EXECUTEVARIOUS LINUX COMMAND FOR :

- INFORMATION MAINTAINANCE :

1. wc - for display the number of lines ,words , and charater

```
fabric@ramanujan-HLBS-CM-44:~/Desktop$ cat riya
riya and aditi are good friends.we studied in the same class.
fabric@ramanujan-HLBS-CM-44:~/Desktop$ wc riya
 1 11 62 riya
```

2. clear - to clear the terminal

```
fabric@ramanujan-HLBS-CM-44:~/Documents$ cat riya
cherry
orange
lichi
fabric@ramanujan-HLBS-CM-44:~/Documents$ cat aditi2
guava
lichi
mango
fabric@ramanujan-HLBS-CM-44:~/Documents$ clear
```

```
fabric@ramanujan-HLBS-CM-44:~/Documents$
```

3. cal - displays the calender of that month

```
fabric@ramanujan-HLBS-CM-44:~/Desktop$ cal
   September 2024
Su Mo Tu We Th Fr Sa
 1  2  3  4  5  6  7
 8  9 10 11 12 13 14
15 16 17 18 19 20 21
22 23 24 25 26 27 28
29 30
```

for all year :

```
fabric@ramanujan-HLBS-CM-44:~$ cal -y
                                2024
      January               February                March
Su Mo Tu We Th Fr Sa  Su Mo Tu We Th Fr Sa  Su Mo Tu We Th Fr Sa
    1  2  3  4  5  6                  1  2  3                  1  2
 7  8  9 10 11 12 13   4  5  6  7  8  9 10   3  4  5  6  7  8  9
14 15 16 17 18 19 20  11 12 13 14 15 16 17  10 11 12 13 14 15 16
21 22 23 24 25 26 27  18 19 20 21 22 23 24  17 18 19 20 21 22 23
28 29 30 31           25 26 27 28 29        24 25 26 27 28 29 30
                                            31

       April                  May                   June
Su Mo Tu We Th Fr Sa  Su Mo Tu We Th Fr Sa  Su Mo Tu We Th Fr Sa
    1  2  3  4  5  6            1  2  3  4                     1
 7  8  9 10 11 12 13   5  6  7  8  9 10 11   2  3  4  5  6  7  8
14 15 16 17 18 19 20  12 13 14 15 16 17 18   9 10 11 12 13 14 15
21 22 23 24 25 26 27  19 20 21 22 23 24 25  16 17 18 19 20 21 22
28 29 30              26 27 28 29 30 31     23 24 25 26 27 28 29
                                            30

        July                  August              September
Su Mo Tu We Th Fr Sa  Su Mo Tu We Th Fr Sa  Su Mo Tu We Th Fr Sa
    1  2  3  4  5  6                  1  2  3   1  2  3  4  5  6  7
 7  8  9 10 11 12 13   4  5  6  7  8  9 10   8  9 10 11 12 13 14
14 15 16 17 18 19 20  11 12 13 14 15 16 17  15 16 17 18 19 20 21
21 22 23 24 25 26 27  18 19 20 21 22 23 24  22 23 24 25 26 27 28
28 29 30 31           25 26 27 28 29 30 31  29 30

      October               November              December
Su Mo Tu We Th Fr Sa  Su Mo Tu We Th Fr Sa  Su Mo Tu We Th Fr Sa
       1  2  3  4  5                  1  2   1  2  3  4  5  6  7
 6  7  8  9 10 11 12   3  4  5  6  7  8  9   8  9 10 11 12 13 14
13 14 15 16 17 18 19  10 11 12 13 14 15 16  15 16 17 18 19 20 21
20 21 22 23 24 25 26  17 18 19 20 21 22 23  22 23 24 25 26 27 28
27 28 29 30 31        24 25 26 27 28 29 30  29 30 31

fabric@ramanujan-HLBS-CM-44:~$
```

4 . who - shows who is currently logged into the system

```
fabric@ramanujan-HLBS-CM-44:~$ who
fabric   tty2         2024-10-01 15:29 (tty2)
fabric@ramanujan-HLBS-CM-44:~$
```

