

40 Linux Commands

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S2 Div 2

1. sudo

```
rujuta@Inspiron-5558:~$ sudo apt update
[sudo] password for rujuta:
Get:1 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Hit:2 http://in.archive.ubuntu.com/ubuntu jammy InRelease
Get:3 https://dl.google.com/linux/chrome/deb stable InRelease [1,811 B]
Get:4 http://in.archive.ubuntu.com/ubuntu jammy-updates InRelease [114 kB]
Get:5 https://dl.google.com/linux/chrome/deb stable/main amd64 Packages [1,094 B]
Get:6 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [549 kB]
Get:7 http://in.archive.ubuntu.com/ubuntu jammy-backports InRelease [99.8 kB]
Get:8 http://in.archive.ubuntu.com/ubuntu jammy-updates/main i386 Packages [400 kB]
Get:9 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [791 kB]
Get:10 http://security.ubuntu.com/ubuntu jammy-security/main i386 Packages [226 kB]
Get:11 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [117 kB]
Get:12 http://security.ubuntu.com/ubuntu jammy-security/main amd64 DEP-11 Metadata [41.4 kB]
Get:13 http://security.ubuntu.com/ubuntu jammy-security/main DEP-11 48x48 Icons [13.8 kB]
Get:14 http://security.ubuntu.com/ubuntu jammy-security/main DEP-11 64x64 Icons [22.7 kB]
Get:15 http://security.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [7,540 B]
Get:16 http://security.ubuntu.com/ubuntu jammy-security/restricted i386 Packages [25.5 kB]
```

2. pwd

```
rujuta@Inspiron-5558:~$ pwd
/home/rujuta
```

3. cd

```
rujuta@Inspiron-5558:~$ cd dtl
```

4. ls

```
rujuta@Inspiron-5558:~/dtl$ ls -a
.  ..  f1.txt  f2.txt
rujuta@Inspiron-5558:~/dtl$ ls -l
total 8
-rw-rw-r-- 1 rujuta rujuta 63 Dec 30 10:28 f1.txt
-rw-rw-r-- 1 rujuta rujuta 32 Dec 30 10:29 f2.txt
```

5. cat

```
rujuta@Inspiron-5558:~/dtl$ cat > f3.txt
Hello!
This file has been created using cat > command.
:)
rujuta@Inspiron-5558:~/dtl$ ls
f1.txt  f2.txt  f3.txt
```

```
rujuta@Inspiron-5558:~/dtl$ cat -T f1.txt
Alphabets:
Vowels : a, e, i, o, u
Consonants: b, c, d, f, g, h, j, k, l, m, n,
^I  p, q, r, s, t, v, w, x, y, z
```

```
rujuta@Inspiron-5558:~/dtl$ cat -E f2.txt
Numbers:$
0$
1$
2$
3$
4$
5$
6$
7$
8$
9$
10$
rujuta@Inspiron-5558:~/dtl$ cat -n f2.txt
 1 Numbers:
 2 0
 3 1
 4 2
 5 3
 6 4
 7 5
 8 6
 9 7
10 8
11 9
12 10
```

```
rujuta@Inspiron-5558:~/dtl$ cat f1.txt f2.txt > f4.txt
rujuta@Inspiron-5558:~/dtl$ ls
f1.txt  f2.txt  f3.txt  f4.txt
rujuta@Inspiron-5558:~/dtl$ cat f4.txt
Alphabets:
Vowels : a, e, i, o, u
Consonants: b, c, d, f, g, h, j, k, l, m, n,
           p, q, r, s, t, v, w, x, y, z
Numbers:
0
1
2
3
4
5
6
7
8
9
10
```

```
rujuta@Inspiron-5558:~/dtl$ tac f2.txt
10
9
8
7
6
5
4
3
2
1
0
Numbers:
```

