

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]
```

```
$ ls
```

```
dir1 dir2 test1.txt test2.txt test3.sh test4.sh
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]
```

```
$ tar -cvf archive.tar test1.txt test2.txt test3.sh test4.sh
```

```
test1.txt
```

```
test2.txt
```

```
test3.sh
```

```
test4.sh
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]
```

```
$ ls
```

```
archive.tar dir1 dir2 test1.txt test2.txt test3.sh test4.sh
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]
```

```
$ mv archive.tar dir2
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]
```

```
$ cd dir2
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice/dir2]
```

```
$ ls
```

```
archive.tar
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice/dir2]
```

```
$ tar -xvf archive.tar
```

```
test1.txt
```

```
test2.txt
```

```
test3.sh
```

```
test4.sh
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice/dir2]
```

```
$ ls
```

```
archive.tar test1.txt test2.txt test3.sh test4.sh
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice/dir2]
```

```
$ |
```

```
(saurabh@LenovoLegion5)~[~/LinuxPractice/dir2]
```

```
$ ls
```

```
archive.tar  test1.txt  test2.txt  test3.sh  test4.sh
```

```
(saurabh@LenovoLegion5)~[~/LinuxPractice/dir2]
```

```
$ ll archive.tar
```

```
-rw-r--r-- 1 saurabh saurabh 10240 Apr 13 11:25 archive.tar
```

```
(saurabh@LenovoLegion5)~[~/LinuxPractice/dir2]
```

```
$ gzip archive.tar
```

```
(saurabh@LenovoLegion5)~[~/LinuxPractice/dir2]
```

```
$ ll archive.tar.gz
```

```
-rw-r--r-- 1 saurabh saurabh 426 Apr 13 11:25 archive.tar.gz
```

```
(saurabh@LenovoLegion5)~[~/LinuxPractice/dir2]
```

```
$ gunzip archive.tar.gz
```

```
(saurabh@LenovoLegion5)~[~/LinuxPractice/dir2]
```

```
$ ll archive.tar
```

```
-rw-r--r-- 1 saurabh saurabh 10240 Apr 13 11:25 archive.tar
```

```
(saurabh@LenovoLegion5)~[~/LinuxPractice/dir2]
```

```
$ |
```

```
(saurabh@LenovoLegion5)~[~/LinuxPractice]
$ ls
dir1  dir2  dir3  names.txt  test1.txt  test2.txt  test3.sh  test4.sh
```

```
(saurabh@LenovoLegion5)~[~/LinuxPractice]
$ cat names.txt
Dhoni
Sachin
Virat
Anderson
Dravid
Yuvraj
McCullum
```

```
(saurabh@LenovoLegion5)~[~/LinuxPractice]
$ cat names.txt | sort > sortednames.txt
```

```
(saurabh@LenovoLegion5)~[~/LinuxPractice]
$ cat sortednames.txt
```

```
Anderson
Dhoni
Dravid
McCullum
Sachin
Virat
Yuvraj
```

```
(saurabh@LenovoLegion5)~[~/LinuxPractice]
$ |
```

```
(saurabh@LenovoLegion5)~[/LinuxPractice]
```

```
$ cat names.txt sortednames.txt
```

```
Dhoni  
Sachin  
Virat  
Anderson  
Dravid  
Yuvraj  
McCullum
```

```
Anderson  
Dhoni  
Dhoni  
Dravid  
McCullum  
Sachin  
Virat  
Virat  
Yuvraj
```

```
(saurabh@LenovoLegion5)~[/LinuxPractice]
```

```
$ cat names.txt sortednames.txt | sort | uniq
```

```
Anderson  
Dhoni  
Dravid  
McCullum  
Sachin  
Virat  
Yuvraj
```

```
(saurabh@LenovoLegion5)~[/LinuxPractice]
```

```
$ |
```

```
(saurabh@LenovoLegion5)~[/LinuxPractice]  
$ ls  
dir1  dir3      sortednames.txt  test2.txt  test4.sh  
dir2  names.txt  test1.txt       test3.sh
```

```
(saurabh@LenovoLegion5)~[/LinuxPractice]  
$ ls | sort | tee sortedListOfFiles.txt  
dir1  
dir2  
dir3  
names.txt  
sortedListOfFiles.txt  
sortednames.txt  
test1.txt  
test2.txt  
test3.sh  
test4.sh
```

```
(saurabh@LenovoLegion5)~[/LinuxPractice]  
$ ls  
dir1  dir3      sortedListOfFiles.txt  test1.txt  test3.sh  
dir2  names.txt  sortednames.txt       test2.txt  test4.sh
```