5. date - displays todays date along with time

```
fabric@ramanujan-HLBS-CM-44:~/Desktop$ date
Tuesday 24 September 2024 04:03:18 PM AEST
fabric@ramanujan-HLBS-CM-44:~/Desktop$
```

6. pwd - prints the current working directory

```
fabric@ramanujan-HLBS-CM-44:~/Desktop$ mkdir riya
mkdir: cannot create directory ‘riya’: File exists
fabric@ramanujan-HLBS-CM-44:~/Desktop$ pwd riya
/home/fabric/Desktop
```

- FILE MANAGEMENT -

1 . cat - display the content of the file

```
fabric@ramanujan-HLBS-CM-44:~/Desktop$ cat riya
riya and aditi are good friends.we studied in the same class.
fabric@ramanujan-HLBS-CM-44:~/Desktop$
```

2. cp - copy and paste a file into a directory , syntax :- cp <sourcefile> <destinationfile>

```
fabric@ramanujan-HLBS-CM-44:~/Desktop$ cp riya aditi
fabric@ramanujan-HLBS-CM-44:~/Desktop$ ls
adii  aditi  ee  pagal  rii  riya  rohan  tar
fabric@ramanujan-HLBS-CM-44:~/Desktop$ cd aditi
fabric@ramanujan-HLBS-CM-44:~/Desktop/aditi$ ls
riya  riyaa  tar  tt
fabric@ramanujan-HLBS-CM-44:~/Desktop/aditi$ cat riya
riya and aditi are good friends.
fabric@ramanujan-HLBS-CM-44:~/Desktop/aditi$
```

3. rm - remove file
rm -rf <directoryname>\ -> deletes the directory with all the files

```
fabric@ramanujan-HLBS-CM-44:~/Desktop$ rm aditi
rm: cannot remove 'aditi': Is a directory
fabric@ramanujan-HLBS-CM-44:~/Desktop$ cd aditi
fabric@ramanujan-HLBS-CM-44:~/Desktop/aditi$ ls
riya  riyaa  tar  tt
fabric@ramanujan-HLBS-CM-44:~/Desktop/aditi$ rm riyaa
fabric@ramanujan-HLBS-CM-44:~/Desktop/aditi$ ls
riya  tar  tt
fabric@ramanujan-HLBS-CM-44:~/Desktop/aditi$
```

4. mv - to rename and move file
syntax : for rename -> mv <old file name > <new file name >
for move -> mv <filename > <location (pwd)>

```
fabric@ramanujan-HLBS-CM-44:~$ cd Documents
fabric@ramanujan-HLBS-CM-44:~/Documents$ pwd
/home/fabric/Documents
fabric@ramanujan-HLBS-CM-44:~/Documents$ cd ..
fabric@ramanujan-HLBS-CM-44:~$ cd Desktop
fabric@ramanujan-HLBS-CM-44:~/Desktop$ ls
adii  aditi  ee  pagal  rii  riya  tar
fabric@ramanujan-HLBS-CM-44:~/Desktop$ mv riya /home/fabric/Documents
fabric@ramanujan-HLBS-CM-44:~/Desktop$ ls
adii  aditi  ee  pagal  rii  tar
fabric@ramanujan-HLBS-CM-44:~/Desktop$ cd ..
fabric@ramanujan-HLBS-CM-44:~$ cd Documents
fabric@ramanujan-HLBS-CM-44:~/Documents$ ls
aditi  riya
```

5 . cmp - to compare two files byte by byte
(charater by charater and gives the rersult where the first mismatch)

```
fabric@ramanujan-HLBS-CM-44:~/Documents$ cmp aditi riya
cmp: EOF on aditi which is empty
fabric@ramanujan-HLBS-CM-44:~/Documents$ vim aditi
\fabric@ramanujan-HLBS-CM-44:~/Documents$ cmp aditi riya
aditi riya differ: byte 1, line 1
fabric@ramanujan-HLBS-CM-44:~/Documents$ cat aditi
hello,everyone welcome to my channel.
fabric@ramanujan-HLBS-CM-44:~/Documents$ cat riya
riya and aditi are good friends.
fabric@ramanujan-HLBS-CM-44:~/Documents$ wc aditi
 1  5 38 aditi
fabric@ramanujan-HLBS-CM-44:~/Documents$ wc riya
 1  6 33 riya
fabric@ramanujan-HLBS-CM-44:~/Documents$ cmp aditi riya
aditi riya differ: byte 1, line 1
fabric@ramanujan-HLBS-CM-44:~/Documents$ cmp riya aditi
riya aditi differ: byte 1, line 1
fabric@ramanujan-HLBS-CM-44:~/Documents$ vim aditi
fabric@ramanujan-HLBS-CM-44:~/Documents$ cmp riya aditi
riya aditi differ: byte 2, line 1
fabric@ramanujan-HLBS-CM-44:~/Documents$
```