6. cp

```
rujuta@Inspiron-5558:~/dtl$ cp f1.txt f2.txt
rujuta@Inspiron-5558:~/dtl$ cat f2.txt
Alphabets:
Vowels : a, e, i, o, u
Consonants: b, c, d, f, g, h, j, k, l, m, n,
           p, q, r, s, t, v, w, x, y, z
rujuta@Inspiron-5558:~/dtl$
```

7. mv

```
rujuta@Inspiron-5558:~/dtl$ mv f2.txt f1_1.txt
```

8. mkdir

```
rujuta@Inspiron-5558:~$ mkdir dtl
rujuta@Inspiron-5558:~$ cd dtl
rujuta@Inspiron-5558:~/dtl$ pwd
/home/rujuta/dtl
```

9. rmdir

```
rujuta@Inspiron-5558:~$ mkdir Directory
rujuta@Inspiron-5558:~$ rmdir Directory
```

10.

11. touch

```
rujuta@Inspiron-5558:~/dtl$ touch f2.txt
rujuta@Inspiron-5558:~/dtl$ vi f2.txt
rujuta@Inspiron-5558:~/dtl$ cat f2.txt
This is a text file.
It has been created using touch command.
rujuta@Inspiron-5558:~/dtl$
```

12. locate

```
rujuta@Inspiron-5558:~/dtl$ plocate q1
/usr/lib/firmware/cxgb4/aq1202_fw.cld
/var/lib/swcatalog/icons/ubuntu-jammy-universe/48x48/imagemagick-6.q16_display-im6.q16.png
/var/lib/swcatalog/icons/ubuntu-jammy-universe/48x48/imagemagick-6.q16hdri_display-im6.q16hdri.png
/var/lib/swcatalog/icons/ubuntu-jammy-universe/64x64/imagemagick-6.q16_display-im6.q16.png
/var/lib/swcatalog/icons/ubuntu-jammy-universe/64x64/imagemagick-6.q16hdri_display-im6.q16hdri.png
rujuta@Inspiron-5558:~/dtl$
```

13. find

```
rujuta@Inspiron-5558:~$ find dtl -name file1
dtl
dtl/f3.txt
dtl/f1_1.txt
dtl/f4.txt
dtl/f1.txt
dtl/f2.txt
```

14. grep

```
rujuta@Inspiron-5558:~/dtl$ grep Hello f3.txt
Hello!
rujuta@Inspiron-5558:~/dtl$
```

15. df

```

rujuta@Inspiron-5558:~$ df
Filesystem      1K-blocks      Used Available Use% Mounted on
tmpfs           804868        1920     802948   1% /run
/dev/sda2       479079112    14649000  440020720   4% /
tmpfs          4024336         0     4024336   0% /dev/shm
tmpfs           5120          4        5116   1% /run/lock
/dev/sda1       98304        30887     67417   32% /boot/efi
tmpfs          804864        140     804724   1% /run/user/1000
rujuta@Inspiron-5558:~$ df -h
Filesystem      Size  Used Avail Use% Mounted on
tmpfs           787M  1.9M  785M   1% /run
/dev/sda2       457G  14G   420G   4% /
tmpfs          3.9G    0   3.9G   0% /dev/shm
tmpfs          5.0M  4.0K  5.0M   1% /run/lock
/dev/sda1       96M   31M   66M  32% /boot/efi
tmpfs          786M  140K  786M   1% /run/user/1000
rujuta@Inspiron-5558:~$

```

16. du

```

rujuta@Inspiron-5558:~$ du -m dtl
1      dtl
rujuta@Inspiron-5558:~$

```

17. head

```

rujuta@Inspiron-5558:~/dtl$ head f4.txt
Alphabets:
Vowels : a, e, i, o, u
Consonants: b, c, d, f, g, h, j, k, l, m, n,
           p, q, r, s, t, v, w, x, y, z
Numbers:
0
1
2
3
4

