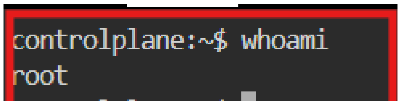
LINUX COMMANDS

1) whoami :

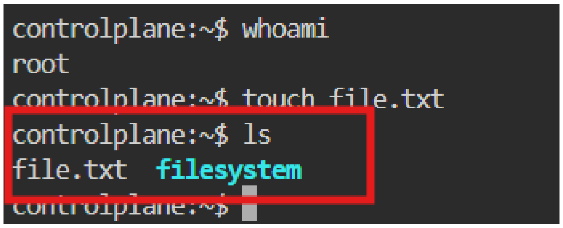
   Displays the effective username of the current session



```
controlplane:~$ whoami
root
```

2) ls:

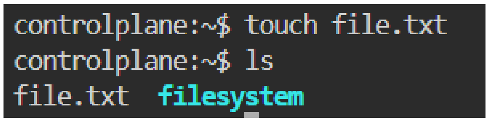
   Shows current user



```
controlplane:~$ whoami
root
controlplane:~$ touch file.txt
controlplane:~$ ls
file.txt  filesystem
controlplane:~$
```

3) touch file/folder.name :

   Lists files/folders



```
controlplane:~$ touch file.txt
controlplane:~$ ls
file.txt  filesystem
```

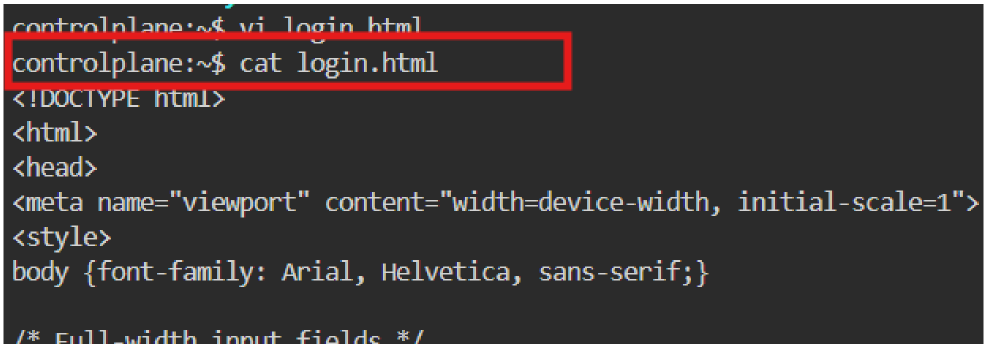
==> File is created.

4) Vi login.html

   Opens file in vi editor(create/edit)

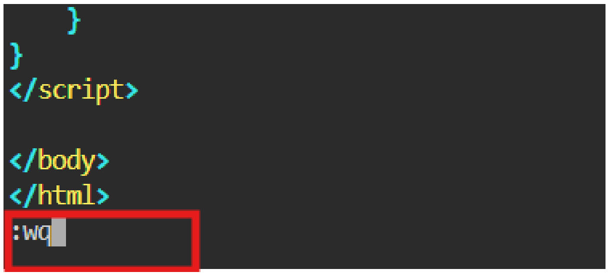
5) cat login.html

   Shows file content



```
controlplane:~$ vi login.html
controlplane:~$ cat login.html
<!DOCTYPE html>
<html>
<head>
<meta name="viewport" content="width=device-width, initial-scale=1">
<style>
body {font-family: Arial, Helvetica, sans-serif;}

/* Full-width input fields */
```

