

Practice files and directories :

Ls Command:

Ls -l: list all the directories and files

```
root@ICPL14580:/home
drwxr-xr-x 1 root root 4096 Sep 27 20:13 srv
dr-xr-xr-x 12 root root 0 Dec 17 04:32 sys
drwxrwxrwt 1 root root 4096 Oct 18 06:44 tmp
drwxr-xr-x 1 root root 4096 Sep 27 20:13 usr
drwxr-xr-x 1 root root 4096 Sep 27 20:14 var
root@ICPL14580:/home# cd home
root@ICPL14580:/home# pwd
/home
root@ICPL14580:/home# ls -l
total 60
-rw-r--r-- 1 root root 17581 Dec 12 05:30 employee_test_data.csv
-rwxrwxr-- 1 root root 155 Oct 19 09:55 ifelsecript.sh
-rwxrwxrwx 1 root root 95 Oct 19 08:45 myscript.sh
-rwxrwxrwx 1 root root 358 Oct 19 05:31 sample.txt
-rw-r--r-- 1 root root 0 Oct 19 07:56 sample1.txt
-rw-r--r-- 1 root root 122 Oct 18 12:48 sample2.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample3.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample4.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample5.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample6.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample7.txt
-rw-r--r-- 1 root root 16475 Dec 12 05:19 test_data
-rw-r--r-- 1 root root 1 Dec 12 05:17 test_data.csv
-rw-r--r-- 1 root root 16473 Dec 12 05:22 test_data1.csv
root@ICPL14580:/home# ls -l
total 60
-rw-r--r-- 1 root root 17581 Dec 12 05:30 employee_test_data.csv
-rwxrwxr-- 1 root root 155 Oct 19 09:55 ifelsecript.sh
-rwxrwxrwx 1 root root 95 Oct 19 08:45 myscript.sh
-rwxrwxrwx 1 root root 358 Oct 19 05:31 sample.txt
-rw-r--r-- 1 root root 0 Oct 19 07:56 sample1.txt
-rw-r--r-- 1 root root 122 Oct 18 12:48 sample2.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample3.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample4.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample5.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample6.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample7.txt
-rw-r--r-- 1 root root 16475 Dec 12 05:19 test_data
-rw-r--r-- 1 root root 1 Dec 12 05:17 test_data.csv
-rw-r--r-- 1 root root 16473 Dec 12 05:22 test_data1.csv
root@ICPL14580:/home#
```

Example for ls -a: to list all the files including hidden files

```
root@ICPL14580:/home
root@ICPL14580:/home# touch .hiddenfile2
root@ICPL14580:/home# mkdir .hiddendir
root@ICPL14580:/home# ls -l
total 60
-rw-r--r-- 1 root root 17581 Dec 12 05:30 employee_test_data.csv
-rwxrwxr-- 1 root root 155 Oct 19 09:55 ifelsecript.sh
-rwxrwxrwx 1 root root 95 Oct 19 08:45 myscript.sh
-rwxrwxrwx 1 root root 358 Oct 19 05:31 sample.txt
-rw-r--r-- 1 root root 0 Oct 19 07:56 sample1.txt
-rw-r--r-- 1 root root 122 Oct 18 12:48 sample2.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample3.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample4.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample5.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample6.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample7.txt
-rw-r--r-- 1 root root 16475 Dec 12 05:19 test_data
-rw-r--r-- 1 root root 1 Dec 12 05:17 test_data.csv
-rw-r--r-- 1 root root 16473 Dec 12 05:22 test_data1.csv
root@ICPL14580:/home#
```

If we use ls -l hidden files and folders are not visible.

We need to use `ls -a` for hidden files and directories to display hidden files and directories along with normal files and folders.

```
root@ICPL14580:/home# ls -a
.  ..  .hiddenfile  .hiddenfile2  employee_test_data.csv  ifelsescript.sh  myscript.sh  sample.txt  sample1.txt  sample2.txt  sample3.txt  sample4.txt  sample5.txt  sample6.txt  sample7.txt  test_data  test_data.csv
root@ICPL14580:/home#
```

`ls -lS`

```
root@ICPL14580:/home# ls -lS
total 60
-rw-r--r-- 1 root root 17581 Dec 12 05:30 employee_test_data.csv
-rw-r--r-- 1 root root 16475 Dec 12 05:19 test_data
-rw-r--r-- 1 root root 16473 Dec 12 05:22 test_data1.csv
-rwxrwxrwx 1 root root 358 Oct 19 05:31 sample.txt
-rwxrwxr-- 1 root root 155 Oct 19 09:55 ifelsescript.sh
-rw-r--r-- 1 root root 122 Oct 18 12:48 sample2.txt
-rwxrwxrwx 1 root root 95 Oct 19 08:45 myscript.sh
-rw-r--r-- 1 root root 1 Dec 12 05:17 test_data.csv
-rw-r--r-- 1 root root 0 Oct 19 07:56 sample1.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample3.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample4.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample5.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample6.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample7.txt
root@ICPL14580:/home#
```

Ex for `ls -lhS`: h for human readable size format

```
root@ICPL14580:/home# ls -lhS
total 60K
-rw-r--r-- 1 root root 18K Dec 12 05:30 employee_test_data.csv
-rw-r--r-- 1 root root 17K Dec 12 05:19 test_data
-rw-r--r-- 1 root root 17K Dec 12 05:22 test_data1.csv
-rwxrwxrwx 1 root root 358 Oct 19 05:31 sample.txt
-rwxrwxr-- 1 root root 155 Oct 19 09:55 ifelsescript.sh
-rw-r--r-- 1 root root 122 Oct 18 12:48 sample2.txt
-rwxrwxrwx 1 root root 95 Oct 19 08:45 myscript.sh
-rw-r--r-- 1 root root 1 Dec 12 05:17 test_data.csv
-rw-r--r-- 1 root root 0 Oct 19 07:56 sample1.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample3.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample4.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample5.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample6.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample7.txt
```

`ls -li` shows the inode number of each file, which is useful for managing hard links or

troubleshooting filesystem issues.

```
root@ICPL14580:/home# ls -l
6192449487965825 employee_test_data.csv 4503599627523406 sample.txt 7036874417790649 sample3.txt 11258999068511849 sample6.txt 12666373952011426 test_data.csv
11540474045221760 ifelsescript.sh 4503599627957691 sample1.txt 11821949021933043 sample4.txt 6192449487795756 sample7.txt 3377699720861207 test_data1.csv
12103423998586715 myscript.sh 5348024557621007 sample2.txt 12947848928847961 sample5.txt 31525197391622178 test_data
root@ICPL14580:/home# ls -li
total 60
6192449487965825 -rw-r--r-- 1 root root 17581 Dec 12 05:30 employee_test_data.csv
11540474045221760 -rwxrwxr-- 1 root root 155 Oct 19 09:55 ifelsescript.sh
12103423998586715 -rwxrwxrwx 1 root root 95 Oct 19 08:45 myscript.sh
4503599627523406 -rwxrwxrwx 1 root root 358 Oct 19 05:31 sample.txt
4503599627957691 -rw-r--r-- 1 root root 0 Oct 19 07:56 sample1.txt
5348024557621007 -rw-r--r-- 1 root root 122 Oct 18 12:48 sample2.txt
7036874417790649 -rw-r--r-- 1 root root 0 Oct 19 06:44 sample3.txt
11821949021933043 -rw-r--r-- 1 root root 0 Oct 19 06:44 sample4.txt
12947848928847961 -rw-r--r-- 1 root root 0 Oct 19 06:44 sample5.txt
11258999068511849 -rw-r--r-- 1 root root 0 Oct 19 06:45 sample6.txt
6192449487795756 -rw-r--r-- 1 root root 0 Oct 19 06:45 sample7.txt
31525197391622178 -rw-r--r-- 1 root root 16475 Dec 12 05:19 test_data
12666373952011426 -rw-r--r-- 1 root root 1 Dec 12 05:17 test_data.csv
3377699720861207 -rw-r--r-- 1 root root 16473 Dec 12 05:22 test_data1.csv
root@ICPL14580:/home#
```

Ls with wildcard matching

```
root@ICPL14580:/home# ls -l *.csv
-rw-r--r-- 1 root root 17581 Dec 12 05:30 employee_test_data.csv
-rw-r--r-- 1 root root 1 Dec 12 05:17 test_data.csv
-rw-r--r-- 1 root root 16473 Dec 12 05:22 test_data1.csv
root@ICPL14580:/home#
```

Ls -lh

```
root@ICPL14580:/home# ls -lh
total 60K
-rw-r--r-- 1 root root 18K Dec 12 05:30 employee_test_data.csv
-rwxrwxr-- 1 root root 155 Oct 19 09:55 ifelsescript.sh
-rwxrwxrwx 1 root root 95 Oct 19 08:45 myscript.sh
-rwxrwxrwx 1 root root 358 Oct 19 05:31 sample.txt
-rw-r--r-- 1 root root 0 Oct 19 07:56 sample1.txt
-rw-r--r-- 1 root root 122 Oct 18 12:48 sample2.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample3.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample4.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample5.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample6.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample7.txt
-rw-r--r-- 1 root root 17K Dec 12 05:19 test_data
-rw-r--r-- 1 root root 1 Dec 12 05:17 test_data.csv
-rw-r--r-- 1 root root 17K Dec 12 05:22 test_data1.csv
```

```
root@ICPL14580:/home# ls -la
. .hiddenfile2 ifelsescript.sh sample.txt sample2.txt sample4.txt sample6.txt test_data test_data1.csv
.. .hiddenfile employee_test_data.csv myscript.sh sample1.txt sample3.txt sample5.txt sample7.txt test_data.csv
root@ICPL14580:/home#
```

Ls -lR

```
root@ICPL14580:/home# ls -lR
.:
total 60
-rw-r--r-- 1 root root 17581 Dec 12 05:30 employee_test_data.csv
-rwxrwxr-- 1 root root 155 Oct 19 09:55 ifelsescript.sh
-rwxrwxrwx 1 root root 95 Oct 19 08:45 myscript.sh
-rwxrwxrwx 1 root root 358 Oct 19 05:31 sample.txt
-rw-r--r-- 1 root root 0 Oct 19 07:56 sample1.txt
-rw-r--r-- 1 root root 122 Oct 18 12:48 sample2.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample3.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample4.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample5.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample6.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample7.txt
drwxr-xr-x 1 root root 4096 Dec 17 05:11 sampledир
-rw-r--r-- 1 root root 16475 Dec 12 05:19 test_data
-rw-r--r-- 1 root root 1 Dec 12 05:17 test_data.csv
-rw-r--r-- 1 root root 16473 Dec 12 05:22 test_data1.csv

./sampledir:
total 0
-rw-r--r-- 1 root root 0 Dec 17 05:11 ex.txt
-rw-r--r-- 1 root root 0 Dec 17 05:11 ex1.txt
-rw-r--r-- 1 root root 0 Dec 17 05:11 ex2.txt
-rw-r--r-- 1 root root 0 Dec 17 05:11 ex3.txt
```

ls -d */ : Lists only the directories in the current path (no contents).

```
root@ICPL14580:/home# ls -d */
sampledir/
```

How would you use ls to display file types (e.g., directories, regular files, symbolic links)?