```

18. tail

```

rujuta@Inspiron-5558:~/dtl$ tail f4.txt
1
2
3
4
5
6
7
8
9
10

```

19. diff

```
rujuta@Inspiron-5558:~/dtl$ diff f1.txt f4.txt
4a5,16
> Numbers:
> 0
> 1
> 2
> 3
> 4
> 5
> 6
> 7
> 8
> 9
> 10
rujuta@Inspiron-5558:~/dtl$
```

20. tar

```
rujuta@Inspiron-5558:~/dtl$ tar cvf file.tar *.txt
f1_1.txt
f1.txt
f2.txt
f3.txt
f4.txt
rujuta@Inspiron-5558:~/dtl$
```

21. chmod

```

rujuta@Inspiron-5558:~/dtl$ ls -l
total 32
-rw-rw-r-- 1 rujuta rujuta 113 Jan  8 16:20 f1_1.txt
-rw-rw-r-- 1 rujuta rujuta 113 Jan  8 16:20 f1.txt
-rw-rw-r-- 1 rujuta rujuta  62 Jan  8 16:31 f2.txt
-rw-rw-r-- 1 rujuta rujuta  58 Jan  1 11:09 f3.txt
-rw-rw-r-- 1 rujuta rujuta 145 Jan  1 11:14 f4.txt
-rw-rw-r-- 1 rujuta rujuta 10240 Jan  8 16:43 file.tar
rujuta@Inspiron-5558:~/dtl$ chmod u=rwx,g=rx,o=r f1.txt
rujuta@Inspiron-5558:~/dtl$ ls -l
total 32
-rw-rw-r-- 1 rujuta rujuta 113 Jan  8 16:20 f1_1.txt
-rwxr-xr-- 1 rujuta rujuta 113 Jan  8 16:20 f1.txt
-rw-rw-r-- 1 rujuta rujuta  62 Jan  8 16:31 f2.txt
-rw-rw-r-- 1 rujuta rujuta  58 Jan  1 11:09 f3.txt
-rw-rw-r-- 1 rujuta rujuta 145 Jan  1 11:14 f4.txt
-rw-rw-r-- 1 rujuta rujuta 10240 Jan  8 16:43 file.tar
rujuta@Inspiron-5558:~/dtl$ chmod 754 f2.txt
rujuta@Inspiron-5558:~/dtl$ ls -l
total 32
-rw-rw-r-- 1 rujuta rujuta 113 Jan  8 16:20 f1_1.txt
-rwxr-xr-- 1 rujuta rujuta 113 Jan  8 16:20 f1.txt
-rwxr-xr-- 1 rujuta rujuta  62 Jan  8 16:31 f2.txt
-rw-rw-r-- 1 rujuta rujuta  58 Jan  1 11:09 f3.txt
-rw-rw-r-- 1 rujuta rujuta 145 Jan  1 11:14 f4.txt
-rw-rw-r-- 1 rujuta rujuta 10240 Jan  8 16:43 file.tar
rujuta@Inspiron-5558:~/dtl$ █

```

22. chown

```

rujuta@Inspiron-5558:~/dtl$ sudo chown root f1.txt
[sudo] password for rujuta:
rujuta@Inspiron-5558:~/dtl$ ls -l
total 32
-rw-rw-r-- 1 rujuta rujuta 113 Jan  8 16:20 f1_1.txt
-rwxr-xr-- 1 root  rujuta 113 Jan  8 16:20 f1.txt
-rwxr-xr-- 1 rujuta rujuta  62 Jan  8 16:31 f2.txt
-rw-rw-r-- 1 rujuta rujuta  58 Jan  1 11:09 f3.txt
-rw-rw-r-- 1 rujuta rujuta 145 Jan  1 11:14 f4.txt
-rw-rw-r-- 1 rujuta rujuta 10240 Jan  8 16:43 file.tar
rujuta@Inspiron-5558:~/dtl$ █

```

23. jobs

```

rujuta@Inspiron-5558:~/dtl$ jobs
rujuta@Inspiron-5558:~/dtl$ jobs -r

