```
/home/srishtirupa
srishtirupa@linux:-$ mkdir new_directory
srishtirupa@linux:~$ rmdir new_directory
srishtirupa@linux:-$ ls
BigData
                        msg.txt
                                                    T1.txt
                                                                test3
class.txt
copied13.txt Downloads new.txt
                                                    test12.txt
demo1
             igTest
                                                    test13.txt
srishtirupa@linux:-$ cd dekstop
bash: cd: dekstop: No such file or directory
srishtirupa@linux:-$ cd Dekstop
bash: cd: Dekstop: No such file or directory
srishtirupa@linux:-$ cd Desktop
srishtirupa@linux:-/Desktop$ ztouch Demo.txt
Command 'ztouch' not found, did you mean:
command 'ktouch' from snap ktouch (22.08.1)
command 'touch' from deb coreutils (8.32-4.1ubuntu1)
command 'ktouch' from deb ktouch (4:21.12.3-1ubuntu1)
See 'snap info <snapname>' for additional versions.
srishtirupa@linux:~/Desktop$ touch Demo.txt
srishtirupa@linux:-/Desktop$ touch Demo1.txt Demo2.txt
srishtirupa@linux:-/Desktop$ ls
Demo1.txt Demo2.txt Demo.txt
srishtirupa@linux:-/Desktop$ cat > Demo.txt
This is a text file
^Z
[1]+ Stopped
                              cat > Demo.txt
srishtirupa@linux:-/Desktop$ cat Demo.txt
This is a text file
srishtirupa@linux:-/Desktop$ rm Demo.txt
srishtirupa@linux:-/Desktop$ rm Demo1.txt Demo2.txt
srishtirupa@linux:~/Desktop$ ls
srishtirupa@linux:~/Desktop$ cd ..
srishtirupa@linux:-$ ls
BigData
                        msg.txt
                                                    T1.txt
                                                                test3
class.txt
copied13.txt Downloads new.txt
                                                    test12.txt
demo1
             igTest
                                                    test13.txt
srishtirupa@linux:-$ cat > demo1.txt
hello this is kalii..
^Z
[2]+ Stopped
                              cat > demo1.txt
srishtirupa@linux:-$ cat demo1.txt
hello this is kalii..
srishtirupa@linux:-$ cp demo1.txt demo2.txt
srishtirupa@linux:-$ cp demo2.txt Documents
srishtirupa@linux:-$ ls
             demo1.txt
BigData
                                   new.txt
                                                                test12.txt
```

srishtirupa@linux:-\$ pwd

```
BigData
               demo12.txt
                                                                       test13.txt
class.txt
copied13.txt
               demo2.txt
                           igTest
                                                          T1.txt
                                                                       test3
                            msg.txt
demo1
                                                          test12.txt
srishtirupa@linux:~$ cat > Demo.txt
11
2
3
4
5
6
8
9
10
11
^Z
[3]+ Stopped
                               cat > Demo.txt
srishtirupa@linux:~$ head Demo.txt
11
3
4
6
8
9
10
srishtirupa@linux:~$ cat Demo.txt
11
3
4
5
6
8
10
11
srishtirupa@linux:~$ tac Demo.txt
11
10
9
8
б
```

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

srishtirupa@linux:~$ tac Demo.txt

11
10
9
8
7
6
4
2
11
srishtirupa@linux:~$ head -n 4 Demo.txt
11
2
4
srishtirupa@linux:-$ tail Demo.txt
2
4 5
6
8
9
10
11
srishtirupa@linux:~$ tail -n 4 Demo.txt
8
9
10
11
srishtirupa@linux:-$ more DEmo.txt
more: cannot open DEmo.txt: No such file or directory
```

srishtirupa@linux:~\$ cat Demo.txt

```
srishtirupa@linux:-$ tail Demo.txt
2
3
4
5
6
7
8
9
10
11
srishtirupa@linux:-$ tail -n 4 Demo.txt
8
9
10
11
srishtirupa@linux:-$ more DEmo.txt
more: cannot open DEmo.txt: No such file or directory
srishtirupa@linux: $ more Demo.txt
11
2
3
4
5
6
7
8
9
10
11
srishtirupa@linux:-$ less Demo.txt
[4]+ Stopped
                               less Demo.txt
srishtirupa@linux:-$ id
uid=1000(srishtirupa) gid=1000(srishtirupa) groups=1000(srishtirupa)
srishtirupa@linux:=$ cat Demo.txt | tac | cat | cat | tac
11
2
3
4
5
6
7
8
9
10
11
```

