

## **Question**

Configure your system in such a way that any user of your system creates a file then there should not be permission to do any activity in that file.

**Note:- Don't use the chmod command.**

## **My Approach**

**For this I use the concept of umask.**

umask is a command in Unix and Unix-like operating systems that is used to set default permissions for newly created files and directories. It stands for "user file creation mask" and is a bitmask that controls which permissions are removed from the default permissions of new files and directories.

**Step 1 : Set umask value = 777**

**Command = umask 777**

After this every file and directory that will be created in the system will have no permissions.

**For files:** No one (neither the owner, nor the group, nor others) will have any permission to read, write, or execute the file.

**For directories:** No one (neither the owner, nor the group, nor others) will have any permission to list contents, create files, or access files within the directory.

# Example:

```
Activities Terminal Feb 29 18:12
sigmoid@sigmoid-ThinkPad-T450: ~
sigmoid@sigmoid-ThinkPad-T450:~$ umask
0002
sigmoid@sigmoid-ThinkPad-T450:~$ umask 777
sigmoid@sigmoid-ThinkPad-T450:~$ umask
0777
sigmoid@sigmoid-ThinkPad-T450:~$ touch newfile
sigmoid@sigmoid-ThinkPad-T450:~$ mkdir newfolder
sigmoid@sigmoid-ThinkPad-T450:~$ ls -l newf*
----- 1 sigmoid sigmoid 0 Feb 29 18:10 newfile

ls: cannot open directory 'newfolder': Permission denied
sigmoid@sigmoid-ThinkPad-T450:~$ ls -l
ls: cannot access 'l': No such file or directory
sigmoid@sigmoid-ThinkPad-T450:~$ ls -l
total 104032
drwxrwxr-x 3 sigmoid sigmoid 4096 Feb 27 20:40 assignment_linux
-rwxrwxr-x 1 sigmoid sigmoid 558 Feb 27 19:42 copy_find_file
-rw-r----- 1 sigmoid sigmoid 122 Feb 28 17:46 dead.letter
drwxr-xr-x 2 sigmoid sigmoid 4096 Feb 14 03:54 Desktop
drwxr-xr-x 2 sigmoid sigmoid 4096 Feb 20 14:10 Documents
drwxr-xr-x 5 sigmoid sigmoid 4096 Feb 28 11:05 Downloads
-r-xr--r-- 1 sigmoid sigmoid 935 Feb 27 20:37 final
-rwxrwxr-x 1 sigmoid sigmoid 585 Feb 27 20:09 find_file
-rw-r----- 1 sigmoid sigmoid 267 Feb 29 13:33 ftpwallfile
-rw-rw-r-- 1 sigmoid sigmoid 106428268 Feb 13 03:59 google-chrome-stable_current_and64.deb
-rw-r----- 1 sigmoid sigmoid 487 Feb 29 11:49 kruger
drwxrwxr-x 3 sigmoid sigmoid 4096 Feb 27 18:29 linuxscripts
drwxr-xr-x 2 sigmoid sigmoid 4096 Feb 14 03:54 Music
----- 1 sigmoid sigmoid 0 Feb 29 18:10 newfile
d----- 2 sigmoid sigmoid 4096 Feb 29 18:10 newfolder
drwxr-xr-x 2 sigmoid sigmoid 4096 Feb 28 18:52 Pictures
drwxr-xr-x 2 sigmoid sigmoid 4096 Feb 14 03:54 Public
-rw-r----- 1 sigmoid sigmoid 11 Feb 29 12:12 rudra
drwx----- 3 sigmoid sigmoid 4096 Feb 15 16:03 snap
drwxr-xr-x 2 sigmoid sigmoid 4096 Feb 14 03:54 Templates
-rw-r--r-- 1 root root 2470 Feb 27 21:17 time_service
-rw-r----- 1 sigmoid sigmoid 84 Feb 29 13:39 tx
-rw-rw-r-- 1 sigmoid sigmoid 407 Feb 25 18:35 typescript
drwxr-xr-x 2 sigmoid sigmoid 4096 Feb 14 03:54 Videos
drwxrwxr-x 3 sigmoid sigmoid 4096 Feb 25 23:23 'VirtualBox VMs'
sigmoid@sigmoid-ThinkPad-T450:~$ cat newfile
cat: newfile: Permission denied
sigmoid@sigmoid-ThinkPad-T450:~$
```

We can see here that after setting the umask value as 777, we create a file and directory and both of this have no permission(read, write and execute) at all.