

## Day 6

- **Section 1**

1. Create a folder called myteam in your home directory and change its permissions to read only for the owner.
2. Log out and log in by another user
3. Try to access (by cd command) the folder (myteam)

```
yara@yara:~$ ls -lh |grep myteam
dr----- 2 yara yara 4.0K Dec 20 12:24 myteam
yara@yara:~$ chmod 630 myteam
yara@yara:~$ ls -lh |grep myteam
drw--wx--- 2 yara yara 4.0K Dec 20 12:24 myteam
yara@yara:~$ chmod o+x myteam
yara@yara:~$ ls -lh |grep myteam
drw--wx--x 2 yara yara 4.0K Dec 20 12:24 myteam
```

```
yara@yara:~$ su sara
Password:
sara@yara:/home/yara$ ls
ls: cannot open directory '.': Permission denied
sara@yara:/home/yara$ ls
a1.exe Desktop file1_try.c file2_try.c Music Public Videos
a2.exe Documents file1.txt file2.txt myteam snap
a.exe Downloads file2.exe ITI_Embedded Pictures Templates
sara@yara:/home/yara$ cd myteam/
bash: cd: myteam/: Permission denied
sara@yara:/home/yara$
```

4. Using the command Line
  - a. Change the permissions of oldpasswd (using chmod in 2 different ways)

```
yara@yara:~$ ls -lh |grep oldpasswd
-rw-r--r-- 1 yara yara 3.2K Dec 20 23:12 oldpasswd
yara@yara:~$ chmod 63 oldpasswd && ls -l oldpasswd
----rw--wx 1 yara yara 3188 Dec 20 23:12 oldpasswd
yara@yara:~$ chmod 630 oldpasswd && ls -l oldpasswd
-rw--wx--- 1 yara yara 3188 Dec 20 23:12 oldpasswd
yara@yara:~$ chmod o+x oldpasswd && ls -l oldpasswd
-rw--wx--x 1 yara yara 3188 Dec 20 23:12 oldpasswd
yara@yara:~$
```

b. Change your default permissions to be as above.

```
export PS2=": "  
export PATH=$PATH:/usr/local/bin  
export HELLO=$HOSTNAME  
export LOCAL=$(whoami)  
umask 146  
"~/ .bashrc" 123L, 3945B 123,9
```

```
yara@yara:~$ vim ~/.bashrc  
yara@yara:~$ source ~/.bashrc  
yara@yara:~$ mkdir dir1234  
yara@yara:~$ ls -lh  
total 132K  
-rwxrwxr-x 1 yara yara 16K Dec 15 19:15 a1.exe  
-rwxrwxr-x 1 yara yara 16K Dec 15 19:15 a2.exe  
-rwxrwxr-x 1 yara yara 16K Dec 15 18:19 a.exe  
drwxr-xr-x 2 yara yara 4.0K Dec 20 15:10 Desktop  
drwx-wx--x 2 yara yara 4.0K Dec 26 16:32 dir123  
drw--wx--x 2 yara yara 4.0K Dec 26 16:33 dir1234  
drwxr-xr-x 2 yara yara 4.0K Dec 4 18:14 Documents
```

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

- Files:** Maximum default permission is **666**.
- Directories:** Maximum default permission is **777**.
- Actual permissions depend on the **umask** value

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

```
yara@yara:~$ vim ~/.bashrc  
yara@yara:~$ source ~/.bashrc  
yara@yara:~$ mkdir dir1  
yara@yara:~$ touch file_no_perm.txt  
yara@yara:~$ ls -lh  
total 132K  
-rwxrwxr-x 1 yara yara 16K Dec 15 19:15 a1.exe  
-rwxrwxr-x 1 yara yara 16K Dec 15 19:15 a2.exe  
-rwxrwxr-x 1 yara yara 16K Dec 15 18:19 a.exe  
drwxr-xr-x 2 yara yara 4.0K Dec 20 15:10 Desktop  
d----- 2 yara yara 4.0K Dec 26 16:53 dir1  
d----- 2 yara yara 4.0K Dec 26 16:50 dir12345  
drwxr-xr-x 2 yara yara 4.0K Dec 4 18:14 Documents  
drwxr-xr-x 2 yara yara 4.0K Dec 25 21:44 Downloads  
-rw-rw-r-- 1 yara yara 2.8K Dec 15 19:10 file1_try.c  
-rw-rw-r-- 1 yara yara 7 Dec 7 20:13 file1.txt  
-rwxrwxr-x 1 yara yara 16K Dec 15 18:28 file2.exe  
-rw-rw-r-- 1 yara yara 3.7K Dec 15 19:17 file2_try.c  
----- 1 yara yara 0 Dec 26 16:54 file_no_perm.txt
```

e. State who can access a this file if any with proof.

```
yara@yara:~$ sudo cd -s dir1
sudo: cd: command not found
sudo: "cd" is a shell built-in command, it cannot be run directly.
sudo: the -s option may be used to run a privileged shell.
sudo: the -D option may be used to run a command in a specific directory.
yara@yara:~$ sudo cat file_no_perm.txt
yara@yara:~$ sudo vim file_no_perm.txt
yara@yara:~$ echo "hello world" >> file_no_perm.txt
bash: file_no_perm.txt: Permission denied
yara@yara:~$ sudo echo "hello world" >> file_no_perm.txt
bash: file_no_perm.txt: Permission denied
```

- **Create a new directory.**
  1. **Set the sticky bit on the newly created directory.**
  2. **set the setgui bit on the created directory**
  3. **Create multiple user accounts.**
  4. **Allow these users to create files within the directory and directory.**
  5. **Attempt to delete or rename each other's files.**
  6. **Provide a clear output demonstrating the impact of the sticky bit on file deletion and renaming within the directory.**
  7. **Provide a clear output for the directory created.**
- **List the permission passwd command has and explain why it has S**