacsd:~/linuxassign_4$ cat /etc/group
root:x:0:
daemon:x:1:
bin:x:2:
sys:x:3:
adm:x:4:syslog,dbda
tty:x:5:
disk:x:6:
lp:x:7:
mail:x:8:
news:x:9:
uucp:x:10:
man:x:12:
proxy:x:13:
kmem:x:15:
dialout:x:20:
fax:x:21:
voice:x:22:
cdrom:x:24:dbda
floppy:x:25:
tape:x:26:


dbda@iacsd: ~/linuxassign_4
geoclue:x:131:
pulse:x:132:
pulse-access:x:133:
gdm:x:134:
lxd:x:135:dbda
dbda:x:1000:
sambashare:x:136:dbda
ftp:x:137:
gayatri:x:1001:
harsh:x:1002:
dbda@iacsd:~/linuxassign_4$ bash q7.sh
To Add user=1 Delete user=2 create group=3 delete group=4 exit=0
2
Enter user name to be deleated:
harsh
dbda@iacsd:~/linuxassign_4$ cat /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


dbda@iacsd: ~/linuxassign_4
systemd-network:x:102:
systemd-resolve:x:103:
crontab:x:104:
messagebus:x:105:
systemd-timesync:x:106:
input:x:107:
sgx:x:108:
kvm:x:109:
render:x:110:
syslog:x:111:
_ssh:x:112:
tss:x:113:
bluetooth:x:114:
ssl-cert:x:115:
uuidd:x:116:
systemd-oom:x:117:
tcpdump:x:118:
avahi-autoipd:x:119:
netdev:x:120:
avahi:x:121:
lpadmin:x:122:dbda
rtkit:x:123:
whoopsie:x:124:
sssd:x:125:
fwupd-refresh:x:126:
nm-openvpn:x:127:
scanner:x:128:saned
saned:x:129:
colord:x:130:
geoclue:x:131:
pulse:x:132:
pulse-access:x:133:
gdm:x:134:
lxd:x:135:dbda
dbda:x:1000: