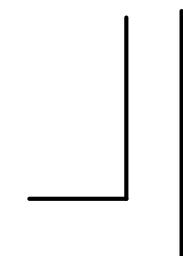


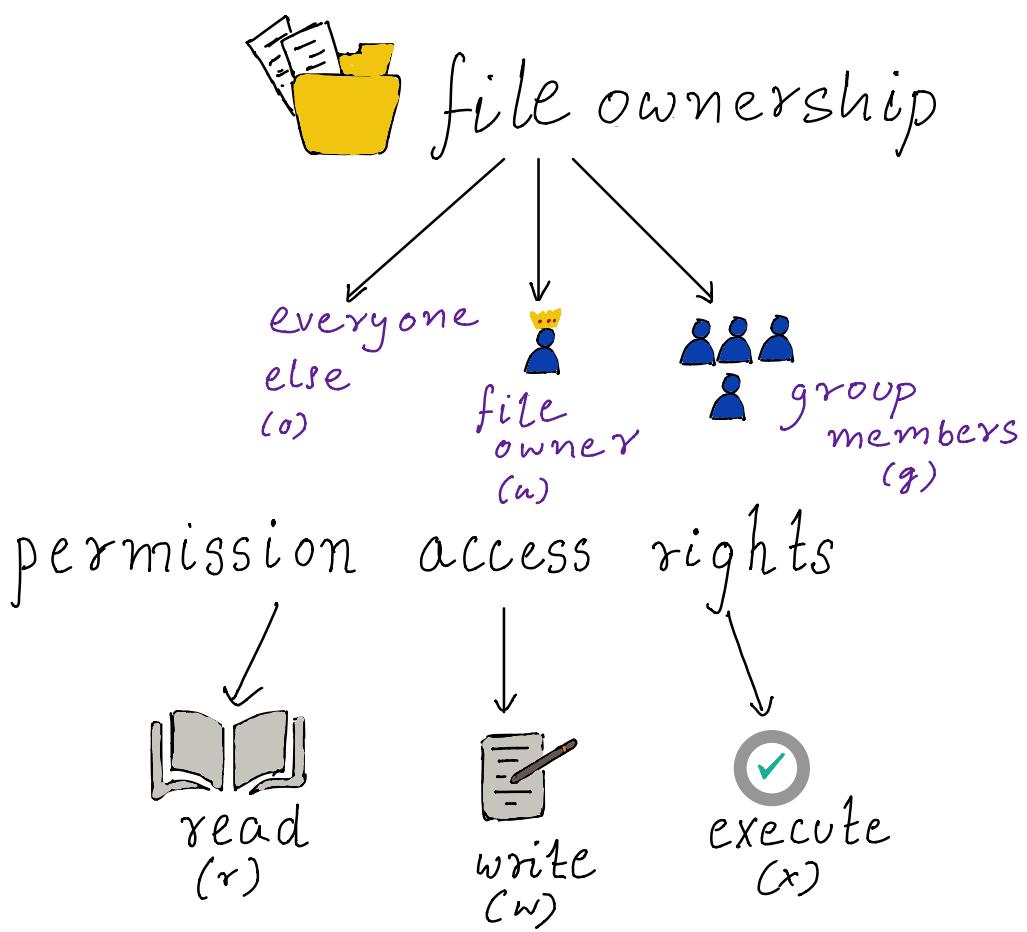
A hand-drawn style speech bubble with a jagged, star-like border. Inside the bubble, the word "chmod" is written in a bold, cursive font.