6. comm -
compares two file line by line (The 'comm' command is used for line-by-line comparison of two sorted files (using sort command ). It reads two files as input and generates a three-column output by default:

Column 1: Lines unique to the first file.
Column 2: Lines unique to the second file.
Column 3: Lines common to both files. )

```
fabric@ramanujan-HLBS-CM-44:~/Documents$ vim riya
fabric@ramanujan-HLBS-CM-44:~/Documents$ cat riya
cherry
lichi
apple
fabric@ramanujan-HLBS-CM-44:~/Documents$ cat aditi
mango
lichi
guava
fabric@ramanujan-HLBS-CM-44:~/Documents$ sort -o riya riya2
sort: cannot read: riya2: No such file or directory
fabric@ramanujan-HLBS-CM-44:~/Documents$ touch riya2
fabric@ramanujan-HLBS-CM-44:~/Documents$ sort -o riya riya2
fabric@ramanujan-HLBS-CM-44:~/Documents$ cat riya2
fabric@ramanujan-HLBS-CM-44:~/Documents$ cat riya
fabric@ramanujan-HLBS-CM-44:~/Documents$ touch aditi2
fabric@ramanujan-HLBS-CM-44:~/Documents$ ls
aditi  aditi2  riya  riya2
fabric@ramanujan-HLBS-CM-44:~/Documents$ cat aditi
mango
lichi
guava
fabric@ramanujan-HLBS-CM-44:~/Documents$ sort -o aditi2 aditi
fabric@ramanujan-HLBS-CM-44:~/Documents$ cat aditi
mango
lichi
guava
fabric@ramanujan-HLBS-CM-44:~/Documents$ cat aditi2
guava
lichi
mango
fabric@ramanujan-HLBS-CM-44:~/Documents$ vim riya
fabric@ramanujan-HLBS-CM-44:~/Documents$ sort -o riya2 riya
fabric@ramanujan-HLBS-CM-44:~/Documents$ cat riya
cherry
orange
lichi
fabric@ramanujan-HLBS-CM-44:~/Documents$ cat riya2
cherry
lichi
orange
```

```
fabric@ramanujan-HLBS-CM-44:~/Documents$ comm riya2 aditi2
cherry
        guava
                lichi
        mango
orange
fabric@ramanujan-HLBS-CM-44:~/Documents$
```

7. diff - primary purpose is to compare the contents of two files and display the differences between them.

syntax : diff a.txt b.txt

```
fabric@ramanujan-HLBS-CM-44:~/Documents$ diff riya aditi
1,2c1
< cherry
< orange
---
> mango
3a3
> guava
fabric@ramanujan-HLBS-CM-44:~/Documents$
```

8. find - it is used to find and can also be used to delete
syntax :- find ./<directory> -name filename.txt
for find + delete -> find ./directoryname -name filename.txt -exec rm -i {} \;
**-i -> it is used for the confirmation from the user to delete the file

```
fabric@ramanujan-HLBS-CM-44:~/Documents$ cd ..
fabric@ramanujan-HLBS-CM-44:~$ find ./Documents -name aditi
./Documents/aditi
fabric@ramanujan-HLBS-CM-44:~$ find ./Documents -name aditi -exec rm -i {} \
> y
find: missing argument to `-exec'
fabric@ramanujan-HLBS-CM-44:~$ find ./Documents -name aditi -exec rm -i {} \;
rm: remove regular file './Documents/aditi'? yes
fabric@ramanujan-HLBS-CM-44:~$ cd Documents
fabric@ramanujan-HLBS-CM-44:~/Documents$ ls
aditi2  riya  riya2
fabric@ramanujan-HLBS-CM-44:~/Documents$
```