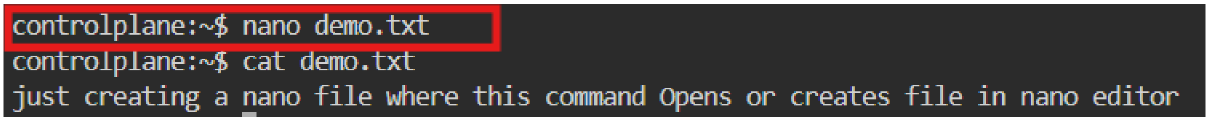
6) :wq



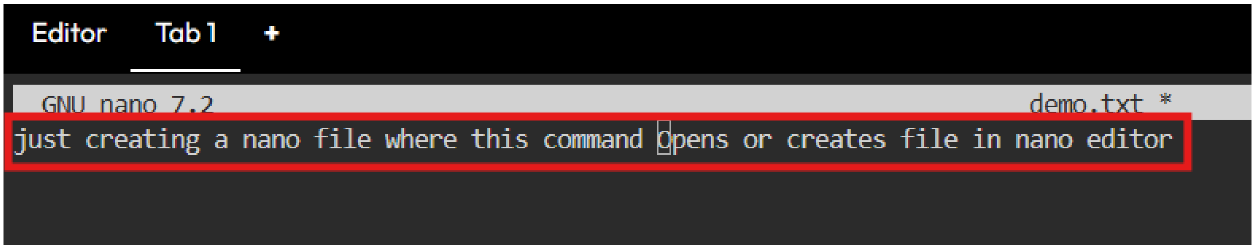
```
    }
}
</script>

</body>
</html>
:wq
```

7) nano demo.txt

Open or create a file



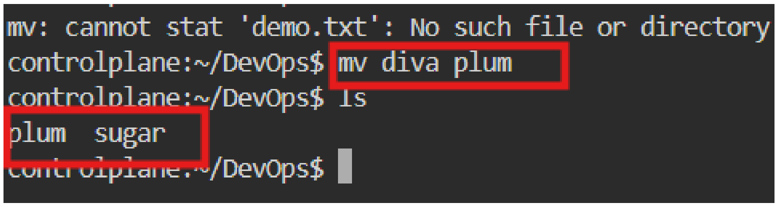
```
controlplane:~$ nano demo.txt
controlplane:~$ cat demo.txt
just creating a nano file where this command Opens or creates file in nano editor
```



```
  GNU nano 7.2                                              demo.txt *
just creating a nano file where this command Opens or creates file in nano editor
```

8) mv old new

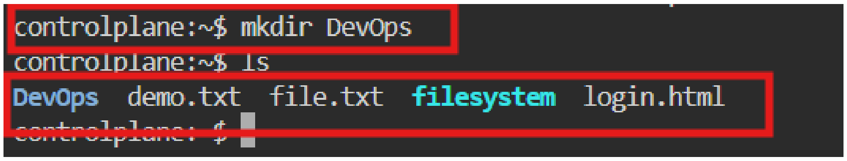
Open file in editor



```
mv: cannot stat 'demo.txt': No such file or directory
controlplane:~/DevOps$ mv diva plum
controlplane:~/DevOps$ ls
plum  sugar
controlplane:~/DevOps$
```

9) mkdir DevOps:

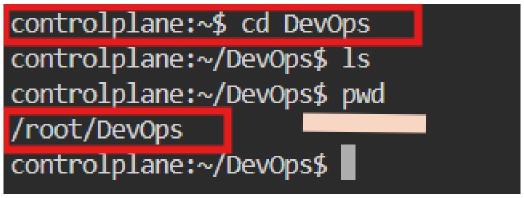
Directory creation



```
controlplane:~$ mkdir DevOps
controlplane:~$ ls
DevOps  demo.txt  file.txt  filesystem  login.html
controlplane:~$
```

10) cd foldername , cd .. , pwd

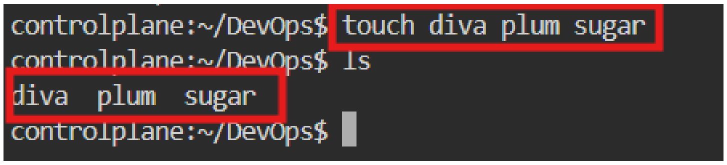
Show current location



```
controlplane:~$ cd DevOps
controlplane:~/DevOps$ ls
controlplane:~/DevOps$ pwd
/root/DevOps
controlplane:~/DevOps$
```

