

# Linux Guide

## File Permission in Linux

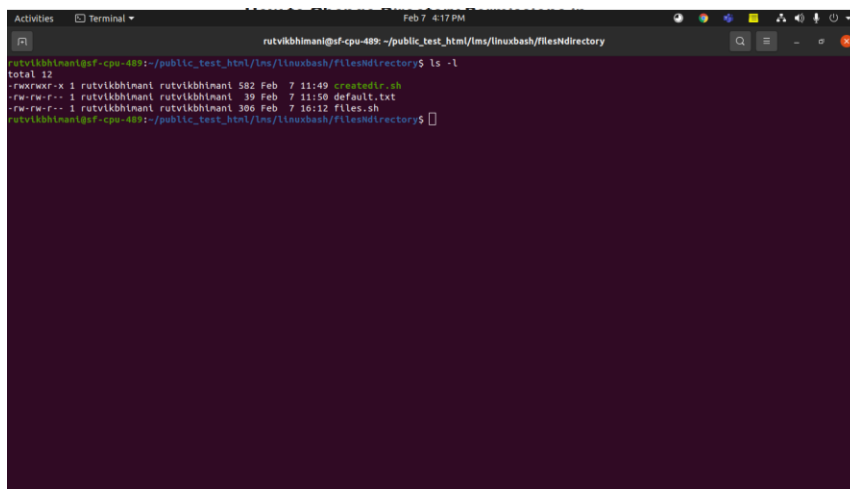
+r= read permission

+w=Write Permission

+x=Execute Permission

To list the all file with the permission

ls-l



```
rutvikbhinani@sf-cpu-409: ~/public_test_html/lms/linuxbash/filesNdirectory$ ls -l
total 12
-rwxr-xr-x 1 rutvikbhinani rutvikbhinani 502 Feb  7 11:49 createdir.sh
-rw-r--r-- 1 rutvikbhinani rutvikbhinani  39 Feb  7 11:50 default.txt
-rw-r--r-- 1 rutvikbhinani rutvikbhinani 306 Feb  7 16:12 files.sh
rutvikbhinani@sf-cpu-409: ~/public_test_html/lms/linuxbash/filesNdirectory$
```

What is 777 numeric number mean ?

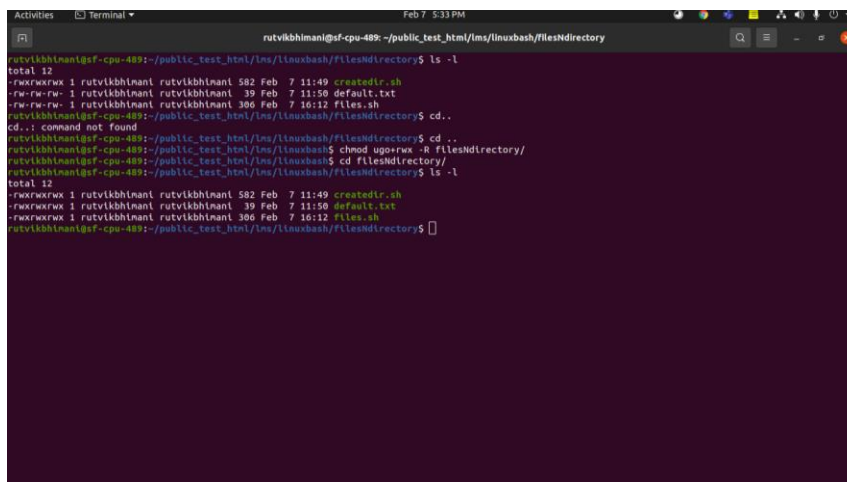
Owner	Group	Other
4 2 1	4 2 1	4 2 1
4- read	4-read	4-read
2-write	2-write	2-write
1- Execute	1-execute	1-execute
<hr/>		
7	7	7

