



prakhar@prakhar-VirtualBox: ~



```
prakhar@prakhar-VirtualBox:~$ ls
Desktop    Downloads  new.txt    Public    Templates
Documents  Music      Pictures   snap      Videos
prakhar@prakhar-VirtualBox:~$ mkdir new.txt
mkdir: cannot create directory 'new.txt': File exists
prakhar@prakhar-VirtualBox:~$ mkdir prakhar.txt
prakhar@prakhar-VirtualBox:~$ cat prakhar.txt
cat: prakhar.txt: Is a directory
prakhar@prakhar-VirtualBox:~$ pwd
/home/prakhar
prakhar@prakhar-VirtualBox:~$ rmdir prakhar.txt
prakhar@prakhar-VirtualBox:~$ cd /Desktop
bash: cd: /Desktop: No such file or directory
prakhar@prakhar-VirtualBox:~$ cd Desktop
prakhar@prakhar-VirtualBox:~/Desktop$ cd ..
prakhar@prakhar-VirtualBox:~$ touch demo.txt
prakhar@prakhar-VirtualBox:~$ cat > demo.txt
sds
^Z
[1]+  Stopped                  cat > demo.txt
prakhar@prakhar-VirtualBox:~$ rm demo.txt
prakhar@prakhar-VirtualBox:~$ mkdir prakhar
prakhar@prakhar-VirtualBox:~$ mv demo.txt prakhar
mv: cannot stat 'demo.txt': No such file or directory
prakhar@prakhar-VirtualBox:~$ mv prakhar.txt prakhar
mv: cannot stat 'prakhar.txt': No such file or directory
prakhar@prakhar-VirtualBox:~$ mkdir prakhar.txt
prakhar@prakhar-VirtualBox:~$ mv prakhar.txt prakhar
prakhar@prakhar-VirtualBox:~$ gedit prakhar.txt
```



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```
prakhar@prakhar-VirtualBox:~$ mv prakhar.txt prakhar
```

```
prakhar@prakhar-VirtualBox:~$ gedit prakhar.txt
```

```
prakhar@prakhar-VirtualBox:~$ head prakhar.txt
```

1

2

3

4

5

6

7

8

9

10

```
prakhar@prakhar-VirtualBox:~$ tail prakhar.txt
```

4

5

6

7

8

9

10

11

12

```
prakhar@prakhar-VirtualBox:~$ tac prakhar.txt
```

12

11

10



prakhar@prakhar-VirtualBox: ~



2

1

prakhar@prakhar-VirtualBox:~\$ id

uid=1000(prakhar) gid=1000(prakhar) groups=1000(prakhar),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),122(lpadmin),134(lxd),135(sambashare)

prakhar@prakhar-VirtualBox:~\$ passwd

Changing password for prakhar.

Current password:

New password:

BAD PASSWORD: The password is shorter than 8 characters

New password:

Retype new password:

passwd: password updated successfully

prakhar@prakhar-VirtualBox:~\$ groupadd developer

groupadd: Permission denied.

groupadd: cannot lock /etc/group; try again later.

prakhar@prakhar-VirtualBox:~\$ sudo groupadd developer

[sudo] password for prakhar:

prakhar@prakhar-VirtualBox:~\$ wc prakhar.txt

13 12 28 prakhar.txt

prakhar@prakhar-VirtualBox:~\$

prakhar@prakhar-VirtualBox:~\$ od prakhar.txt

0000000 005061 005062 005063 005064 005065 005066 005067 005070

0000020 005071 030061 030412 005061 031061 005012

0000034

prakhar@prakhar-VirtualBox:~\$ sort prakhar.txt

1



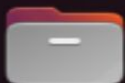
Activities

Terminal

Jan 12 15:51



prakhar@prakhar-VirtualBox: ~



```
0000020 005071 030061 030412 005061 031061 005012
0000034
```

```
prakhar@prakhar-VirtualBox:~$ sort prakhar.txt
```

```
1
10
11
12
2
3
4
5
6
7
8
9
```

```
prakhar@prakhar-VirtualBox:~$ gzip prakhar.txt
```

```
prakhar@prakhar-VirtualBox:~$ gunzip prakhar.txt
```

```
prakhar@prakhar-VirtualBox:~$ locate prakhar.txt
```

```
Command 'locate' not found, but can be installed with:
sudo apt install plocate
```

