

# File permissions in Linux

## Project description

[Practical experience with types of access granted to the three types of owners in linux  
Practical experience granting access to specific resources in a system . apt packet manager ,installation ,uninstallation and list installed applications.generate input and output with the echo,expr, and clear command.  
Finding files with linux commands cd.pwd,ls to navigate directories,display working directories and list contents of a directory.Display content of files with the cat and head commands]

## Check file and directory details

[There are five files in the project directory and one subdirectory inside the projects directory named draft .

```
Project_k.txt = d r w - r w -r w -  
Project_m.txt = d r w - r- - - -  
Project_r.txt = d r w - r w - r -  
.project_x.txt = - r w - - w - - -
```

Sub directory

```
Drafts = d r w x - - x - - - ]
```

## Describe the permissions string

[Permission strings are types of access granted to a file or directory.Permission strings are represented with the ten character strings “drwxrwxrwx”. The d indicates the file is a directory , the r indicates read all files in the directory, the w indicates write permissions and allow modifications on a file. These permissions are applied to the types of owners to grant or deny access to USER, GROUP, OTHER ]

## Change file permissions

[A user might longer be working on a project and the organization requires changes to some permissions in order to protect system files, to change file permissions for others not to have write permissions, I applied the chmod o - w project\_k.txt , this command denies others the write permission.i also used the ls - la command to display changes to permissions to all files and directories

`Project_k.txt = d r w - r w - r - - ]`

[The organization has archived project\_x.txt and requests that no one should have the write permission in this project. To change file permission the command `chmod u - w, g - w , g + r` was applied and the user and group were denied access to write permission and to the group was given the read permission `. project_x.txt`. The `.` indicates that project\_x.txt is a hidden file

`.project_x.txt = - r - r - - - - ]`

## Change directory permissions

[To grant the researcher2 access to the drafts, I applied the command `chmod g-x , drafts` to give the researcher 2 access to the draft directory and its content and removed the execute permission from the group owner.

`Researcher2`

`Draft = d r w x - - - - - ]`

## Summary

[I used the options to modify the behaviour of the command, adding options to `ls` command displays permissions to all files and directory including hidden files , `ls - la` , the `chmod` command changes permissions on files and directories.]