```
(saurabh@LenovoLegion5)~[/LinuxPractice]  
$ cat sortedListOfFiles.txt  
dir1  
dir2  
dir3  
names.txt  
sortedListOfFiles.txt  
sortednames.txt  
test1.txt  
test2.txt  
test3.sh  
test4.sh
```

```
(saurabh@LenovoLegion5)~[/LinuxPractice]  
$ |
```

```
saurabh@LenovoLegion5: x + v - □ ×  
  
(saurabh@LenovoLegion5)-[~/LinuxPractice]  
$ ls  
test1.txt  test2.txt  
  
(saurabh@LenovoLegion5)-[~/LinuxPractice]  
$ pwd  
/home/saurabh/LinuxPractice  
  
(saurabh@LenovoLegion5)-[~/LinuxPractice]  
$ cd /  
  
(saurabh@LenovoLegion5)-[/]  
$ find /home/saurabh/LinuxPractice -name test1.txt  
/home/saurabh/LinuxPractice/test1.txt  
  
(saurabh@LenovoLegion5)-[/]  
$ find /home/saurabh/LinuxPractice -name '*.txt'  
/home/saurabh/LinuxPractice/test2.txt  
/home/saurabh/LinuxPractice/test1.txt  
  
(saurabh@LenovoLegion5)-[/]  
$ |
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]
```

```
$ ls  
test1.txt  test2.txt
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]
```

```
$ vi test1.txt
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]
```

```
$ cat test1.txt
```

Apple Inc. is an American multinational technology company headquartered in Cupertino, California. Apple is the world's largest technology company by revenue, with US\$394.3 billion in 2022 revenue.[6] As of March 2023, Apple is the world's biggest company by market capitalization.

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]
```

```
$ sed 's/Apple/Orange/g' test1.txt
```

Orange Inc. is an American multinational technology company headquartered in Cupertino, California. Orange is the world's largest technology company by revenue, with US\$394.3 billion in 2022 revenue.[6] As of March 2023, Orange is the world's biggest company by market capitalization.



saurabh@LenovoLegion5: x



```
(saurabh@LenovoLegion5)-[~/LinuxPractice]
```

```
$ man uname
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]
```

```
$ uname -s
```

```
Linux
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]
```

```
$ uname -p
```

```
unknown
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]
```

```
$ uname -o
```

```
GNU/Linux
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]
```

```
$ uname -a
```

```
Linux LenovoLegion5 5.10.16.3-microsoft-standard-WSL2 #1 SMP Fri Apr 2 22:23:49 UTC 2021 x86_64 GNU/Linux
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]
```




saurabh@LenovoLegion5: x



```
(saurabh@LenovoLegion5)~[~/LinuxPractice]
```

```
$ lsb_release
```

No LSB modules are available.

```
(saurabh@LenovoLegion5)~[~/LinuxPractice]
```

```
$ sudo apt-get install lsb-release
```

Reading package lists... Done

Building dependency tree... Done

Reading state information... Done

lsb-release is already the newest version (12.0-1).

lsb-release set to manually installed.

0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

```
(saurabh@LenovoLegion5)~[~/LinuxPractice]
```

```
$ lsb_release -a
```

No LSB modules are available.

Distributor ID: Kali

Description: Kali GNU/Linux Rolling

Release: 2023.1

Codename: kali-rolling

```
(saurabh@LenovoLegion5)~[~/LinuxPractice]
```

```
$ |
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]
```

```
$ pwd  
/home/saurabh/LinuxPractice
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]
```

```
$ du /home/saurabh/LinuxPractice  
4      /home/saurabh/LinuxPractice/dir1  
12     /home/saurabh/LinuxPractice
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]
```

```
$ du -h /home/saurabh/LinuxPractice  
4.0K   /home/saurabh/LinuxPractice/dir1  
12K    /home/saurabh/LinuxPractice
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]
```

```
$ |
```

(saurabh@LenovoLegion5)-[~]

\$ man lsblk

(saurabh@LenovoLegion5)-[~]

\$ lsblk

NAME	MAJ:MIN	RM	SIZE	RO	TYPE	MOUNTPOINTS
sda	8:0	0	256G	0	disk	
sdb	8:16	0	256G	0	disk	
sdc	8:32	0	256G	0	disk	
sdd	8:48	0	256G	0	disk	/

(saurabh@LenovoLegion5)-[~]

\$ lsblk -b

NAME	MAJ:MIN	RM	SIZE	RO	TYPE	MOUNTPOINTS
sda	8:0	0	274877906944	0	disk	
sdb	8:16	0	274877906944	0	disk	
sdc	8:32	0	274877906944	0	disk	
sdd	8:48	0	274877906944	0	disk	/

(saurabh@LenovoLegion5)-[~]

\$

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]  
$ ls  
dir1 test1.txt test2.txt test3.sh test4.sh
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]  
$ cat test2.txt  
BankManager 10000  
Accountant 8000  
Employee 8000  
Clerk 7000
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]  
$ awk '{print $1}' test2.txt  
BankManager  
Accountant  
Employee  
Clerk
```

```
(saurabh@LenovoLegion5)-[~/LinuxPractice]  
$ |
```

```
(saurabh@LenovoLegion5)-[/]
```

```
$ uptime
```

```
11:37:05 up 4:25, 0 user, load average: 0.02, 0.09, 0.10
```

```
(saurabh@LenovoLegion5)-[/]
```

```
$ uptime -s
```

```
2023-04-13 07:11:55
```

```
(saurabh@LenovoLegion5)-[/]
```

```
$ uptime -p
```

```
up 4 hours, 25 minutes
```

```
(saurabh@LenovoLegion5)-[/]
```

```
$ |
```

(saurabh@LenovoLegion5)-[/]

\$ free -m

	total	used	free	shared	buff/cache	available
Mem:	3611	1105	606	34	2127	2506
Swap:	1024	9	1014			

(saurabh@LenovoLegion5)-[/]

\$ free -b

	total	used	free	shared	buff/cache	available
Mem:	3787120640	1158144000	637079552	35999744	2231328768	2628976640
Swap:	1073741824	10031104	1063710720			

(saurabh@LenovoLegion5)-[/]

\$ free -g

	total	used	free	shared	buff/cache	available
Mem:	3	1	0	0	2	2
Swap:	1	0	0			

(saurabh@LenovoLegion5)-[/]

\$ |

```
(saurabh@LenovoLegion5)-[/]  
$ ls  
bin    dev    home   lib     lib64   lost+found  mnt  proc  run   srv  tmp  var  
boot   etc    init   lib32   libx32  media       opt  root  sbin  sys  usr
```

```
(saurabh@LenovoLegion5)-[/]  
$ cd home
```

```
(saurabh@LenovoLegion5)-[/home]  
$ ls  
saurabh
```

```
(saurabh@LenovoLegion5)-[/home]  
$ sudo adduser infobell  
Adding user 'infobell' ...  
Adding new group 'infobell' (1001) ...  
Adding new user 'infobell' (1001) with group 'infobell (1001)' ...  
Creating home directory '/home/infobell' ...  
Copying files from '/etc/skel' ...  
New password:  
Retype new password:  
passwd: password updated successfully  
Changing the user information for infobell  
Enter the new value, or press ENTER for the default  
    Full Name []:  
    Room Number []:  
    Work Phone []:  
    Home Phone []:  
    Other []:  
Is the information correct? [Y/n] Y  
Adding new user 'infobell' to supplemental / extra groups 'users' ...  
Adding user 'infobell' to group 'users' ...
```

```
(saurabh@LenovoLegion5)-[/home]  
$ ls  
infobell  saurabh
```

```
(saurabh@LenovoLegion5)-[/home]
```



```

└─$ cd LinuxPractice/

(saurabh@LenovoLegion5)~[~/LinuxPractice]
└─$ cd dir
dir1/ dir2/ dir3/
(saurabh@LenovoLegion5)~[~/LinuxPractice]
└─$ cd dir1

(saurabh@LenovoLegion5)~[~/LinuxPractice/dir1]
└─$ cd dir2/

(saurabh@LenovoLegion5)~[~/LinuxPractice/dir1/dir2]
└─$ cd dir3/

(saurabh@LenovoLegion5)~[~/LinuxPractice/dir1/dir2/dir3]
└─$ ls
file.txt

(saurabh@LenovoLegion5)~[~/LinuxPractice/dir1/dir2/dir3]
└─$ cat file.txt
This file is present in /home/saurabh/LinuxPractice/dir1/dir2/dir3

(saurabh@LenovoLegion5)~[~/LinuxPractice/dir1/dir2/dir3]
└─$ cat file.txt
This file is present in /home/saurabh/LinuxPractice/dir1/dir2/dir3
If i make changes here then it will reflect into the file.txt which is present in another folder

(saurabh@LenovoLegion5)~[~/LinuxPractice/dir1/dir2/dir3]
└─$ echo Softlink is like a pointer. > file.txt