```
prakhar@prakhar-VirtualBox:~$ date
```

```
Thursday 12 January 2023 03:46:34 PM IST
```

```
prakhar@prakhar-VirtualBox:~$ cal
```

```
Command 'cal' not found, but can be installed with:
sudo apt install ncal
```

```
prakhar@prakhar-VirtualBox:~$ sleep 1
```

```
prakhar@prakhar-VirtualBox:~$
```



prakhar@prakhar-VirtualBox: ~



```
prakhar@prakhar-VirtualBox:~$  
prakhar@prakhar-VirtualBox:~$ time
```

```
real    0m0.000s  
user    0m0.000s  
sys     0m0.000s
```

```
prakhar@prakhar-VirtualBox:~$ df
```

Filesystem	1K-blocks	Used	Available	Use%	Mounted on
tmpfs	1220564	1436	1219128	1%	/run
/dev/sda3	11735576	9524592	1593052	86%	/
tmpfs	6102820	0	6102820	0%	/dev/shm
tmpfs	5120	4	5116	1%	/run/lock
/dev/sda2	524252	5364	518888	2%	/boot/efi
tmpfs	1220564	2416	1218148	1%	/run/user/1000

```
prakhar@prakhar-VirtualBox:~$ mount
```

```
sysfs on /sys type sysfs (rw,nosuid,nodev,noexec,relatime)  
proc on /proc type proc (rw,nosuid,nodev,noexec,relatime)  
udev on /dev type devtmpfs (rw,nosuid,relatime,size=6067480k,nr_inodes=1516870,  
mode=755,inode64)  
devpts on /dev/pts type devpts (rw,nosuid,noexec,relatime,gid=5,mode=620,ptmxmo  
de=000)  
tmpfs on /run type tmpfs (rw,nosuid,nodev,noexec,relatime,size=1220564k,mode=75  
5,inode64)  
/dev/sda3 on / type ext4 (rw,relatime,errors=remount-ro)  
securityfs on /sys/kernel/security type securityfs (rw,nosuid,nodev,noexec,rela  
time)  
tmpfs on /dev/shm type tmpfs (rw,nosuid,nodev,inode64)  
tmpfs on /run/lock type tmpfs (rw,nosuid,nodev,noexec,relatime,size=5120k,inode
```





prakhar@prakhar-VirtualBox: ~