Use the -F option, which adds a / for directories, @ for symbolic links, and * for executable files:

```
ifelscript.sh sample.txt sample2.txt sample4.txt sample6.txt sa
root@ICPL14580:/home# ls -lF
total 60
-rw-r--r-- 1 root root 17581 Dec 12 05:30 employee_test_data.csv
-rwxrwxr-- 1 root root 155 Oct 19 09:55 ifelscript.sh*
-rwxrwxrwx 1 root root 95 Oct 19 08:45 myscript.sh*
-rwxrwxrwx 1 root root 358 Oct 19 05:31 sample.txt*
-rw-r--r-- 1 root root 0 Oct 19 07:56 sample1.txt
-rw-r--r-- 1 root root 122 Oct 18 12:48 sample2.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample3.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample4.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample5.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample6.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample7.txt
drwxr-xr-x 1 root root 4096 Dec 17 05:11 sampledир/
-rw-r--r-- 1 root root 16475 Dec 12 05:19 test_data
-rw-r--r-- 1 root root 1 Dec 12 05:17 test_data.csv
-rw-r--r-- 1 root root 16473 Dec 12 05:22 test_data1.csv
root@ICPL14580:/home#
```

Cd command

```
root@ICPL14580:/home# cd ..
root@ICPL14580:/#
```

```
root@ICPL14580:/home/sampledир# cd ../../
root@ICPL14580:/#
```

```
root@ICPL14580:/home/sampledир# cd -
/home
root@ICPL14580:/home# cd -
/home/sampledир
root@ICPL14580:/home/sampledир#
```

```
root@ICPL14580:/home/sampledир# cd
root@ICPL14580:~#
```

```
root@ICPL14580:/home# cd sampledir/subsampledir
root@ICPL14580:/home/sampledir/subsampledir#
```

```
root@ICPL14580:/home# cd ~
root@ICPL14580:~# ls -l
total 12
-rwxr-xr-x 1 root root 8439 Dec 12 05:11 employee_test_data.csv
root@ICPL14580:~# pwd
/root
root@ICPL14580:~#
```

```
root@ICPL14580:/# cd home
root@ICPL14580:/home# cd $HOME
root@ICPL14580:~# pwd
/root
root@ICPL14580:~#
```

PWD command:

```
👤 root@ICPL14580:/home
root@ICPL14580:/home#
root@ICPL14580:/home# pwd
/home
root@ICPL14580:/home#
```

```

root@ICPL14580:/home# ls -l
total 60
-rw-r--r-- 1 root root 17581 Dec 12 05:30 employee_test_data.csv
-rwxrwxr-- 1 root root 155 Oct 19 09:55 ifelsescript.sh
drwxr-xr-x 1 root root 4096 Dec 17 05:44 log
drwxr-xr-x 1 root root 4096 Dec 17 05:49 myfolder
-rwxrwxrwx 1 root root 95 Oct 19 08:45 myscript.sh
-rwxrwxrwx 1 root root 358 Oct 19 05:31 sample.txt
-rw-r--r-- 1 root root 0 Oct 19 07:56 sample1.txt
-rw-r--r-- 1 root root 122 Oct 18 12:48 sample2.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample3.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample4.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample5.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample6.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample7.txt
drwxr-xr-x 1 root root 4096 Dec 17 05:30 sampledир
drwxr-xr-x 1 root root 4096 Dec 17 05:27 sampledир2
drwxr-xr-x 1 root root 4096 Dec 17 05:27 sampledир3
-rw-r--r-- 1 root root 16475 Dec 12 05:19 test_data
-rw-r--r-- 1 root root 1 Dec 12 05:17 test_data.csv
-rw-r--r-- 1 root root 16473 Dec 12 05:22 test_data1.csv
root@ICPL14580:/home# ls -l ~
total 12
-rwxr-xr-x 1 root root 8439 Dec 12 05:11 employee_test_data.csv
lrwxrwxrwx 1 root root 9 Dec 17 05:48 mylink -> /root/log
lrwxrwxrwx 1 root root 14 Dec 17 05:50 mylink1 -> /root/myfolder
lrwxrwxrwx 1 root root 18 Dec 17 05:45 syslog_link -> /log/samplelog.txt
root@ICPL14580:/home#

```

mkdir -p /path/to/new/dir

```

root@ICPL14580:~# ls -R
.:
employee_test_data.csv  mylink  mylink1  path  syslog_link

./path:
to

./path/to:
new

./path/to/new:
dir

./path/to/new/dir:
root@ICPL14580:~#