(saurabh@LenovoLegion5)~[~/LinuxPractice/dir1/dir2/dir3]
└─$ cat file.txt
Softlink is like a pointer.
Any changes made into this softlink file will reflect into the original file.txt which is located inside another folder

(saurabh@LenovoLegion5)~[~/LinuxPractice/dir1/dir2/dir3]
└─$

```

```

└─$ cat softlink
This file is present in /home/saurabh/LinuxPractice/dir1/dir2/dir3

(saurabh@LenovoLegion5)~[~/Saurabh]
└─$ cat If i make changes here then it will reflect into the file.txt which is present in another folder >> softlink
cat: If: No such file or directory
cat: i: No such file or directory
cat: make: No such file or directory
cat: changes: No such file or directory
cat: here: No such file or directory
cat: then: No such file or directory
cat: it: No such file or directory
cat: will: No such file or directory
cat: reflect: No such file or directory
cat: into: No such file or directory
cat: the: No such file or directory
cat: file.txt: No such file or directory
cat: which: No such file or directory
cat: is: No such file or directory
cat: present: No such file or directory
cat: in: No such file or directory
cat: another: No such file or directory
cat: folder: No such file or directory

(saurabh@LenovoLegion5)~[~/Saurabh]
└─$ echo If i make changes here then it will reflect into the file.txt which is present in another folder >> softlink

(saurabh@LenovoLegion5)~[~/Saurabh]
└─$ cat softlink
Softlink is like a pointer.

(saurabh@LenovoLegion5)~[~/Saurabh]
└─$ echo Any changes made into this softlink file will reflect into the original file.txt which is located inside another folder >> softlink

(saurabh@LenovoLegion5)~[~/Saurabh]
└─$

```

```

(saurabh@LenovoLegion5)-[~/LinuxPractice/dir1/dir2/dir3]
$ ls
file2.txt  file.txt

(saurabh@LenovoLegion5)-[~/LinuxPractice/dir1/dir2/dir3]
$ echo This file is used for demonstrating hardlink example > file2.txt

(saurabh@LenovoLegion5)-[~/LinuxPractice/dir1/dir2/dir3]
$ cat file2.txt
This file is used for demonstrating hardlink example

(saurabh@LenovoLegion5)-[~/LinuxPractice/dir1/dir2/dir3]
$ pwd
/home/saurabh/LinuxPractice/dir1/dir2/dir3

(saurabh@LenovoLegion5)-[~/LinuxPractice/dir1/dir2/dir3]
$ echo "This is the safest way to create replica of a file ." >> file2.txt

(saurabh@LenovoLegion5)-[~/LinuxPractice/dir1/dir2/dir3]
$ cat file2.txt
This file is used for demonstrating hardlink example
This is the safest way to create replica of a file .
If I delet file from the original folder still this replica will not get affected

(saurabh@LenovoLegion5)-[~/LinuxPractice/dir1/dir2/dir3]
$ rm file2.txt

(saurabh@LenovoLegion5)-[~/LinuxPractice/dir1/dir2/dir3]
$

```

```

(saurabh@LenovoLegion5)-[~/Saurabh]
$ ls
softlink

(saurabh@LenovoLegion5)-[~/Saurabh]
$ ls -l
total 0
lrwxrwxrwx 1 saurabh saurabh 51 Apr 13 13:39 softlink -> /home/saurabh/LinuxPractice/dir1/dir2/dir3/file.txt

(saurabh@LenovoLegion5)-[~/Saurabh]
$ ln /home/saurabh/LinuxPractice/dir1/dir2/dir3/file2.txt hardlink

(saurabh@LenovoLegion5)-[~/Saurabh]
$ ls -ltr
total 4
lrwxrwxrwx 1 saurabh saurabh 51 Apr 13 13:39 softlink -> /home/saurabh/LinuxPractice/dir1/dir2/dir3/file.txt
-rw-r--r-- 2 saurabh saurabh 53 Apr 13 13:48 hardlink

(saurabh@LenovoLegion5)-[~/Saurabh]
$ cat hardlink
This file is used for demonstrating hardlink example

(saurabh@LenovoLegion5)-[~/Saurabh]
$ cat hardlink
This file is used for demonstrating hardlink example
This is the safest way to create replica of a file .

(saurabh@LenovoLegion5)-[~/Saurabh]
$ echo If I delet file from the original folder still this replica will not get affected >> hardlink

(saurabh@LenovoLegion5)-[~/Saurabh]
$ cat hardlink
This file is used for demonstrating hardlink example
This is the safest way to create replica of a file .
If I delet file from the original folder still this replica will not get affected

```