```
prakhar@prakhar-VirtualBox:~$ ip
Usage: ip [ OPTIONS ] OBJECT { COMMAND | help }
       ip [ -force ] -batch filename
where  OBJECT := { address | addrlabel | fou | help | ila | ioam | l2tp | link
|
               macsec | maddress | monitor | mptcp | mroute | mrule |
               neighbor | neighbour | netconf | netns | nexthop | ntable |
               ntbl | route | rule | sr | tap | tcpmetrics |
               token | tunnel | tuntap | vrf | xfrm }
OPTIONS := { -V[ersion] | -s[tatistics] | -d[etails] | -r[esolve] |
             -h[uman-readable] | -iec | -j[son] | -p[retty] |
             -f[amily] { inet | inet6 | mpls | bridge | link } |
             -4 | -6 | -M | -B | -0 |
             -l[oops] { maximum-addr-flush-attempts } | -br[ief] |
             -o[neline] | -t[imestamp] | -ts[hort] | -b[atch] [filename]
|
             -rc[vbuf] [size] | -n[etns] name | -N[umeric] | -a[ll] |
             -c[olor]}
prakhar@prakhar-VirtualBox:~$ ping
ping: usage error: Destination address required
prakhar@prakhar-VirtualBox:~$ ping kiit.ac.in
ping: kiit.ac.in: Temporary failure in name resolution
prakhar@prakhar-VirtualBox:~$ ping google.com
PING google.com (142.250.182.14) 56(84) bytes of data.
64 bytes from maa05s18-in-f14.1e100.net (142.250.182.14): icmp_seq=1 ttl=116 ti
me=25.6 ms
64 bytes from maa05s18-in-f14.1e100.net (142.250.182.14): icmp_seq=3 ttl=116 ti
me=25.8 ms
64 bytes from maa05s18-in-f14.1e100.net (142.250.182.14): icmp_seq=4 ttl=116 ti
```



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```
-o[neline] | -t[imestamp] | -ts[hort] | -b[atch] [filename]
```

```
|
```

```
-rc[vbuf] [size] | -n[etns] name | -N[umeric] | -a[ll] |  
-c[olor]}
```

```
prakhar@prakhar-VirtualBox:~$ ping
```

```
ping: usage error: Destination address required
```

```
prakhar@prakhar-VirtualBox:~$ ping kiit.ac.in
```

```
ping: kiit.ac.in: Temporary failure in name resolution
```

```
prakhar@prakhar-VirtualBox:~$ ping google.com
```

```
PING google.com (142.250.182.14) 56(84) bytes of data.
```

```
64 bytes from maa05s18-in-f14.1e100.net (142.250.182.14): icmp_seq=1 ttl=116 ti  
me=25.6 ms
```

```
64 bytes from maa05s18-in-f14.1e100.net (142.250.182.14): icmp_seq=3 ttl=116 ti  
me=25.8 ms
```

```
64 bytes from maa05s18-in-f14.1e100.net (142.250.182.14): icmp_seq=4 ttl=116 ti  
me=25.8 ms
```

```
64 bytes from maa05s18-in-f14.1e100.net (142.250.182.14): icmp_seq=5 ttl=116 ti  
me=27.9 ms
```

```
64 bytes from maa05s18-in-f14.1e100.net (142.250.182.14): icmp_seq=6 ttl=116 ti  
me=38.7 ms
```

```
64 bytes from maa05s18-in-f14.1e100.net (142.250.182.14): icmp_seq=8 ttl=116 ti  
me=28.4 ms
```

```
^Z
```

```
[2]+  Stopped                  ping google.com
```

```
prakhar@prakhar-VirtualBox:~$ host google.com
```

```
google.com has address 142.250.182.14
```

```
google.com has IPv6 address 2404:6800:4007:819::200e
```

```
google.com mail is handled by 10 smtp.google.com.
```

```
prakhar@prakhar-VirtualBox:~$
```





prakhar@prakhar-VirtualBox: ~



```
prakhar@prakhar-VirtualBox:~$ who
prakhar  tty2          2023-01-12 15:33 (tty2)
prakhar@prakhar-VirtualBox:~$ apt
```

```
apt 2.4.6 (amd64)
Usage: apt [options] command
```

apt is a commandline package manager and provides commands for searching and managing as well as querying information about packages. It provides the same functionality as the specialized APT tools, like apt-get and apt-cache, but enables options more suitable for interactive use by default.

#### Most used commands:

- list - list packages based on package names
- search - search in package descriptions
- show - show package details
- install - install packages
- reinstall - reinstall packages
- remove - remove packages
- autoremove - Remove automatically all unused packages
- update - update list of available packages
- upgrade - upgrade the system by installing/upgrading packages
- full-upgrade - upgrade the system by removing/installing/upgrading packages
- edit-sources - edit the source information file
- satisfy - satisfy dependency strings

See apt(8) for more information about the available commands. Configuration options and syntax is detailed in apt.conf(5).





prakhar@prakhar-VirtualBox: ~



prakhar@prakhar-VirtualBox:~\$

prakhar@prakhar-VirtualBox:~\$ apt-get

apt 2.4.6 (amd64)

Usage: apt-get [options] command

apt-get [options] install|remove pkg1 [pkg2 ...]

apt-get [options] source pkg1 [pkg2 ...]

apt-get is a command line interface for retrieval of packages and information about them from authenticated sources and for installation, upgrade and removal of packages together with their dependencies.

Most used commands:

update - Retrieve new lists of packages

upgrade - Perform an upgrade

install - Install new packages (pkg is libc6 not libc6.deb)

reinstall - Reinstall packages (pkg is libc6 not libc6.deb)

remove - Remove packages

purge - Remove packages and config files

autoremove - Remove automatically all unused packages

dist-upgrade - Distribution upgrade, see apt-get(8)

dselect-upgrade - Follow dselect selections

build-dep - Configure build-dependencies for source packages

satisfy - Satisfy dependency strings

clean - Erase downloaded archive files

autoclean - Erase old downloaded archive files

check - Verify that there are no broken dependencies

source - Download source archives



Type here to search



4:05 PM

1/12/2023





prakhar@prakhar-VirtualBox: ~



This APT has Super Cow Powers.

