9. Delete bad user account

```
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$ sudo userdel -r baduser
```

10. Delete the supplementary group called badgroup.

```
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$ sudo groupdel badgroup
```

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

```
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$ mkdir myteam
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$ chmod 400 myteam
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$ ls -l
total 48
drwxr-xr-x 2 ahmed ahmed 4096 19:27 14 مار Desktop
drwxrwxr-x 3 ahmed ahmed 4096 06:00 15 مار dir1
drwxrwxr-x 2 ahmed ahmed 4096 04:20 15 مار docs
drwxr-xr-x 2 ahmed ahmed 4096 19:27 14 مار Documents
drwxr-xr-x 2 ahmed ahmed 4096 19:27 14 مار Downloads
drwxr-xr-x 2 ahmed ahmed 4096 19:27 14 مار Music
dr-------- 2 ahmed ahmed 4096 15:34 18 مار myteam
-rw-r--r-- 1 ahmed ahmed 2894 04:43 15 مار oldpasswd
drwxr-xr-x 2 ahmed ahmed 4096 19:50 16 مار Pictures
drwxr-xr-x 2 ahmed ahmed 4096 19:27 14 مار Public
drwxr-xr-x 2 ahmed ahmed 4096 19:27 14 مار Templates
drwxr-xr-x 2 ahmed ahmed 4096 19:27 14 مار Videos
```

14. Log out and log in by another user

```
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$ su islam
Password:
islam@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:/home/ahmed$
```

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

```
islam@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:/home/ahmed$ cd myteam
bash: cd: myteam: Permission denied
islam@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:/home/ahmed$
```

16. Using the command Line

    1. 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)

```
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$ ls
Desktop  docs         Downloads  myteam      Pictures  Templates
dir1     Documents  Music        oldpasswd  Public     Videos
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$ chmod 631 oldpasswd
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$ ls -l oldpasswd
-rw--wx--x 1 ahmed ahmed 2894 04:43 15 مار oldpasswd
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$
```

    2. Change your default permissions to be as above.

```
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$ umask 146
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$
```

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

    For file rw-r--r—

    For directory rwxr-xr-x

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

```
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$ umask 777
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$ mkdir myfiles
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$ touch newfile
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$ ls -l
total 52
drwxr-xr-x 2 ahmed ahmed 4096 19:27 14 مار Desktop
drwxrwxr-x 3 ahmed ahmed 4096 06:00 15 مار dir1
drwxrwxr-x 2 ahmed ahmed 4096 04:20 15 مار docs
drwxr-xr-x 2 ahmed ahmed 4096 19:27 14 مار Documents
drwxr-xr-x 2 ahmed ahmed 4096 19:27 14 مار Downloads
drwxr-xr-x 2 ahmed ahmed 4096 19:27 14 مار Music
d--------- 2 ahmed ahmed 4096 15:53 18 مار myfiles
dr-------- 2 ahmed ahmed 4096 15:34 18 مار myteam
---------- 1 ahmed ahmed    0 15:53 18 مار newfile
-rw--wx--x 1 ahmed ahmed 2894 04:43 15 مار oldpasswd
drwxr-xr-x 2 ahmed ahmed 4096 15:52 18 مار Pictures
drwxr-xr-x 2 ahmed ahmed 4096 19:27 14 مار Public
drwxr-xr-x 2 ahmed ahmed 4096 19:27 14 مار Templates
drwxr-xr-x 2 ahmed ahmed 4096 19:27 14 مار Videos
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$
```
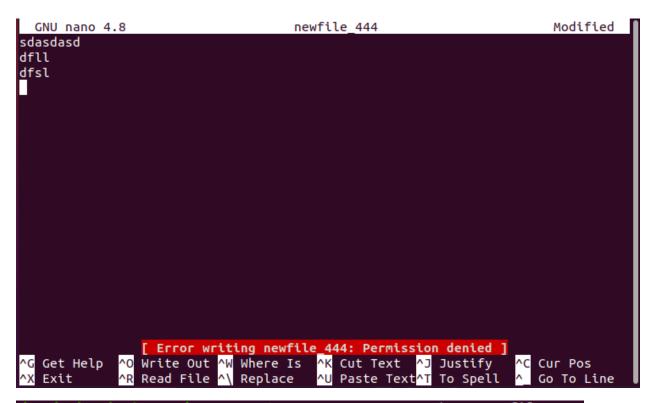
17. What are the minimum permission needed for:

    1. Copy a directory (permission for source directory and permissions for target parent directory)

    Read and Write

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

    Read and write

3. Delete a file
   <mark>Write and excute</mark>
4. Change to a directory
   <mark>excute</mark>
5. List a directory content (ls command)
   <mark>read</mark>
6. View a file content (more/cat command)
   <mark>read</mark>
7. Modify a file content
   <mark>write</mark>

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

```
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$ touch newfile_444
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$ chmod 444 myfile_444
chmod: cannot access 'myfile_444': No such file or directory
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$ chmod 444 newfile_444
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$ nano newfile_444
```

```
  GNU nano 4.8                    newfile_444                     Modified
sdasdasd
dfll
dfsl




                  [ Error writing newfile_444: Permission denied ]
^G Get Help    ^O Write Out ^W Where Is    ^K Cut Text  ^J Justify   ^C Cur Pos
^X Exit        ^R Read File ^\ Replace     ^U Paste Text^T To Spell  ^  Go To Line
```

```
ahmed@ahmed-VivoBook-ASUSLaptop-X515JP-X515JP:~$ rm newfile_444
rm: remove write-protected regular empty file 'newfile_444'?
```

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

X meaning execute

x for file meaning the owner or other users can execute file

x for directory meaning the owner or other users can enter the directory and access its contents