```

24. kill

```

rujuta      15516  0.0  0.0  21672  5388 pts/1    Ss   16:56   0:00  bash
rujuta      15530  0.0  0.0  20744  2784 pts/0    S+   16:58   0:00  ping www.google.com
rujuta      15531  0.0  0.0  23072  1580 pts/1    R+   16:58   0:00  ps ux
rujuta@Inspiron-5558:~/dtl$ kill 15530 pid
64 bytes from bom07s36-in-f4.1e100.net (142.250.199.132): icmp_seq=11 ttl=118 time=17.0 ms
64 bytes from bom07s36-in-f4.1e100.net (142.250.199.132): icmp_seq=12 ttl=118 time=13.9 ms
64 bytes from bom07s36-in-f4.1e100.net (142.250.199.132): icmp_seq=13 ttl=118 time=19.6 ms
64 bytes from bom07s36-in-f4.1e100.net (142.250.199.132): icmp_seq=14 ttl=118 time=16.3 ms
64 bytes from bom07s36-in-f4.1e100.net (142.250.199.132): icmp_seq=15 ttl=118 time=15.0 ms
64 bytes from bom07s36-in-f4.1e100.net (142.250.199.132): icmp_seq=16 ttl=118 time=14.6 ms
64 bytes from bom07s36-in-f4.1e100.net (142.250.199.132): icmp_seq=17 ttl=118 time=13.9 ms
64 bytes from bom07s36-in-f4.1e100.net (142.250.199.132): icmp_seq=18 ttl=118 time=13.1 ms
64 bytes from bom07s36-in-f4.1e100.net (142.250.199.132): icmp_seq=19 ttl=118 time=14.3 ms
Terminated

```

25. ping

```

rujuta@Inspiron-5558:~/dtl$ ping www.google.com
PING www.google.com (142.250.199.132) 56(84) bytes of data.
64 bytes from bom07s36-in-f4.1e100.net (142.250.199.132): icmp_seq=1 ttl=118 time=12.8 ms
64 bytes from bom07s36-in-f4.1e100.net (142.250.199.132): icmp_seq=2 ttl=118 time=16.7 ms
64 bytes from bom07s36-in-f4.1e100.net (142.250.199.132): icmp_seq=3 ttl=118 time=13.6 ms
64 bytes from bom07s36-in-f4.1e100.net (142.250.199.132): icmp_seq=4 ttl=118 time=11.2 ms
64 bytes from bom07s36-in-f4.1e100.net (142.250.199.132): icmp_seq=5 ttl=118 time=17.3 ms
64 bytes from bom07s36-in-f4.1e100.net (142.250.199.132): icmp_seq=6 ttl=118 time=12.3 ms
64 bytes from bom07s36-in-f4.1e100.net (142.250.199.132): icmp_seq=7 ttl=118 time=14.0 ms
64 bytes from bom07s36-in-f4.1e100.net (142.250.199.132): icmp_seq=8 ttl=118 time=14.1 ms

```

26. wget

```

rujuta@Inspiron-5558:~$ wget https://www.loggly.com/wp-content/uploads/2015/05/Linux-Cheat-Sheet-Sponsored-By-Loggly.pdf
--2023-01-08 18:29:02-- https://www.loggly.com/wp-content/uploads/2015/05/Linux-Cheat-Sheet-Sponsored-By-Loggly.pdf
Resolving www.loggly.com (www.loggly.com)... 104.77.173.106, 104.77.173.139
Connecting to www.loggly.com (www.loggly.com)|104.77.173.106|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 987562 (964K) [application/pdf]
Saving to: 'Linux-Cheat-Sheet-Sponsored-By-Loggly.pdf'

Linux-Cheat-Sheet-Sponsored-By-Logg 100%[=====>] 964.42K  2.95MB/s   in 0.3s

2023-01-08 18:29:04 (2.95 MB/s) - 'Linux-Cheat-Sheet-Sponsored-By-Loggly.pdf' saved [987562/987562]