11) touch demo app sample

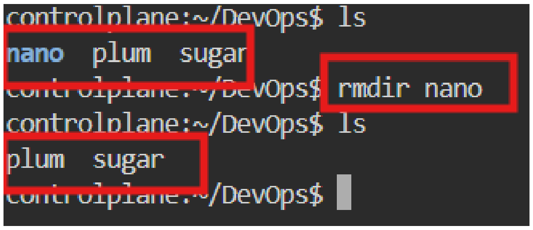
Creating multiple files



```
controlplane:~/DevOps$ touch diva plum sugar
controlplane:~/DevOps$ ls
diva  plum  sugar
controlplane:~/DevOps$
```

12) rmdir folder

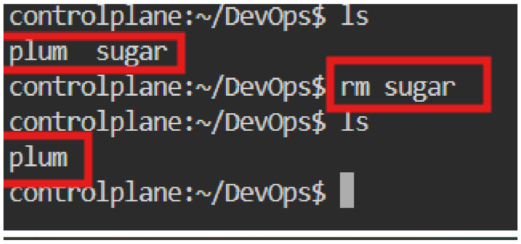
Removes empty folder only



```
controlplane:~/DevOps$ ls
nano  plum  sugar
controlplane:~/DevOps$ rmdir nano
controlplane:~/DevOps$ ls
plum  sugar
controlplane:~/DevOps$
```

13) rm files

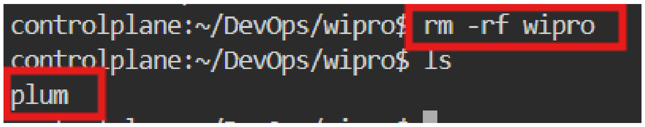
Deleting files



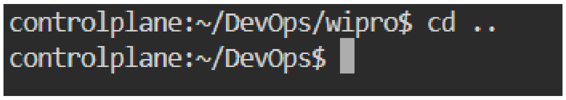
```
controlplane:~/DevOps$ ls
plum  sugar
controlplane:~/DevOps$ rm sugar
controlplane:~/DevOps$ ls
plum
controlplane:~/DevOps$
```

14) rm -rf folder

Force deletes folder with contents



```
controlplane:~/DevOps/wipro$ rm -rf wipro
controlplane:~/DevOps/wipro$ ls
plum
```

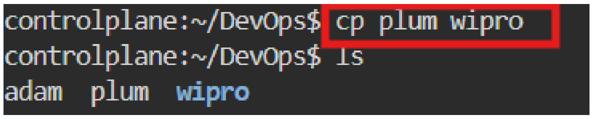


```
controlplane:~/DevOps/wipro$ cd ..
controlplane:~/DevOps$
```

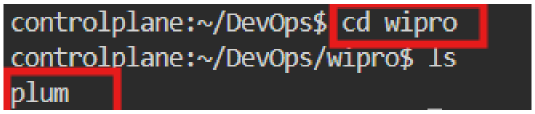
Wipro is gone.

