chown && chmod

When you write in pash : "ls -la" you will see this line :

drwx------ 44 abdelrahman-tawfik abdelrahman-tawfik 4096 Jun 23 19:20 .config

directory

u58V owner

Group owner

File or directory name

→ 9 bits

read write execute

R W X --- ---

owner   Group   other

Chown

we can change the user and group owner , and we can set permission for this file or folder

first : to change the owner and group owner :

"sudo chown new_user:group_name filename"

change owner

New owner name

اللي هتغير له الكلام دا

Ex : "sudo chown root:root .local"

it will be :   drwx------ 44 root root 4096 Jun 23 19:20 .local

---

and we can set the permissions for the folder or file using chmod

owner Group other

sudo chmod bit_1 bit_2 bit_2 file_name

→ 1→7 mo OClan كل bit مسروح بارقم من ٦ ل٧

Chmod 013   أو   chmod 754   مثلا بنى

for example chmod 750

for owner   Group   other

- كل الاول bit مسموح ستخدره permission (كل واحد مسره)
owner Group other بالترتيب
- بعد كل كقلك bit (٣ أرقام مثلا binary

owner   Group   other
7   5   0

111   101   000   → anyone can't read,write,execute

read write execute

owner can read, write, execute

any member in my Group can read, execute but can't write

So the sequence will be <u>RWX R-X ---</u>

وهما دول ال <u>9 bits</u> اللي عوفة قالب

So

  drwx------ 44 abdelrahman-tawfik abdelrahman-tawfik 4096 Jun 23 19:20 .config

owner can read, write, and execute but Group and other can't do that

So we can change that using :

  "sudo chmod 531 .config"

    101   011 001

owner can R,X Group can W,X other can only X "execute"

So the file will be :

  dr-x-wx--x 44 abdelrahman-tawfik abdelrahman-tawfik 4096 Jun 23 19:20 .config

and if we write "sudo chown root:root .config" , it will be :

  dr-x-wx--x 44 root root 4096 Jun 23 19:20 .config