```


mkdir -p existing_dir

```
root@ICPL14580:~# mkdir -p sampledir
root@ICPL14580:~# mkdir sampledir
mkdir: cannot create directory 'sampledir': File exists
root@ICPL14580:~#
```

mkdir -m 755 new_dir

```
root@ICPL14580:/home# mkdir -m 755 new_dir
root@ICPL14580:/home# ls -l
total 60
-rw-r--r-- 1 root root 17581 Dec 12 05:30 employee_test_data.csv
-rwxrwxr-- 1 root root 155 Oct 19 09:55 ifelsescript.sh
drwxr-xr-x 1 root root 4096 Dec 17 05:44 log
drwxr-xr-x 1 root root 4096 Dec 17 05:49 myfolder
-rwxrwxrwx 1 root root 95 Oct 19 08:45 myscript.sh
drwxr-xr-x 1 root root 4096 Dec 17 06:06 new_dir
-rwxrwxrwx 1 root root 358 Oct 19 05:31 sample.txt
-rw-r--r-- 1 root root 0 Oct 19 07:56 sample1.txt
-rw-r--r-- 1 root root 122 Oct 18 12:48 sample2.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample3.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample4.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample5.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample6.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample7.txt
drwxr-xr-x 1 root root 4096 Dec 17 05:30 sampledir
drwxr-xr-x 1 root root 4096 Dec 17 05:27 sampledir2
drwxr-xr-x 1 root root 4096 Dec 17 05:27 sampledir3
-rw-r--r-- 1 root root 16475 Dec 12 05:19 test_data
-rw-r--r-- 1 root root 1 Dec 12 05:17 test_data.csv
-rw-r--r-- 1 root root 16473 Dec 12 05:22 test_data1.csv
```


mkdir dir1 dir2 dir3

```
root@ICPL14580:/home# mkdir dir1 dir2 dir3
root@ICPL14580:/home# ls -l
total 60
drwxr-xr-x 1 root root 4096 Dec 17 06:08 dir1
drwxr-xr-x 1 root root 4096 Dec 17 06:08 dir2
drwxr-xr-x 1 root root 4096 Dec 17 06:08 dir3
-rw-r--r-- 1 root root 17581 Dec 12 05:30 employee_test_data.csv
-rwxrwxr-- 1 root root 155 Oct 19 09:55 ifelsescript.sh
drwxr-xr-x 1 root root 4096 Dec 17 05:44 log
drwxr-xr-x 1 root root 4096 Dec 17 05:49 myfolder
-rwxrwxrwx 1 root root 95 Oct 19 08:45 myscript.sh
drwxr-xr-x 1 root root 4096 Dec 17 06:06 new_dir
-rwxrwxrwx 1 root root 358 Oct 19 05:31 sample.txt
-rw-r--r-- 1 root root 0 Oct 19 07:56 sample1.txt
-rw-r--r-- 1 root root 122 Oct 18 12:48 sample2.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample3.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample4.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample5.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample6.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample7.txt
drwxr-xr-x 1 root root 4096 Dec 17 05:30 sampledир
drwxr-xr-x 1 root root 4096 Dec 17 05:27 sampledир2
drwxr-xr-x 1 root root 4096 Dec 17 05:27 sampledир3
-rw-r--r-- 1 root root 16475 Dec 12 05:19 test_data
-rw-r--r-- 1 root root 1 Dec 12 05:17 test_data.csv
-rw-r--r-- 1 root root 16473 Dec 12 05:22 test_data1.csv
root@ICPL14580:/home#
```