prakhar@prakhar-VirtualBox:~\$ dir

Desktop	Downloads	new.txt	prakhar	Public	Templates
Documents	Music	Pictures	prakhar.txt	snap	Videos

prakhar@prakhar-VirtualBox:~\$

prakhar@prakhar-VirtualBox:~\$ fc

dir

Desktop	Downloads	new.txt	prakhar	Public	Templates
Documents	Music	Pictures	prakhar.txt	snap	Videos

prakhar@prakhar-VirtualBox:~\$ ifconfig

```
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
  inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
  inet6 fe80::69c:5122:f5eb:60fd prefixlen 64 scopeid 0x20<link>
  ether 08:00:27:ab:4f:34 txqueuelen 1000 (Ethernet)
  RX packets 38773 bytes 57448300 (57.4 MB)
  RX errors 0 dropped 0 overruns 0 frame 0
  TX packets 2946 bytes 219298 (219.2 KB)
  TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

lo: flags=73&lt;UP,LOOPBACK,RUNNING&gt; mtu 65536

```
  inet 127.0.0.1 netmask 255.0.0.0
  inet6 ::1 prefixlen 128 scopeid 0x10<host>
  loop txqueuelen 1000 (Local Loopback)
  RX packets 277 bytes 25331 (25.3 KB)
  RX errors 0 dropped 0 overruns 0 frame 0
  TX packets 277 bytes 25331 (25.3 KB)
  TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

prakhar@prakhar-VirtualBox:~\$ iftop





prakhar@prakhar-VirtualBox: ~



```
RX errors 0   dropped 0   overruns 0   frame 0
TX packets 277   bytes 25331 (25.3 KB)
TX errors 0   dropped 0   overruns 0   carrier 0   collisions 0
```

```
prakhar@prakhar-VirtualBox:~$ iftop
Command 'iftop' not found, but can be installed with:
sudo apt install iftop
```

```
prakhar@prakhar-VirtualBox:~$ info
```

```
[3]+  Stopped                  info
```

```
prakhar@prakhar-VirtualBox:~$ ipcs
```

```
----- Message Queues -----
```

key	msqid	owner	perms	used-bytes	messages
-----	-------	-------	-------	------------	----------

```
----- Shared Memory Segments -----
```

key	shmid	owner	perms	bytes	nattch	status
-----	-------	-------	-------	-------	--------	--------

```
----- Semaphore Arrays -----
```

key	semid	owner	perms	nsems
-----	-------	-------	-------	-------

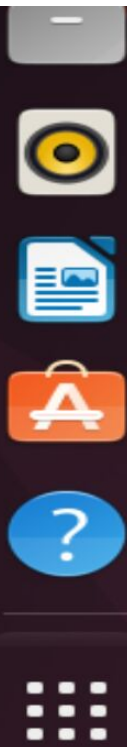
```
prakhar@prakhar-VirtualBox:~$ man man
```

```
[4]+  Stopped                  man man
```

```
prakhar@prakhar-VirtualBox:~$ man
```

```
What manual page do you want?
For example, try 'man man'.
```

```
prakhar@prakhar-VirtualBox:~$ tty
/dev/pts/0
```



prakh@prakh-VirtualBox: ~\$

/dev/pts/0

prakh@prakh-VirtualBox:~\$ uname

Linux

prakh@prakh-VirtualBox:~\$ uniq

sdas

sdas

s

s

z^Z

[5]+ Stopped

uniq

prakh@prakh-VirtualBox:~\$ uptime

16:04:36 up 31 min, 1 user, load average: 0.20, 0.15, 0.17

prakh@prakh-VirtualBox:~\$

prakh@prakh-VirtualBox:~\$ users

prakh

prakh@prakh-VirtualBox:~\$ w

16:04:57 up 31 min, 1 user, load average: 0.28, 0.17, 0.17

USER	TTY	FROM	LOGIN@	IDLE	JCPU	PCPU	WHAT
prakh	tty2	tty2	15:33	31:51	0.13s	0.11s	/usr/libexec/g

prakh@prakh-VirtualBox:~\$ whoami

prakh

prakh@prakh-VirtualBox:~\$