```
srishtirupa@linux:~$ cat > marks.txt
alex - 50
ale - 70
jon - 75
carry - 85
celena - 90
justin - 80
^Z
[5]+ Stopped
                               cat > marks.txt
srishtirupa@linux:~$ cat marks.txt
alex - 50
ale - 70
jon - 75
carry - 85
celena - 90
justin - 80
srishtirupa@linux:~$ cut -d- -f2 marks.txt
50
70
75
85
90
80
srishtirupa@linux:-$ cat marks.txt | grep 9
celena - 90
srishtirupa@linux:-$ ls
BigData demo2.txt igTest
class.txt
             Demo.txt
                         marks.txt secondDir hello test12.txt
copied13.txt Desktop
                         msg.txt
                                                       test13.txt
demo1
                                                        test3
                                    T1.txt
demo12.txt
srishtirupa@linux:-$ comm DEmo.txt demo2.txt
comm: DEmo.txt: No such file or directory
srishtirupa@linux:-$ comm Demo.txt demo2.txt
3
4
5
6
8
comm: file 1 is not in sorted order
10
```

11

```
comm: input is not in sorted order
srishtirupa@linux:-$ echo class7 | sed 's/class/standard/'
standard7
srishtirupa@linux:~$ echo class7 | sed 's/7/10/'
class10
srishtirupa@linux: $ cat marks.txt | tee new.txt | cat
alex - 50
ale - 70
jon - 75
carry - 85
celena - 90
justin - 80
srishtirupa@linux:~$ cat marks.txt | tee demo.txt |cat
alex - 50
ale - 70
jon - 75
carry - 85
celena - 90
justin - 80
srishtirupa@linux:-$ cat new.txt
alex - 50
ale - 70
jon - 75
carry - 85
celena - 90
justin - 80
srishtirupa@linux:-$ cat marks.txt |tr 'pruc' 'PRUC'
alex - 50
ale - 70
jon - 75
CaRRy - 85
Celena - 90
jUstin - 80
srishtirupa@linux:-$ wc marks.txt
6 18 63 marks.txt
srishtirupa@linux:-$ od -b marks.txt
0000000 141 154 145 170 040 055 040 065 060 012 141 154 145 040 055 040
0000020 067 060 012 152 157 156 040 055 040 067 065 012 143 141 162 162
0000040 171 040 055 040 070 065 012 143 145 154 145 156 141 040 055 040
0000060 071 060 012 152 165 163 164 151 156 040 055 040 070 060 012
0000077
srishtirupa@linux:~$ od -t x1 marks.txt
00000000 61 6c 65 78 20 2d 20 35 30 0a 61 6c 65 20 2d 20
0000020 37 30 0a 6a 6f 6e 20 2d 20 37 35 0a 63 61 72 72
```

hello this is kalii..

```
0000020 37 30 0a 6a 6f 6e 20 2d 20 37 35 0a 63 61 72 72
0000040 79 20 2d 20 38 35 0a 63 65 6c 65 6e 61 20 2d 20
0000060 39 30 0a 6a 75 73 74 69 6e 20 2d 20 38 30 0a
0000077
srishtirupa@linux: $ od -c marks.txt
                                        5
0000000
               ι
                   e
                                             0
                                                \n
                                                         ι
          a
                       X
                                                     a
                                                              e
          7
0000020
               0
                  \n
                       j
                                                 7
                                                     5
                                                         \n
                                n
                                                              C
                                                                      Г
                           0
                                                                  a
                                                 ι
0000040
                           8
                                5
                                                     e
          y
                                   \n
                                        C
                                            e
                                                         n
                                                              a
          9
                                        i
                                                              8
0000060
               0
                  \n
                       j
                           u
                                s
                                    t
                                            n
                                                                  0
                                                                     \n
0000077
srishtirupa@linux: $ sort marks.txt
ale - 70
alex - 50
carry - 85
celena - 90
jon - 75
justin - 80
srishtirupa@linux:~$ ls
BigData
                                      new.txt
               demo2.txt
                                                                     test3
class.txt
               demo.txt
                          igTest
                                                        T1.txt
copied13.txt
               Demo.txt
                          marks.txt
demo1
                          msg.txt
                                                        test12.txt
demo12.txt
                                                        test13.txt
srishtirupa@linux: $ gzip demo.txt demo2.txt
srishtirupa@linux: $ ls
BigData
                                         new.txt
                                                                         test3
class.txt
               Demo.txt
                              igTest
                                                            T1.txt
copied13.txt
                             marks.txt
demo1
                             msg.txt
                                                           test12.txt
demo12.txt
                                                            test13 txt
srishtirupa@linux: $ gunzip demo.txt demo2.txt
srishtirupa@linux:~$ ls
BigData
               demo2.txt
                                      new.txt
                                                                     test3
                          igTest
class.txt
               demo.txt
                                                        T1.txt
copied13.txt
               Demo.txt
                          marks.txt
demo1
                          msg.txt
                                                        test12.txt
demo12.txt
                                                        test13.txt
srlshtirupa@linux:~$ find . -name "*.txt"
./copied13.txt
./Documents/demo2.txt
./Documents/demo1.txt
./Demo.txt
./T1.txt
./test13.txt
./demo2.txt
```

srishtirupa@linux: \$ od -t x1 marks.txt

0000000 61 6c 65 78 20 2d 20 35 30 0a 61 6c 65 20 2d 20