Note : where + means file and d meand directory

## How to change permission for file and directory??

chmod ugo+rw <foldername>

- change the permission for all

A terminal window showing a series of commands and their outputs. The user is in a directory named 'filesndirectory'. They run 'ls -l' which shows a list of files with permissions, owner, group, size, date, and filename. The permissions are: 'createdir.sh' (drwxrwxr-x), 'default.txt' (-rw-rw-rw-), and 'files.sh' (-rw-rw-rw-). The user then runs 'cd ..' and 'cd' to navigate between directories. Finally, they run 'chmod ugo+rw -R filesndirectory/' which changes the permissions of all files and directories within 'filesndirectory' to 'drwxrwxrwx'. The final 'ls -l' output shows: 'createdir.sh' (drwxrwxrwx), 'default.txt' (-rw-rw-rw-), and 'files.sh' (-rw-rw-rw-).

```
rutvikbhimanisf-cpu-489:~/public_test_html/lms/linuxbash/filesndirectory$ ls -l
total 12
-rwxrwxr-x 1 rutvikbhimanant rutvikbhimanant 582 Feb  7 11:40 createdir.sh
-rw-rw-rw- 1 rutvikbhimanant rutvikbhimanant 39 Feb  7 11:50 default.txt
-rw-rw-rw- 1 rutvikbhimanant rutvikbhimanant 306 Feb  7 16:12 files.sh
rutvikbhimanisf-cpu-489:~/public_test_html/lms/linuxbash/filesndirectory$ cd..
cd..: command not found
rutvikbhimanisf-cpu-489:~/public_test_html/lms/linuxbash/filesndirectory$ cd ..
rutvikbhimanisf-cpu-489:~/public_test_html/lms/linuxbash$ chmod ugo+rw -R filesndirectory/
rutvikbhimanisf-cpu-489:~/public_test_html/lms/linuxbash$ cd filesndirectory/
rutvikbhimanisf-cpu-489:~/public_test_html/lms/linuxbash/filesndirectory$ ls -l
total 12
-rwxrwxrwx 1 rutvikbhimanant rutvikbhimanant 582 Feb  7 11:40 createdir.sh
-rwxrwxrwx 1 rutvikbhimanant rutvikbhimanant 39 Feb  7 11:50 default.txt
-rwxrwxrwx 1 rutvikbhimanant rutvikbhimanant 306 Feb  7 16:12 files.sh
rutvikbhimanisf-cpu-489:~/public_test_html/lms/linuxbash/filesndirectory$
```

## How to Change Ownership in Linux

chown name <filename/foldername>

-rw-r--r-- 12 rutvikbhimani rutvikbhimani 12.0K Apr 8 20:51 filename.txt

|[-][-][-]- [-] [-----] [---]

| |

| +-----> Group

+-----> Owner

## How to Change Group Of file

chown <Group> file

## Types of permission in linux

- 0 = ---
- 1 = --x
- 2 = -w-
- 3 = -wx
- 4 = r-
- 5 = r-x
- 6 = rw-
- 7 = rwx

## HTOP

### Install

#### Ubuntu

```
sudo apt-get update
```

```
sudo apt-get install htop
```

#### Centos [usually used in server and hosting]

```
dnf install https://dl.fedoraproject.org/pub/epel/epel-release-latest-8.noarch.rpm
```

```
dnf update
```

```
dnf install htop
```