```

27. uname

```

rujuta@Inspiron-5558:~/dtl$ uname
Linux

```

28. top


```
top - 17:18:13 up 1:16, 1 user, load average: 0.48, 0.20, 0.29
Tasks: 237 total, 1 running, 236 sleeping, 0 stopped, 0 zombie
%Cpu(s): 16.7 us, 8.3 sy, 0.0 ni, 75.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 7860.0 total, 2753.0 free, 1353.8 used, 3753.2 buff/cache
MiB Swap: 2048.0 total, 2048.0 free, 0.0 used. 5817.8 avail Mem
```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
1947	rujuta	20	0	759120	59788	40668	S	33.3	0.7	0:34.91	gnome-terminal-
16181	rujuta	20	0	23628	4096	3240	R	33.3	0.1	0:06.39	top
1	root	20	0	168088	13356	8300	S	0.0	0.2	0:02.93	systemd
2	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kthreadd
3	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	rcu_gp
4	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	rcu_par_gp
5	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	netns
7	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kworker/0:0H-events_highpri
9	root	0	-20	0	0	0	I	0.0	0.0	0:00.39	kworker/0:1H-events_highpri
10	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	mm_percpu_wq
11	root	20	0	0	0	0	S	0.0	0.0	0:00.00	rcu_tasks_rude_
12	root	20	0	0	0	0	S	0.0	0.0	0:00.00	rcu_tasks_trace
13	root	20	0	0	0	0	S	0.0	0.0	0:00.14	ksoftirqd/0
14	root	20	0	0	0	0	I	0.0	0.0	0:02.99	rcu_sched
15	root	rt	0	0	0	0	S	0.0	0.0	0:00.02	migration/0
16	root	-51	0	0	0	0	S	0.0	0.0	0:00.00	idle_inject/0
18	root	20	0	0	0	0	S	0.0	0.0	0:00.00	cpuhp/0
19	root	20	0	0	0	0	S	0.0	0.0	0:00.00	cpuhp/1
20	root	-51	0	0	0	0	S	0.0	0.0	0:00.00	idle_inject/1
21	root	rt	0	0	0	0	S	0.0	0.0	0:00.21	migration/1
22	root	20	0	0	0	0	S	0.0	0.0	0:00.11	ksoftirqd/1
24	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kworker/1:0H-events_highpri
25	root	20	0	0	0	0	S	0.0	0.0	0:00.00	cpuhp/2
26	root	-51	0	0	0	0	S	0.0	0.0	0:00.00	idle_inject/2

29. history

```
rujuta@Inspiron-5558:~/dtl$ history
1  pwd
2  ls
3  cd home
4  mkdir DSA
5  rmdir DSA
6  ls
7  mkdir DSA
8  ls
9  cd DSA
10 touch test.txt
11 ls
12 cd/etc/default/
13 sudo apt install ubuntu-desktop
14 sudo reboot
15 sudo apt-get remove ubuntu desktop
16 sudo apt update
17 sudo apt install ubuntu-desktop
18 sudo apt-get install ubuntu-desktop
19 sudo apt purge ubuntu-desktop
20 sudo apt autoremove
21 sudo dpkg-reconfigure gdm3
22 sudo reboot
23 sudo apt-get install ubuntu-desktop
24 sudo apt purge x ubuntu-desktop
25 sudo apt purge xubuntu-desktop
26 sudo apt autoremove
27 sudo dpkg-reconfigure gdm3
28 dpkg --configure lightdm
29 sudo dpkg-reconfigure lightdm
```