15) cp file Folder/

Copies file into folder



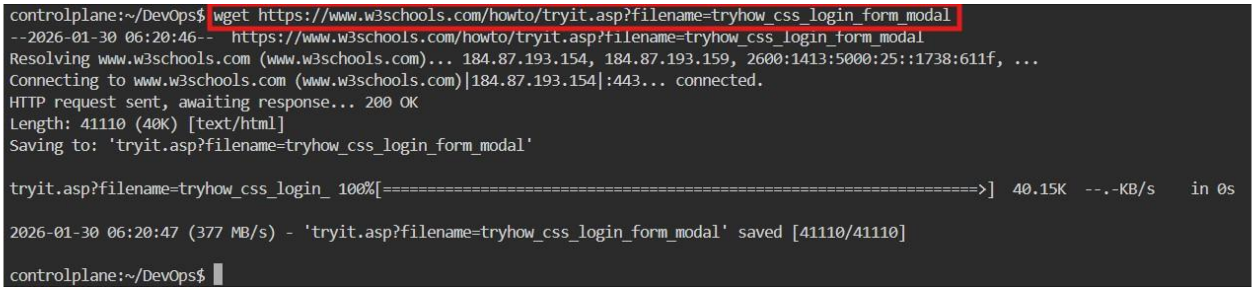
```
controlplane:~/DevOps$ cp plum wipro
controlplane:~/DevOps$ ls
adam  plum  wipro
```



```
controlplane:~/DevOps$ cd wipro
controlplane:~/DevOps/wipro$ ls
plum
```

16) wget URL

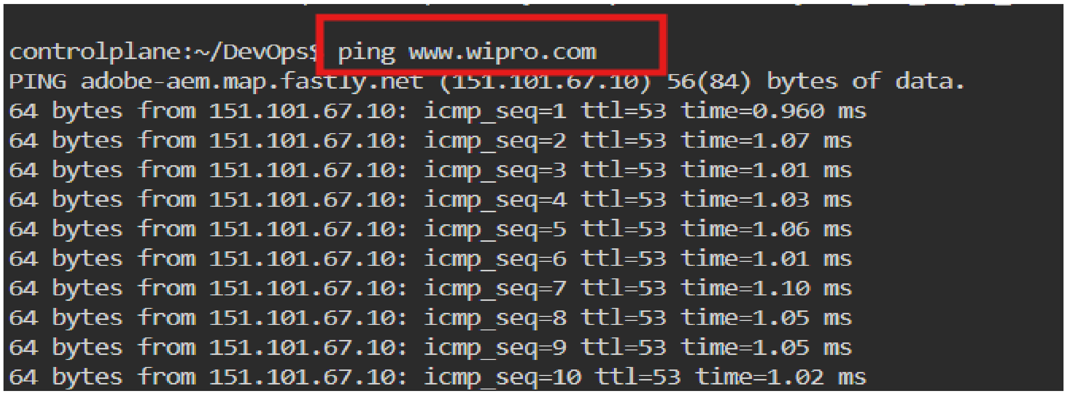
Downloads file from internet



```
controlplane:~/DevOps$ wget https://www.w3schools.com/howto/tryit.asp?filename=tryhow_css_login_form_modal
--2026-01-30 06:20:46--  https://www.w3schools.com/howto/tryit.asp?filename=tryhow_css_login_form_modal
Resolving www.w3schools.com (www.w3schools.com)... 184.87.193.154, 184.87.193.159, 2600:1413:5000:25::1738:611f, ...
Connecting to www.w3schools.com (www.w3schools.com)|184.87.193.154|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 41110 (40K) [text/html]
Saving to: 'tryit.asp?filename=tryhow_css_login_form_modal'

tryit.asp?filename=tryhow_css_login_ 100%[===================================================================>]  40.15K  --.-KB/s    in 0s

2026-01-30 06:20:47 (377 MB/s) - 'tryit.asp?filename=tryhow_css_login_form_modal' saved [41110/41110]

controlplane:~/DevOps$
```