9. grep - used to find a particular word in a file
syntax : grep -i "<word you want to search>" <filename>.txt

```
fabric@ramanujan-HLBS-CM-44:~/Documents$ grep -i lichi riya
lichi
fabric@ramanujan-HLBS-CM-44:~/Documents$ grep -i mango aditi2
mango
fabric@ramanujan-HLBS-CM-44:~/Documents$
```

10. awk - used to perform any action(for eg-print ) on any particaular file
syntax -> awk options 'selection _criteria {action }' input-file > output-file
eg : awk '{print}' employee.txt

```
fabric@ramanujan-HLBS-CM-44:~/Documents$ awk '{print}' riya
cherry
orange
lichi
fabric@ramanujan-HLBS-CM-44:~/Documents$
```

- DIRECTORY MANAGEMENT :

11. mkdir - create a directory

```
fabric@ramanujan-HLBS-CM-44:~/Desktop$ mkdir riya
mkdir: cannot create directory ‘riya’: File exists
fabric@ramanujan-HLBS-CM-44:~/Desktop$ pwd riya
/home/fabric/Desktop
```

12. rmdir - remove directory if empty

```
fabric@ramanujan-HLBS-CM-44:~$ ls
'aditi riya'   bin       config    Desktop     Downloads   ed.txt   go1.11.linux-amd64.tar.gz   Pictures   RIYA   Templates
 bhago         builders  dcb.txt   Documents   ecbd.txt    go       Music                       Public     snap   Videos
fabric@ramanujan-HLBS-CM-44:~$ mkdir operations
fabric@ramanujan-HLBS-CM-44:~$ ls
'aditi riya'   bin       config    Desktop     Downloads   ed.txt   go1.11.linux-amd64.tar.gz   operations   Public   snap        Videos
 bhago         builders  dcb.txt   Documents   ecbd.txt    go       Music                       Pictures     RIYA     Templates
fabric@ramanujan-HLBS-CM-44:~$ rmdir operations
fabric@ramanujan-HLBS-CM-44:~$ ls
'aditi riya'   bin       config    Desktop     Downloads   ed.txt   go1.11.linux-amd64.tar.gz   Pictures   RIYA   Templates
 bhago         builders  dcb.txt   Documents   ecbd.txt    go       Music                       Public     snap   Videos
fabric@ramanujan-HLBS-CM-44:~$
```

*rm -rf <directoryname>\ -> deletes the directory with all the files

```
fabric@ramanujan-HLBS-CM-44:~$ rm -rf RIYA
fabric@ramanujan-HLBS-CM-44:~$ ls
'aditi riya'  bhago  bin  builders  config  dcb.txt  Desktop  Documents  Downloads  ecbd.txt  ed.txt  go  go1.11.linux-amd64.tar.gz  Music  Pictures  Public  snap  Templates  Videos
fabric@ramanujan-HLBS-CM-44:~$
```

13. ls – list directories

```
fabric@ramanujan-HLBS-CM-44: ~
fabric@ramanujan-HLBS-CM-44:~$ touch RIYA
fabric@ramanujan-HLBS-CM-44:~$ ls
bhago     dcb.txt    ecbd.txt                    Music      snap
bin       Desktop    ed.txt                      Pictures   Templates
builders  Documents  go                          Public     Videos
config    Downloads  go1.11.linux-amd64.tar.gz   RIYA
fabric@ramanujan-HLBS-CM-44:~$
```

---

14 .cd – change directory

```
fabric@ramanujan-HLBS-CM-44:~$ cd Documents
fabric@ramanujan-HLBS-CM-44:~/Documents$ ls
aditi2  riya  riya2
fabric@ramanujan-HLBS-CM-44:~/Documents$
```

# Execute various LINUX commands for:

## -Processs control:

**1.fork-**The Fork system call is used for creating a new process in Linux, and Unix systems, which is called the child process, which runs concurrently with the process that makes the fork() call (parent process). After a new child process is created, both processes will execute the next instruction following the fork() system call.