Pranshu Kumar Gond 18110124

Sagar Bisen 18110149



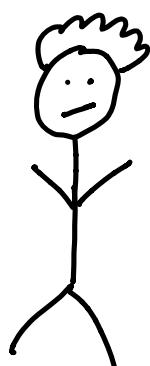
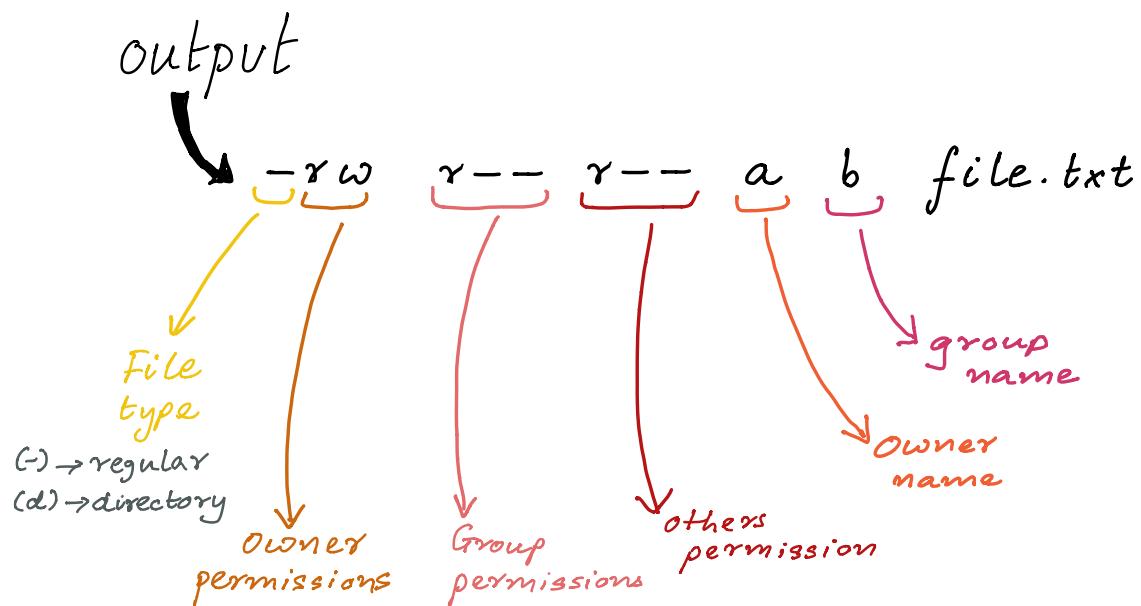
In Linux,



- ★ each file is associated with a **file ownership** and is assigned a **permission access right**

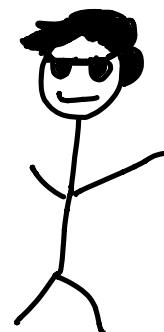
file permissions can be viewed using the command

```
$ ls -l file.txt
```



So how do we
Change the permissions
on a file ??

chmod will
help !!



chmod helps in changing
the access mode/permissions
on a file ❤

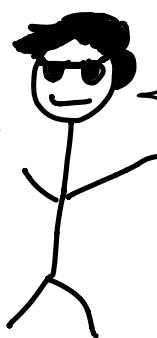
Syntax:

chmod [options] [reference] [operator] [mode] file

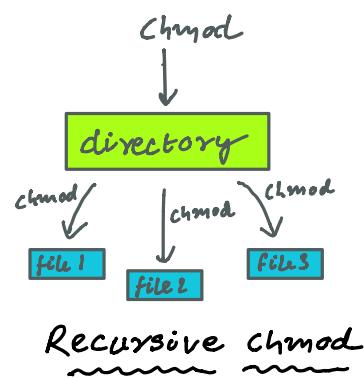
-R ↗ Recursively change files and
directories' permissions

[operator]

- ↳ (+) ↗ Adds specified mode to user
- (-) ↗ Removes specified mode from user
- = ↗ To Assign specified mode for user



There are various
methods to use
chmod



Symbolic Method

⌚ Before

-rwx rwx r-- A B file.c

💻 Command

\$ chmod u-wx file.c

⌚ After

-r--rwx-r-- A B file.c

{u-wx} → readonly
removing write and execute permissions from the file owner (u)

- * a → all users; owner (u), group (g) and others (o)

Numeric Method

📖 read (r) → $(100)_2 = 4$

✍ write (w) → $(010)_2 = 2$

✓ execute (x) → $(001)_2 = 1$

no permission → 0

\$ chmod 760 file.c

Gives owner ($r + w + x$) = 7 ; r, w, x permissions
group ($r + w$) = 6 ; r, w permissions
others (o) ; no permissions

Reference File method

set similar permissions as those on a reference file !

```
$ chmod --reference=reffile.c file.c
```

reference file main file