17) ping

Checks network connectivity



```
controlplane:~/DevOps$ ping www.wipro.com
PING adobe-aem.map.fastly.net (151.101.67.10) 56(84) bytes of data.
64 bytes from 151.101.67.10: icmp_seq=1 ttl=53 time=0.960 ms
64 bytes from 151.101.67.10: icmp_seq=2 ttl=53 time=1.07 ms
64 bytes from 151.101.67.10: icmp_seq=3 ttl=53 time=1.01 ms
64 bytes from 151.101.67.10: icmp_seq=4 ttl=53 time=1.03 ms
64 bytes from 151.101.67.10: icmp_seq=5 ttl=53 time=1.06 ms
64 bytes from 151.101.67.10: icmp_seq=6 ttl=53 time=1.01 ms
64 bytes from 151.101.67.10: icmp_seq=7 ttl=53 time=1.10 ms
64 bytes from 151.101.67.10: icmp_seq=8 ttl=53 time=1.05 ms
64 bytes from 151.101.67.10: icmp_seq=9 ttl=53 time=1.05 ms
64 bytes from 151.101.67.10: icmp_seq=10 ttl=53 time=1.02 ms
```

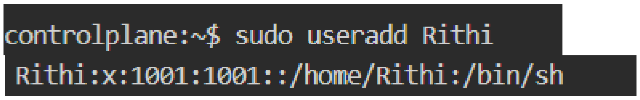
18) history

Shows previous commands

19) **sudo useradd username:**

*It creates a new user and to add the user to the system.

*It does NOT set password automatically.

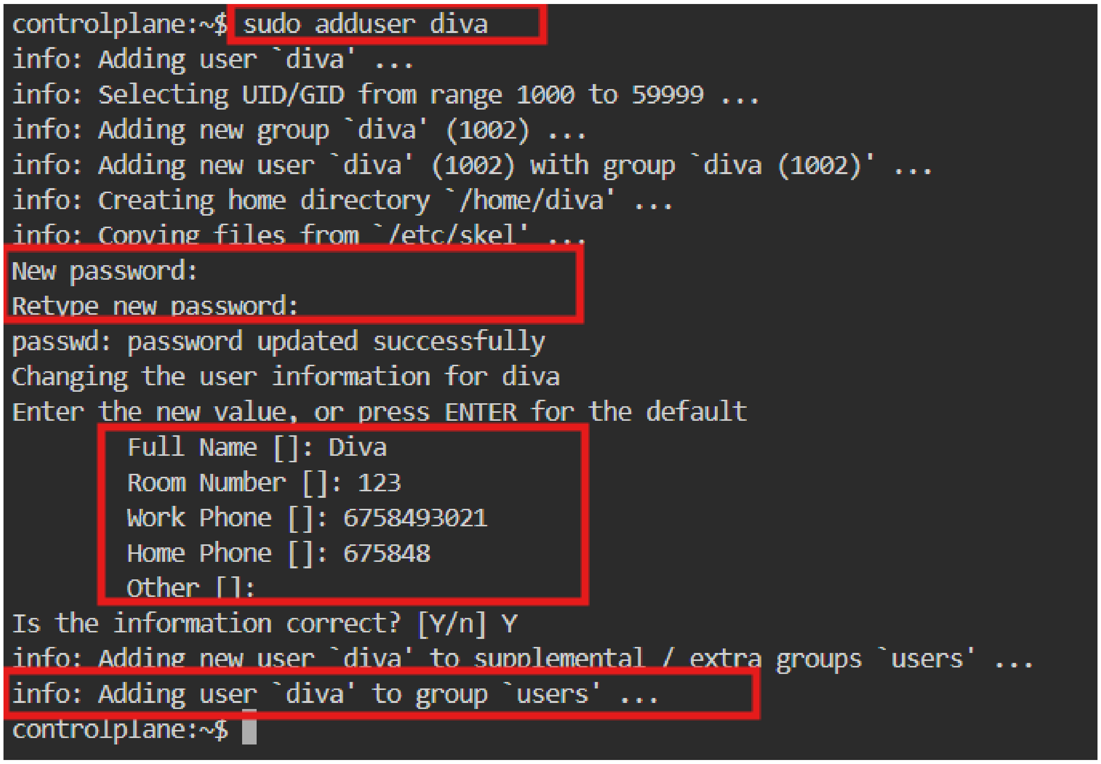


```
controlplane:~$ sudo useradd Rithi
 Rithi:x:1001:1001::/home/Rithi:/bin/sh
```

20) **sudo adduser username:**

*Creates a new user (interactive). Beginner-friendly way to add user.