#### Amazon Linux [aws]

```
yum search htop
```

```
sudo yum install htop
```

List all running process

htop

```
Activities Terminal Feb 7 5:49 PM
rutvikbhimani@sf-cpu-489: ~/public_test_html/lms/linuxbash/filesndirectory

1  [  1.3%] 5 [  3.3%]
2  [  2.0%] 6 [  3.3%]
3  [  0.0%] 7 [  2.7%]
4  [  3.9%] 8 [  2.7%]
mem [  9.24G/11.6G] Tasks: 278, 1331, 2 running
swp [  4.00M/2.00G] Load average: 0.43 0.63 0.75
Uptime: 08:31:24

PID USER      PS1  NI  VIRT  RES  SHR  S  CPU%  MEM%   TIME+  Command
126667 rutvikbht 20   0 4864K 497K 110K  S   2.6  3.1  26:58.90 /opt/google/chrome/chrome --type=renderer --enable-crashpad --crashpad-handler-pid=36
39484 rutvikbht 20   0 984K 197K 9460K  S  2.0  1.2 13:15.21 /opt/onlme/project-on-time
3653 rutvikbht 20   0 14.4G 280K 120K  S  2.0  1.8 31:17.09 /opt/google/chrome/chrome --type=renderer --enable-crashpad --crashpad-handler-pid=36
126673 rutvikbht 20   0 34.5G 469K 133K  S  1.3  2.9 1:26.61 /opt/google/chrome/chrome --type=renderer --enable-crashpad --crashpad-handler-pid=36
39535 rutvikbht 20   0 513K 180K 8080K  S  1.3  0.7 0:45.69 /opt/onlme/project-on-time --type=renderer --disable-features=SporendererForSitePe
153139 rutvikbht 20   0 1244K 5512 3404  S  1.3  0.0 0:00.24 htop
39554 rutvikbht 20   0 242K 5599K 4565K  S  1.3  0.3 0:38.81 /proc/self/exe --type=renderer --disable-features=SporendererForSitePerProcess -
3691 rutvikbht 20   0 14.4G 280K 120K  S  1.3  1.8 9:15.90 /opt/google/chrome/chrome --type=renderer --enable-crashpad --crashpad-handler-pid=36
39542 rutvikbht 20   0 513K 180K 8080K  S  1.3  0.7 0:29.52 /opt/onlme/project-on-time --type=renderer --disable-features=SporendererForSitePe
126670 rutvikbht 20   0 34.5G 469K 133K  S  1.3  2.9 0:28.14 /opt/google/chrome/chrome --type=renderer --enable-crashpad --crashpad-handler-pid=36
153146 rutvikbht 20   0 4864K 497K 110K  S  1.3  3.1 0:00.02 /usr/bin/gnome-shell
2513 rutvikbht 20   0 14.4G 280K 120K  S  1.3  1.8 9:15.90 /opt/google/chrome/chrome --type=renderer --enable-crashpad --crashpad-handler-pid=36
3696 rutvikbht 20   0 14.4G 383K 175K  S  0.7  2.4 24:21.39 /opt/google/chrome/chrome --enable-crashpad
39586 rutvikbht 20   0 242K 5599K 4565K  S  0.7  0.3 0:26.60 /proc/self/exe --type=renderer --disable-features=SporendererForSitePerProcess -
1911 root      20   0 6133K 7752K 3646K  S  0.7  0.5 14:19.38 /usr/lib/xorg/xdg vte2 --displayfd 3 -auth /run/user/1001/gdm/authority-background-n
39555 rutvikbht 20   0 668K 194K 8082K  S  0.7  1.2 2:10.23 /opt/onlme/project-on-time --type=renderer --disable-features=SporendererForSitePe
126816 rutvikbht 20   0 28.4G 244K 95512  S  0.7  1.5 1:16.13 /opt/google/chrome/chrome --type=renderer --enable-crashpad --crashpad-handler-pid=36
2484 rutvikbht 20   0 1215K 723K 5173K  S  0.7  0.4 0:34.17 /snap/teams/60/usr/share/teams/teams --type=renderer --enable-crashpad --crashpad-handler-pid=36
3663 rutvikbht 20   0 14.4G 124K 8554K  S  0.7  0.8 2:10.12 /opt/google/chrome/chrome --type=renderer --enable-crashpad --crashpad-handler-pid=36
9017 rutvikbht 20   0 48.5G 214K 61432  S  0.7  1.3 0:30.02 /snap/code/86/usr/share/code/code --ns-enable-electron-run-as-node --inspect-port=0 /
1053 jdm        39  19 490K 2402K 1573K  S  0.7  0.1 0:00.08 /usr/libexec/tracker-mntr-fs
2441 rutvikbht 20   0 7847K 240K 160K  S  0.7  1.6 3:15.70 /snap/teams/60/usr/share/teams/teams --disable-nanospacesandbox --disable-setuid-sand
3640 rutvikbht 20   0 14.4G 383K 175K  S  0.7  2.4 4:26.84 /opt/google/chrome/chrome --enable-crashpad
3814 rutvikbht 20   0 24.4G 582K 8518K  S  0.7  3.7 2:49.92 /opt/google/chrome/chrome --type=renderer --enable-crashpad --crashpad-handler-pid=36
9269 rutvikbht 20   0 14.4G 244K 95512  S  0.7  1.5 1:16.13 /opt/google/chrome/chrome --type=renderer --enable-crashpad --crashpad-handler-pid=36
1412 jdm        20   0 4013K 159K 9194K  S  0.0  1.2 0:13.83 /usr/bin/gnome-shell
```

Find Particular Process in using search

F3

kill any particular process

F9

# Vim

Open any file using vim

vim <filename>

Navigate in file

👉h   👉j   👉k   👉l

Action	Keybinding
delete charter	x
delete line	dd
undo	u
number to line	:set number
Insert Mode	i
esc	go to normal mode
paster	+p

How to search in vim

:set hlsearch

Search and replace using vim

:s <search>|<replace>

Save and exit

:wq

Exit without saving

:q!