

- **groupadd** command creates a new group account using the values specified on the command line and the default values from the system.
- # #gropuadd student

groupdel command is used to delete a existing group. It will delete all entry that refers to the group, modifies the system account files, and it is handled by superuser or root user.

```
(raman⊕ kali)-[~]
 -$ sudo groupdel sujith
  -(raman⊕ kali)-[~]
zsh: no such file or directory: cat/etc/group
  -(raman⊕ kali)-[~]
s cat /etc/group
root:x:0:
daemon:x:1:
bin:x:2:
sys:x:3:
adm:x:4:
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:
```


usermod command is used to change the properties of a user in Linux through the commandline

- # #usermod --help
- #usermod –u 2000 Tom

```
raman@kali)-[~]
     udoo usermod -c "hello" raman
zsh: command not found: sudoo
  -(raman@kali)-[~]
 🛶 sudo usermod -c "hello" raman
  -(raman⊕ kali)-[~]
 s cat /etc/passwd
root:x:0:0:root:/root:/usr/bin/zsh
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
```


- print the groups a user is in
- # #groups alice

```
raman⊕ kali)-[~]

s groups
raman cdrom floppy sudo audio dip video plugdev netdev bluetooth scanner ka
boxer

(raman⊕ kali)-[~]

s 1
```


- ♣ The groupmod command modifies the definition of the specified group by modifying the appropriate entry in the group database.
- # groupmod -n group1 group2

```
💲 groupmod -n newusergrp usrgrp
groupmod: Permission denied.
groupmod: cannot lock /etc/group; try again later.
  -(raman⊕kali)-[~]
 -$ <u>sudo</u> groupmod -n newusergrp usrgrp
  -(raman⊕kali)-[~]
 🔩 cat /etc/group
oot:x:0:
daemon:x:1:
in:x:2:
ys:x:3:
dm:x:4:
tv:x:5:
disk:x:6:
ucp:x:10:
nan:x:12:
proxy:x:13:
cmem:x:15:
dialout:x:20:
fax:x:21:
```

⊙ chmod:

♣ To change directory permissions of file/ Directory in Linux.
#chmod whowhatwhich file/directory

```
throad +rwx filename // To add permissions.
```

- **Let chmod -rwx directoryname** // To remove permissions.
- **thmod +x filename** //To allow executable permissions.
- **t** chmod -wx filename // to take out write and executable permissions.

#chmod u+x test #chmod g-rwx test #chmod o-r test

```
(raman⊕kali)-[~]
 -$ sudo chmod g+rw myfile.txt
[sudo] password for raman:
  —(raman⊕ kali)-[~]
 s chmod g+rw myfile.txt
  -(raman@kali)-[~]
 s chmod +rwx myfile.txt
  -(raman⊕ kali)-[~]
 -$ ls -1 myfile.txt
rwxrwxr-x 1 raman raman 0 Aug 13 19:51 myfile.txt
  -(raman⊕kali)-[~]
 -$ sudo chmod g+rw myfile.txt
 -(raman⊕ kali)-[~]
 -$ chmod g+rw myfile.txt
  -(raman⊕kali)-[~]
 Is -1 myfile.txt
-rwxrwxr-x 1 raman raman 0 Aug 13 19:51 myfile.txt
   (raman⊕kali)-[~]
```

⊙ ps:

- The ps command, **short for Process Status**, is a command line utility that is used to display or view information related to the processes running in a Linux system.
- ♣ PID This is the unique process ID
- lacktriangle TTY This is the type of terminal that the user is logged in to
- lacktriangle TIME This is the time in minutes and seconds that the process has been running
- CMD The command that launched the process #ps -a

```
(raman® kali)-[~]

$ ps
PID TTY TIME CMD
1045 pts/0 00:00:04 zsh
1589 pts/0 00:00:00 ps

(raman® kali)-[~]
```


The chown command allows you to change the user and/or group ownership of a given file, directory.

#chown Tom Test

```
sudo chown raman myfile.txt
[sudo] password for raman:

(raman & kali) - [~]

substitution chown raman myfile.txt

(raman & kali) - [~]

substitution substitutio
```


id command in Linux is **used to find out user and group names** and numeric ID's (UID or group ID) of the current user or any other user in the server. List out all the groups a user belongs to. Display security context of the current user

top command is used to show the Linux processes. It provides a dynamic real-time view of the running system. Usually, this command shows the summary information of the system and the list of processes or threads which are currently managed by the Linux Kernel.

top - 19:49:03 up 16 min, 1 user, load average: 0.12, 0.17, 0.18
Tasks: 140 total, 1 running, 139 sleeping, 0 stopped, 0 zombie
%Cpu(s): 1.1 us, 3.0 sy, 0.0 ni, 93.9 id, 1.1 wa, 0.0 hi, 0.8 si, 0.
MiB Mem : 1990.1 total, 1173.4 free, 405.2 used, 411.5 buff/cache
MiB Swap: 975.0 total, 975.0 free, 0.0 used. 1432.2 avail Mem

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	
475	root	20	0	277996	79320	38420	S	5.0	3.9	0:21.20	
1650	raman	20	0	330808	40576	32512	S	2.7	2.0	0:00.33	
833	raman	20	0	388940	83764	59880	S	1.3	4.1	0:07.47	
786	raman	20	0	156908	2860	2408	S	0.3	0.1	0:03.91	
851	raman	20	0	235108	21276	14732	S	0.3	1.0	0:00.49	
896	raman	20	0	514652	40928	31364	S	0.3	2.0	0:00.94	
967	raman	20	0	404188	42100	34252	S	0.3	2.1	0:00.36	
995	raman	20	0	403632	85232	68040	S	0.3	4.2	0:03.03	
1	root	20	0	102528	11352	8572	S	0.0	0.6	0:05.22	
2	root	20	0	0	0	0	S	0.0	0.0	0:00.00	
3	root	0	-20	0	0	0	Ι	0.0	0.0	0:00.00	
4	root	0	-20	0	0	0	Ι	0.0	0.0	0:00.00	
6	root	0	-20	0	0	0	Ι	0.0	0.0	0:00.00	
8	root	0	-20	0	0	0	Ι	0.0	0.0	0:00.00	
9	root	20	0	0	0	0	S	0.0	0.0	0:00.37	
10	root	20	0	0	0	0	Ι	0.0	0.0	0:00.37	
11	root	rt	0	0	0	0	S	0.0	0.0	0:00.02	
12	root	20	0	0	0	0	Ι	0.0	0.0	0:00.60	
13	root	20	0	0	0	0	S	0.0	0.0	0:00.00	
15	root	20	0	0	0	0	S	0.0	0.0	0:00.00	