*Creates home folder, Asks password, Sets user details

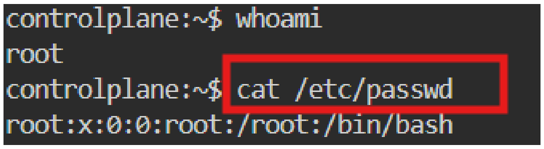


```
controlplane:~$ sudo adduser diva
info: Adding user `diva' ...
info: Selecting UID/GID from range 1000 to 59999 ...
info: Adding new group `diva' (1002) ...
info: Adding new user `diva' (1002) with group `diva (1002)' ...
info: Creating home directory `/home/diva' ...
info: Copying files from `/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for diva
Enter the new value, or press ENTER for the default
        Full Name []: Diva
        Room Number []: 123
        Work Phone []: 6758493021
        Home Phone []: 675848
        Other []:
Is the information correct? [Y/n] Y
info: Adding new user `diva' to supplemental / extra groups `users' ...
info: Adding user `diva' to group `users' ...
controlplane:~$
```

21) **cat /etc/passwd:**

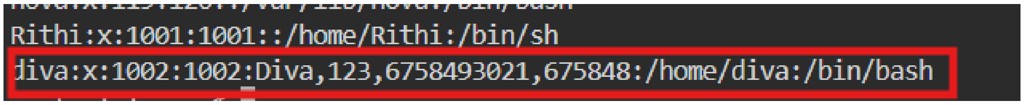
==> `/etc/passwd` is a **system file in Linux that stores user account information.**

*It does NOT store passwords anymore (for security reasons).
*It stores user details.



```
controlplane:~$ whoami
root
controlplane:~$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
```

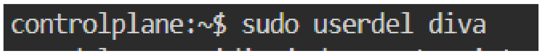
*cat displays the list of all users in the system.



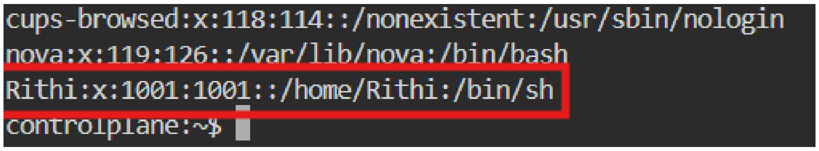
```
nova:x:119:126::/var/lib/nova:/bin/bash
Rithi:x:1001:1001::/home/Rithi:/bin/sh
diva:x:1002:1002:Diva,123,6758493021,675848:/home/diva:/bin/bash
```

22) **sudo userdel username**

- It is used to delete the user , removes unused users.
- Removes a user, but may fail without sudo because admin rights are usually required.



```
controlplane:~$ sudo userdel diva
```

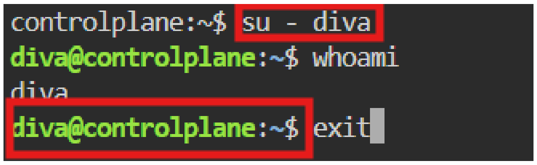


```
cups-browsed:x:118:114::/nonexistent:/usr/sbin/nologin
nova:x:119:126::/var/lib/nova:/bin/bash
Rithi:x:1001:1001::/home/Rithi:/bin/sh
controlplane:~$
```

* Username diva is deleted.

23) **Su – username**

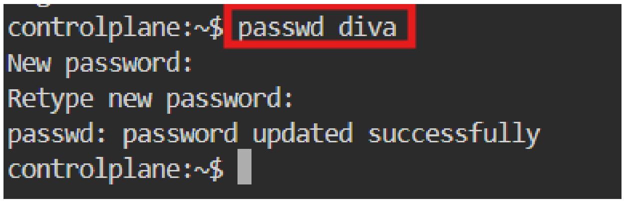
Switches to another user account and loads their environment.



```
controlplane:~$ su - diva
diva@controlplane:~$ whoami
diva
diva@controlplane:~$ exit
```

24) **Passwd username**

Sets or changes the password for a user.