Rm command

```

root@ICPL14580:/home# mkdir dir1 dir2 dir3
root@ICPL14580:/home# ls -l
total 60
drwxr-xr-x 1 root root 4096 Dec 17 06:08 dir1
drwxr-xr-x 1 root root 4096 Dec 17 06:08 dir2
drwxr-xr-x 1 root root 4096 Dec 17 06:08 dir3
-rw-r--r-- 1 root root 17581 Dec 12 05:30 employee_test_data.csv
-rwxrwxr-- 1 root root 155 Oct 19 09:55 ifelsescript.sh
drwxr-xr-x 1 root root 4096 Dec 17 05:44 log
drwxr-xr-x 1 root root 4096 Dec 17 05:49 myfolder
-rwxrwxrwx 1 root root 95 Oct 19 08:45 myscript.sh
drwxr-xr-x 1 root root 4096 Dec 17 06:06 new_dir
-rwxrwxrwx 1 root root 358 Oct 19 05:31 sample.txt
-rw-r--r-- 1 root root 0 Oct 19 07:56 sample1.txt
-rw-r--r-- 1 root root 122 Oct 18 12:48 sample2.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample3.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample4.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample5.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample6.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample7.txt
drwxr-xr-x 1 root root 4096 Dec 17 05:30 sampledир
drwxr-xr-x 1 root root 4096 Dec 17 05:27 sampledир2
drwxr-xr-x 1 root root 4096 Dec 17 05:27 sampledир3
-rw-r--r-- 1 root root 16475 Dec 12 05:19 test_data
-rw-r--r-- 1 root root 1 Dec 12 05:17 test_data.csv
-rw-r--r-- 1 root root 16473 Dec 12 05:22 test_data1.csv
root@ICPL14580:/home# rm sample.txt
root@ICPL14580:/home# rm -r dir1
root@ICPL14580:/home# rm -rf dir2

```

Command: `rm -rf`

1. This tells `rm` to recursively and forcefully delete **everything** starting from the root directory (/).

Real-World Consequences

When this happens:

1. **System Files Deleted:**

Critical system files like `/bin`, `/lib`, `/etc` are deleted, causing the operating system to fail.

2. Immediate System Crash:

Processes will start failing as system binaries and libraries disappear. Your terminal might stop working, and the system will eventually crash.

3. Data Loss:

All user data, including important files, will be lost.

4. System Unrecoverable:

Recovery might require reinstalling the operating system and restoring from a backup.

Command : `rm *.log`

```

-rw-r--r-- 1 root root      0 Dec 17 06:16 sample.log
-rw-r--r-- 1 root root      0 Dec 17 06:16 sample1.log
-rw-r--r-- 1 root root      0 Oct 19 07:56 sample1.txt
-rw-r--r-- 1 root root      0 Dec 17 06:16 sample2.log
-rw-r--r-- 1 root root    122 Oct 18 12:48 sample2.txt
-rw-r--r-- 1 root root      0 Dec 17 06:16 sample3.log
-rw-r--r-- 1 root root      0 Oct 19 06:44 sample3.txt
-rw-r--r-- 1 root root      0 Oct 19 06:44 sample4.txt
-rw-r--r-- 1 root root      0 Oct 19 06:44 sample5.txt
-rw-r--r-- 1 root root      0 Oct 19 06:45 sample6.txt
-rw-r--r-- 1 root root      0 Oct 19 06:45 sample7.txt
drwxr-xr-x 1 root root   4096 Dec 17 05:30 sampledir
drwxr-xr-x 1 root root   4096 Dec 17 05:27 sampledir2
drwxr-xr-x 1 root root   4096 Dec 17 05:27 sampledir3
-rw-r--r-- 1 root root  16475 Dec 12 05:19 test_data
-rw-r--r-- 1 root root      1 Dec 12 05:17 test_data.csv
-rw-r--r-- 1 root root  16473 Dec 12 05:22 test_data1.csv
root@ICPL14580:/home# rm *.log
root@ICPL14580:/home# ls -l
total 60
drwxr-xr-x 1 root root   4096 Dec 17 06:08 dir3
-rw-r--r-- 1 root root  17581 Dec 12 05:30 employee_test_data.csv
-rwxrwxr-- 1 root root    155 Oct 19 09:55 ifelsescript.sh
drwxr-xr-x 1 root root   4096 Dec 17 05:44 log
drwxr-xr-x 1 root root   4096 Dec 17 05:49 myfolder
-rwxrwxrwx 1 root root     95 Oct 19 08:45 myscript.sh
drwxr-xr-x 1 root root   4096 Dec 17 06:06 new_dir
-rw-r--r-- 1 root root      0 Oct 19 07:56 sample1.txt
-rw-r--r-- 1 root root    122 Oct 18 12:48 sample2.txt
-rw-r--r-- 1 root root      0 Oct 19 06:44 sample3.txt
-rw-r--r-- 1 root root      0 Oct 19 06:44 sample4.txt
-rw-r--r-- 1 root root      0 Oct 19 06:44 sample5.txt
-rw-r--r-- 1 root root      0 Oct 19 06:45 sample6.txt
-rw-r--r-- 1 root root      0 Oct 19 06:45 sample7.txt
drwxr-xr-x 1 root root   4096 Dec 17 05:30 sampledir
drwxr-xr-x 1 root root   4096 Dec 17 05:27 sampledir2
drwxr-xr-x 1 root root   4096 Dec 17 05:27 sampledir3
-rw-r--r-- 1 root root  16475 Dec 12 05:19 test_data
-rw-r--r-- 1 root root      1 Dec 12 05:17 test_data.csv
-rw-r--r-- 1 root root  16473 Dec 12 05:22 test_data1.csv
root@ICPL14580:/home#