**2.Getpid-**returns the process ID of the parent of the calling process. If the calling process was created by the fork() function and the parent process still exists at the time of the getppid function call, this function returns the process ID of the parent process. Otherwise, this function returns a value of 1 which is the process id for init process.

```cpp
#include <iostream>
#include <unistd.h>  // for getpid()
using namespace std;

int main() {
    fork();
    cout << "Successfully executed! PID = " << getpid() << endl;
    return 0;
}

```

```
(base) ramanujan@ramanujan-HLBS-CM-44:~$ cd testt
(base) ramanujan@ramanujan-HLBS-CM-44:~/testt$ g++ work.cpp
(base) ramanujan@ramanujan-HLBS-CM-44:~/testt$ ./a.out
Successfully executed! PID = 4591
Successfully executed! PID = 4592
(base) ramanujan@ramanujan-HLBS-CM-44:~/testt$
```

```cpp
#include <iostream>
#include <unistd.h>  // for getpid()
using namespace std;

int main() {
    fork();
    fork();
    cout << "Successfully executed! PID = " << getpid() << endl;
    return 0;
}

```

```
(base) ramanujan@ramanujan-HLBS-CM-44:~/testt$ g++ work.cpp
(base) ramanujan@ramanujan-HLBS-CM-44:~/testt$ ./a.out
Successfully executed! PID = 5350
Successfully executed! PID = 5352
Successfully executed! PID = 5351
Successfully executed! PID = 5353
(base) ramanujan@ramanujan-HLBS-CM-44:~/testt$
```

**3.ps**- The `ps` command, which stands for “process status,” is like a computer tool that helps you see what’s happening inside your Linux computer.

```
(base) ramanujan@ramanujan-HLBS-CM-44:~/testt$ ps
    PID TTY          TIME CMD
   4824 pts/0    00:00:00 bash
   6421 pts/0    00:00:00 ps
```

```
(base) ramanujan@ramanujan-HLBS-CM-44:~/testt$ ps -f
UID          PID    PPID  C STIME TTY          TIME CMD
ramanuj+    4831    4771  0 13:20 pts/1    00:00:00 bash
ramanuj+    4851    4831  0 13:20 pts/1    00:00:00 ps -f
```

**4.kill**- kill command in Linux (located in /bin/kill), is a built-in command which is used to terminate processes manually. kill command sends a signal to a process that terminates the process.

```
    PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM     TIME+ COMMAND
   3165 cl3       20   0 2547600 182744  86400 S   4.0   2.4   0:02.64 Isolate+
   2178 cl3       20   0 3041508 337740 154220 S   2.6   4.4   0:22.86 firefox
   3170 cl3       20   0 2631740 156492  93816 S   1.7   2.1   0:00.79 Isolate+
   3751 cl3       20   0  553168  51340  39108 S   1.0   0.7   0:00.75 gnome-t+
   3781 cl3       20   0   13208   4096   3328 R   0.7   0.1   0:00.17 top
    582 systemd+  20   0   14836   6784   6016 S   0.3   0.1   0:00.97 systemd+
   3226 cl3       20   0 2894696 303976 162692 S   0.3   4.0   0:06.40 thunder+
      1 root      20   0  167932  12824   8216 S   0.0   0.2   0:01.59 systemd
      2 root      20   0       0      0      0 S   0.0   0.0   0:00.00 kthreadd
      3 root      20   0       0      0      0 S   0.0   0.0   0:00.00 pool_wo+
      4 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker+
      5 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker+
      6 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker+
      7 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker+
      8 root      20   0       0      0      0 I   0.0   0.0   0:00.01 kworker+
     10 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker+
     11 root      20   0       0      0      0 I   0.0   0.0   0:00.00 kworker+
cl3@cl3-VirtualBox:~$ kill 2178
cl3@cl3-VirtualBox:~$ top
```

```
top - 12:07:01 up 12 min,  1 user,  load average: 0.21, 0.41, 0.38
Tasks: 221 total,   1 running, 220 sleeping,   0 stopped,   0 zombie
%Cpu(s):  2.8 us,  1.4 sy,  0.0 ni, 95.8 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
MiB Mem :   7443.8 total,   4922.3 free,    970.9 used,   1550.6 buff/cache
MiB Swap:   2048.0 total,   2048.0 free,      0.0 used.   6180.2 avail Mem

    PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM     TIME+ COMMAND
   1561 cl3       20   0 5170940 375148 149780 S   5.9   4.9   0:31.63 gnome-s+
   4001 cl3       20   0   13224   4096   3328 R   5.9   0.1   0:00.01 top
      1 root      20   0  167932  12824   8216 S   0.0   0.2   0:01.59 systemd
      2 root      20   0       0      0      0 S   0.0   0.0   0:00.00 kthreadd
      3 root      20   0       0      0      0 S   0.0   0.0   0:00.00 pool_wo+
      4 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker+
      5 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker+
      6 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker+
      7 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker+
      8 root      20   0       0      0      0 I   0.0   0.0   0:00.01 kworker+
     10 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker+
     11 root      20   0       0      0      0 I   0.0   0.0   0:00.00 kworker+
     12 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker+
     13 root      20   0       0      0      0 I   0.0   0.0   0:00.00 rcu_tas+
     14 root      20   0       0      0      0 I   0.0   0.0   0:00.00 rcu_tas+
     15 root      20   0       0      0      0 I   0.0   0.0   0:00.00 rcu_tas+
     16 root      20   0       0      0      0 S   0.0   0.0   0:00.04 ksoftir+
```