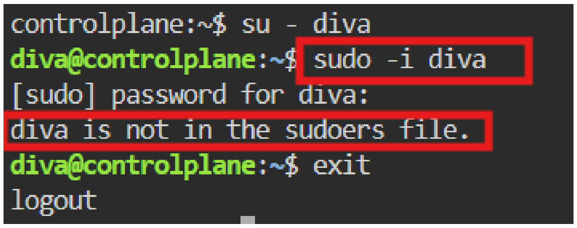


```
controlplane:~$ passwd diva
New password:
Retype new password:
passwd: password updated successfully
controlplane:~$
```

25) **sudo -i username**

Opens a root (admin) login shell.

== > here successfully switched to user **diva**

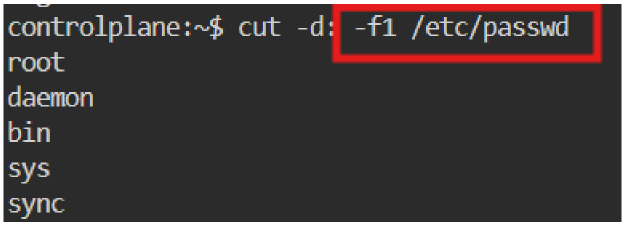


```
controlplane:~$ su - diva
diva@controlplane:~$ sudo -i diva
[sudo] password for diva:
diva is not in the sudoers file.
diva@controlplane:~$ exit
logout
```

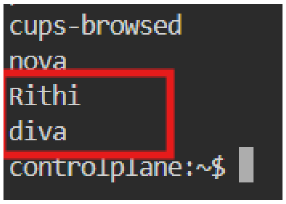
and opens a root

26) cut -d: -f1 /etc/passwd

Shows only usernames from the passwd file by cutting the first field.



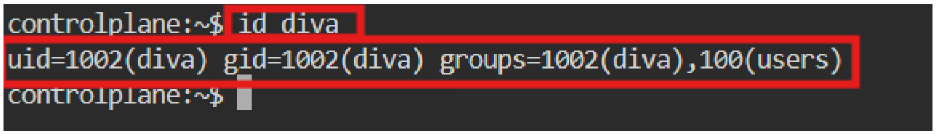
```
controlplane:~$ cut -d: -f1 /etc/passwd
root
daemon
bin
sys
sync
```



```
cups-browsed
nova
Rithi
diva
controlplane:~$
```

27) id username

Displays a user's UID, GID, and group memberships.



```
controlplane:~$ id diva
uid=1002(diva) gid=1002(diva) groups=1002(diva),100(users)
controlplane:~$
```

28) Symbolic mode : u g o a

Symbolic mode is used to **change file or directory permissions using letters**, not numbers.

Symbol	Meaning	Who
u	User	Owner of the file
g	Group	Group members
o	Others	Everyone else
a	All	u + g + o

29) Permissions : r w x

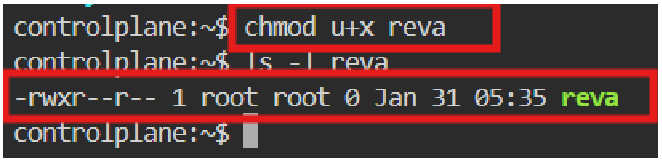
Symbol	Meaning
r	Read
w	Write
x	Execute

30) Operators :