```

```

root@ICPL14580:/home# touch sample.log sample1.log sample2.log
root@ICPL14580:/home# ls -l
total 60
drwxr-xr-x 1 root root 4096 Dec 17 06:08 dir3
-rw-r--r-- 1 root root 17581 Dec 12 05:30 employee_test_data.csv
-rwxrwxr-- 1 root root 155 Oct 19 09:55 ifelsescript.sh
drwxr-xr-x 1 root root 4096 Dec 17 05:44 log
drwxr-xr-x 1 root root 4096 Dec 17 05:49 myfolder
-rwxrwxrwx 1 root root 95 Oct 19 08:45 myscript.sh
drwxr-xr-x 1 root root 4096 Dec 17 06:06 new_dir
-rw-r--r-- 1 root root 0 Dec 17 06:19 sample.log
-rw-r--r-- 1 root root 0 Dec 17 06:19 sample1.log
-rw-r--r-- 1 root root 0 Oct 19 07:56 sample1.txt
-rw-r--r-- 1 root root 0 Dec 17 06:19 sample2.log
-rw-r--r-- 1 root root 122 Oct 18 12:48 sample2.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample3.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample4.txt
-rw-r--r-- 1 root root 0 Oct 19 06:44 sample5.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample6.txt
-rw-r--r-- 1 root root 0 Oct 19 06:45 sample7.txt
drwxr-xr-x 1 root root 4096 Dec 17 05:30 sampledир
drwxr-xr-x 1 root root 4096 Dec 17 05:27 sampledир2
drwxr-xr-x 1 root root 4096 Dec 17 05:27 sampledир3
-rw-r--r-- 1 root root 16475 Dec 12 05:19 test_data
-rw-r--r-- 1 root root 1 Dec 12 05:17 test_data.csv
-rw-r--r-- 1 root root 16473 Dec 12 05:22 test_data1.csv
root@ICPL14580:/home# rm -i *.log
rm: remove regular empty file 'sample.log'? yes
rm: remove regular empty file 'sample1.log'? yes
rm: remove regular empty file 'sample2.log'? yes
root@ICPL14580:/home#

```

```

root@ICPL14580:/home# touch sample.log sample1.log sample2.log
root@ICPL14580:/home# rm -f *.log
root@ICPL14580:/home#

```

```
root@ICPL14580:/home# touch imp.txt imp1.txt imp2.txt
root@ICPL14580:/home# alias rm='rm -i'
root@ICPL14580:/home# rm imp.txt
rm: remove regular empty file 'imp.txt'? y
root@ICPL14580:/home#
```