**5.sleep**- sleep command is used to create a dummy job. A dummy job helps in delaying the execution.

```
cl3@cl3-VirtualBox:~$ sleep 15
```

## -Communication:

**6.input-output Direction**- Used to redirect input or output from the default sources (like keyboard or screen)

to files.
• Redirect Output: command > output.txt (redirects command output to output.txt)
Redirect Input: command < input.txt (uses input.txt as input for the command)
• Append Output: command >> output.txt (appends command output to output.txt)

```
root@RIYA:/mnt/c/Users/844ri/Documents# cat > file2
command run successfully!!
root@RIYA:/mnt/c/Users/844ri/Documents# cat < file2
command run successfully!!
```

```
root@RIYA:/mnt/c/Users/844ri/Documents# cat >> file2
wow!!
root@RIYA:/mnt/c/Users/844ri/Documents# cat < file2
command run successfully!!
wow!!
```

**7.Pipe**- Piping is used to give the output of one command (written on LHS) as input to another command (written on RHS). Commands are piped together using vertical bar " | ".

```
root@RIYA:/mnt/c/Users/844ri/Documents# ls | grep file
file1
file2
```

## -Protection management:

**8.chmod**- In Unix operating systems, the chmod command is used to change the access mode of a file. In this the permissions have three categories: read, write, and execute simultaneously represented by `r`, `w` and `x`.

```
root@RIYA:/mnt/c/Users/844ri/Documents# ls
'My Music'   'My Pictures'   'My Videos'    file1    file2    riya
root@RIYA:/mnt/c/Users/844ri/Documents# chmod 755 file2
root@RIYA:/mnt/c/Users/844ri/Documents# chmod u+r file2
root@RIYA:/mnt/c/Users/844ri/Documents#
```

**9.chown**- The `chown` command, short for "change owner," is a powerful tool that allows users to change the owner of files and directories.

```
root@RIYA:/mnt/c/Users/844ri/Documents# chown daemon file2
root@RIYA:/mnt/c/Users/844ri/Documents# whoami
root
root@RIYA:/mnt/c/Users/844ri/Documents# cat > file2
root@RIYA:/mnt/c/Users/844ri/Documents# cat < file2
root@RIYA:/mnt/c/Users/844ri/Documents#
```

**10.chgrp**- The `chgrp` command in Linux is used to change the group ownership of a file or directory. All files in Linux belong to an owner and a group.

```
root@RIYA:/mnt/c/Users/844ri/Documents# chgrp daemon file2
root@RIYA:/mnt/c/Users/844ri/Documents# ls -l file2
-rwxrwxrwx 1 root root 0 Nov 21 00:55 file2
```