LAB2 II

----

13. Create a folder called myteam in your home directory
and change its permissions to
read only for the owner.

```
rw-rwxr-x 2 sarah sarah 4096 13:47 18 مارس myteam
arah@sarah-HP-ZBook-15-G2:~$ chmod u=r myteam
arah@sarah-HP-ZBook-15-G2:~$ ls -ld myteam
r--rwxr-x 2 sarah sarah 4096 13:47 18 مارس myteam
arah@sarah-HP-ZBook-15-G2:~$
```

14. Log out and log in by another user

```
fwupd-refresh
mohamed
sarah@sarah-HP-ZBook-15-G2:~$ su - mohamed
Password:
mohamed@sarah-HP-ZBook-15-G2:~$ whoami
mohamed
mohamed@sarah-HP-ZBook-15-G2:~$
```

15. Try to access (by cd command) the folder (myteam)

```
sarah@sarah-HP-ZBook-15-G2:~$ sudo cd myteam
sudo: cd: command not found
sarah@sarah-HP-ZBook-15-G2:~$ ls -a
.                .config      .gnupg       Pictures   .sudo_as_admin_successful
..               Desktop      .local       .pki       Templates
.bash_history    dir1         .mozilla     .profile   Videos
.bash_logout     docs         Music        Public
.bashrc          Documents    myteam       snap
.cache           Downloads    oldpasswd    .ssh
```

16. Using the command Line

Change the permissions of oldpasswd file to give owner read and write
permissions and for group write and execute and execute only for the others
(using chmod in 2 different ways)

```
sarah@sarah-HP-ZBook-15-G2:~$ sudo chmod u=rw,g=wx,o=x oldpasswd
sarah@sarah-HP-ZBook-15-G2:~$ ls -l oldpasswd
-rw--wx--x 1 root root 2988 10:07 17 مارل oldpasswd
sarah@sarah-HP-ZBook-15-G2:~$
```

```
sarah@sarah-HP-ZBook-15-G2:~$ sudo chmod 631 oldpasswd
sarah@sarah-HP-ZBook-15-G2:~$ ls -l oldpasswd
-rw--wx--x 1 root root 2988 10:07 17 مارل oldpasswd
sarah@sarah-HP-ZBook-15-G2:~$
```

Change your default permissions to be as above.

```
sarah@sarah-HP-ZBook-15-G2:~$ umask 146
sarah@sarah-HP-ZBook-15-G2:~$
```

What is the maximum permission a file can have, by default when it is just
created? And what is that for directory.

The maximum permission a file can have by default is read and write (not every file is an executable file and it is not secure to make it by default to have the permission to execute) ,
meanwhile the maximum permissions for the directory is to read , write and execute.

Change your default permissions to be no permission to everyone then create a
directory and a file to verify.

```
sarah@sarah-HP-ZBook-15-G2:~$ umask 777
sarah@sarah-HP-ZBook-15-G2:~$ mkdir newdir
sarah@sarah-HP-ZBook-15-G2:~$ ls -ld newdir
d--------- 2 sarah sarah 4096 14:44 18 مار newdir
sarah@sarah-HP-ZBook-15-G2:~$ touch newfile
sarah@sarah-HP-ZBook-15-G2:~$ ls -l newfile
---------- 1 sarah sarah 0 14:44 18 مار newfile
sarah@sarah-HP-ZBook-15-G2:~$
```

17. What are the minimum permission needed for:
Copy a directory (permission for source directory and permissions for target
parent directory)

the minimum permission needed for Copy a directory is
for target directory : write and execute.((wx)
For the source directory: read and execute.(rx)

Copy a file (permission for source file and and permission for target parent directory)

source file permission: read(r--)
target parent permission: execute.

Delete a file

write (-w-)

Change to a directory

execute and write

List a directory content (ls command)

read

View a file content (more/cat command)

read

Modify a file content

write

18. Create a file with permission 444. Try to edit in it and to remove it? Note what happened.

Error reading .
Cannot edit on file while the file permission is to read only so I cannot write or edit in it.

```
sarah@sarah-HP-ZBook-15-G2:~$ touch file1
sarah@sarah-HP-ZBook-15-G2:~$ chmod 444 file1
sarah@sarah-HP-ZBook-15-G2:~$ ls -l file1
-r--r--r-- 1 sarah sarah 0 15:16 18 مارس file1
sarah@sarah-HP-ZBook-15-G2:~$ nano file1
Error reading /home/sarah/.local/share/nano/search_histo
ry: Permission denied
sarah@sarah-HP-ZBook-15-G2:~$ rm -f file1
sarah@sarah-HP-ZBook-15-G2:~$ ls
Desktop     Downloads  newfile      snap
dir1        Music      oldpasswd    Templates
docs        myteam     Pictures     testdir
Documents   newdir     Public       Videos
sarah@sarah-HP-ZBook-15-G2:~$
```

19. What is the difference between the "x" permission for a file and for a directory?

X permission for the file is an optional and not recommended because it is not secure since not every file is an executable file
x permission for the directory is important I cannot login or see inside the directory unless it is has the permission to execute.