30. man


```
LS(1) User Commands LS(1)

NAME
  ls - list directory contents

SYNOPSIS
  ls [OPTION]... [FILE]...

DESCRIPTION
  List information about the FILES (the current directory by default). Sort entries alphabetically if none of -cftuvSUX nor --sort is specified.

  Mandatory arguments to long options are mandatory for short options too.

  -a, --all
      do not ignore entries starting with .

  -A, --almost-all
      do not list implied . and ..

  --author
      with -l, print the author of each file

  -b, --escape
      print C-style escapes for nongraphic characters

  --block-size=SIZE
      with -l, scale sizes by SIZE when printing them; e.g., '--block-size=M'; see SIZE format below

  -B, --ignore-backups
      do not list implied entries ending with ~

  -c
      with -lt: sort by, and show, ctime (time of last modification of file status information); with -l: show ctime and sort by name; otherwise: sort by ctime, newest first

  -C
      list entries by columns

Manual page ls(1) line 1 (press h for help or q to quit)
```

31. echo

```
rujuta@Inspiron-5558:~/dtl$ echo -e "\b Hello \bworld"
HelloWorld
rujuta@Inspiron-5558:~/dtl$
```

32. zip, unzip

```
rujuta@Inspiron-5558:~/dtl$ zip zipfile f1.txt f2.txt f3.txt f4.txt
adding: f1.txt (deflated 22%)
adding: f2.txt (stored 0%)
adding: f3.txt (stored 0%)
adding: f4.txt (deflated 20%)
rujuta@Inspiron-5558:~/dtl$
rujuta@Inspiron-5558:~/dtl$ unzip zipfile.zip
Archive:  zipfile.zip
replace f1.txt? [y]es, [n]o, [A]ll, [N]one, [r]ename: y
  inflating: f1.txt
replace f2.txt? [y]es, [n]o, [A]ll, [N]one, [r]ename: y
  extracting: f2.txt
replace f3.txt? [y]es, [n]o, [A]ll, [N]one, [r]ename: y
  extracting: f3.txt
replace f4.txt? [y]es, [n]o, [A]ll, [N]one, [r]ename: y
  inflating: f4.txt
rujuta@Inspiron-5558:~/dtl$
```

33. hostname

```
rujuta@Inspiron-5558:~/dtl$ hostname
Inspiron-5558
rujuta@Inspiron-5558:~/dtl$
```

34. useradd, userdel

```
rujuta@Inspiron-5558:~$ sudo useradd RB
[sudo] password for rujuta:
rujuta@Inspiron-5558:~$
```

35. apt-get

```
rujuta@Inspiron-5558:~$ sudo apt install htop
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  libflashrom1 libftdi1-2
Use 'sudo apt autoremove' to remove them.
The following NEW packages will be installed:
  htop
0 upgraded, 1 newly installed, 0 to remove and 21 not upgraded.
Need to get 128 kB of archives.
After this operation, 342 kB of additional disk space will be used.
Get:1 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 htop amd64 3.0.5-7build2 [128 kB]
Fetched 128 kB in 2s (58.1 kB/s)
Selecting previously unselected package htop.
(Reading database ... 224354 files and directories currently installed.)
Preparing to unpack .../htop_3.0.5-7build2_amd64.deb ...
Unpacking htop (3.0.5-7build2) ...
Setting up htop (3.0.5-7build2) ...
Processing triggers for mailcap (3.70+nmu1ubuntu1) ...
Processing triggers for desktop-file-utils (0.26-1ubuntu3) ...
Processing triggers for hicolor-icon-theme (0.17-2) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu3) ...
Processing triggers for man-db (2.10.2-1) ...
rujuta@Inspiron-5558:~$
```

36. nano, vi, jed

```
rujuta@Inspiron-5558:~$ vi file.txt
rujuta@Inspiron-5558:~$
```

37. alias, unalias

```
rujuta@Inspiron-5558:~/dtl$ alias l='ls'
rujuta@Inspiron-5558:~/dtl$ l
f1_1.txt  f1.txt  f2.txt  f3.txt  f4.txt  file.tar  zipfile.zip
rujuta@Inspiron-5558:~/dtl$
```

38. su

```
rujuta@Inspiron-5558:~$ su
Password:
```

39. htop