Symbol	Meaning
+	Add permission
-	Remove permission
=	Set exact permission

31) **chmod u+x filename**

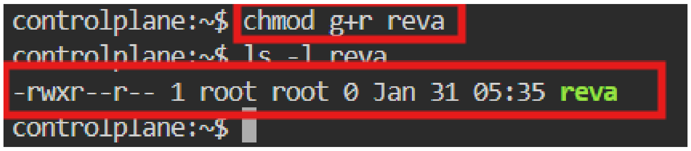
Gives execute permission to the file owner.



```
controlplane:~$ chmod u+x reva
controlplane:~$ ls -l reva
-rwxr--r-- 1 root root 0 Jan 31 05:35 reva
controlplane:~$
```

32) **chmod g+r filename**

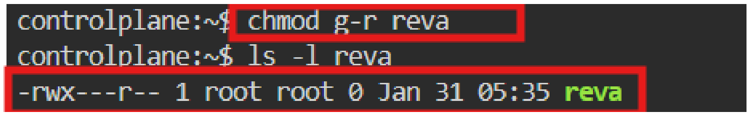
Gives read permission to the group.



```
controlplane:~$ chmod g+r reva
controlplane:~$ ls -l reva
-rwxr--r-- 1 root root 0 Jan 31 05:35 reva
controlplane:~$
```

33) **Chmod g-r filename**

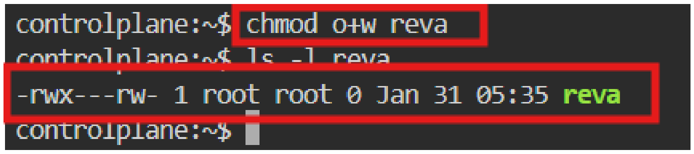
It removes the read permission for the groups.



```
controlplane:~$ chmod g-r reva
controlplane:~$ ls -l reva
-rwx---r-- 1 root root 0 Jan 31 05:35 reva
```

34) **chmod o+x filename**

Gives execute permission to others (everyone else).



```
controlplane:~$ chmod o+w reva
controlplane:~$ ls -l reva
-rwx---rw- 1 root root 0 Jan 31 05:35 reva
controlplane:~$
```

35) **Numeric mode:**

Numeric mode uses **numbers instead of letters** to set file or directory permissions.

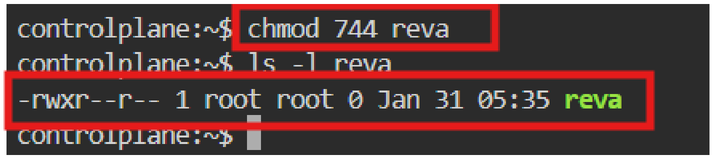
Each permission (read, write, execute) has a numeric value.

Permission	values
Read	4
Write	2
Execute	1
No permission	0

Add the values for each user type to get a single number.

Example : chmod 744 filename

- Owner (u) = 7 → 4+2+1 = rwx (can do all)
- Group (g) = 4 → 4 = r-- (permission to read only)
- Others (o) = 4 → 4 = r-- (permission to read only)



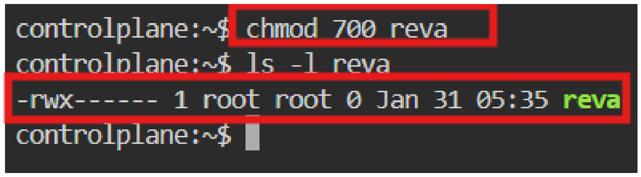
```
controlplane:~$ chmod 744 reva
controlplane:~$ ls -l reva
-rwxr--r-- 1 root root 0 Jan 31 05:35 reva
controlplane:~$ 
```

Here –rwx for users , r-- for read only permission to the groups and r-- for read permission to others

36) **chmod 700 filename and Ls –l filename**

***Chmod 700 :** Gives full permission to owner and no permission to group or others.

*Ls –l filename: Shows detailed information about a file, including permissions and owner.



```
controlplane:~$ chmod 700 reva
controlplane:~$ ls -l reva
-rwx------ 1 root root 0 Jan 31 05:35 reva
controlplane:~$ 
```