```
/Documents/demo1.txt
/Demo.txt
/T1.txt
/test13.txt
/demo2.txt
/msg.txt
/new.txt
/marks.txt
/class.txt
/.cache/tracker3/files/last-crawl.txt
/.cache/tracker3/files/locale-for-miner-apps.txt
/.cache/tracker3/files/first-index.txt
/test12.txt
/demo12.txt
/demo.txt
rishtirupa@linux:-$ locate sysctl.conf
ommand 'locate' not found, but can be installed with:
pt install plocate
lease ask your administrator.
rishtirupa@linux:-$ date
uesday 18 April 2023 03:01:41 PM IST
rishtirupa@linux:-$ cal
ommand 'cal' not found, but can be installed with:
pt install ncal
lease ask your administrator.
rishtirupa@linux: $ time
eal
      0m0.000s
      0m0.000s
ser
      0m0.000s
ys
rishtirupa@linux:-$ gzip demo.txt demo2.txt
rishtirupa@linux:-$ ls
igData
                                      new.txt
                                                                     test3
lass.txt
             Demo.txt
                           igTest
                                                        T1.txt
                           marks.txt
opied13.txt
                                      secondDir, hello test12.txt
emo1
                           msg.txt
emo12.txt
                                                        test13.txt
rishtirupa@linux:-$ zcat demo.txt
lex - 50
le - 70
on - 75
arry - 85
elena - 90
ustin - 80
```

/Documents/demo2.txt

```
1% /run
tmpfs
                         317876
                                          1500
                                                    316376
                                                                 33% /
/dev/sda3
                       52380056 16118100
                                                   33568736
                                                                  0% /dev/shm
tmpfs
                        1589376
                                              0
                                                    1589376
                                                                   1% /run/lock
tmpfs
                            5120
                                              4
                                                        5116
                                                                   2% /boot/efi
/dev/sda2
                          524252
                                          6216
                                                      518036
                          317872
                                                      317760
tmpfs
                                           112
                                                                   1% /run/user/1000
srishtirupa@linux:~$ 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 |
         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[cops] { 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]}
                             -c[olor]}
srishtirupa@linux:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
      link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
     inet 127.0.0.1/8 scope host lo
          valid_lft forever preferred_lft forever
     inet6 ::1/128 scope host
  valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
     link/ether 08:00:27:ea:eb:9a brd ff:ff:ff:ff:ff
     inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
  valid_lft 84163sec preferred_lft 84163sec
      inet6 fe80::b66b:a033:477:70c7/64 scope link noprefixroute
          valid_lft forever preferred_lft forever
srishtirupa@linux:-$ man ip
srishtirupa@linux:~$
srishtirupa@linux:~$ ping google.com
PING google.com (142.250.183.142) 56(84) bytes of data.
64 bytes from bom07s31-in-f14.1e100.net (142.250.183.142): icmp_seq=1 ttl=110 time=101 ms 64 bytes from bom07s31-in-f14.1e100.net (142.250.183.142): icmp_seq=2 ttl=110 time=115 ms
64 bytes from bom07s31-in-f14.1e100.net (142.250.183.142): icmp_seq=3 ttl=110 time=128 ms
64 bytes from bom07s31-in-f14.1e100.net (142.250.183.142): icmp_seq=4 ttl=110 time=139 ms
64 bytes from bom07s31-in-f14.1e100.net (142.250.183.142): icmp_seq=5 ttl=110 time=161 ms
```

Used Available Use% Mounted on

srishtirupa@linux:~\$ df

1K-blocks

Filesystem

```
srishtirupa@linux:~$ host google.com
google.com has address 142.250.183.142
google.com has IPv6 address 2404:6800:4009:824::200e
google.com mail is handled by 10 smtp.google.com.
srishtirupa@linux:-$ hostname
linux
srishtirupa@linux:-$ history
   1 ls
   2 pwd
   3 ls
   4 ls -a
   5 ls -l
   6
      pwd
   7
      mkdir FirstDir
   8 ls
   9
      mkdir secondDir,hello
  10
      lf
  11 ls -r
      Touch Test1
  12
  13
     touch Test1
  14
      ls
  15
      cat test2
  16
      cat > test2
      ls
  17
  18
     cat test2
  19
      cat Test1 test2 > test3
  20
      ls
  21 vat test3
  22
      cat test3
  23
      clear
  24
      whoami
      hostnamectl
  25
  26 cal
  27
      sudo apt install ncal
  28
      apt install ncal
  29
      sudo apt install ncal
      cd
  30
  31
      passwd
  32
      su passwd
  33
      root passwd
```

34 cal

```
197
      sort marks.txt
 198
     ls
 199
      gzip demo.txt demo2.txt
 200 ls
 201
      gunzip demo.txt demo2.txt
 202
      ls
      find . -name "*.txt"
 203
      locate sysctl.conf
 204
 205
      date
 206
      cal
 207
     time
 208 gzip demo.txt demo2.txt
 209 ls
 210 zcat demo.txt
 211 df
 212
      ip
 213 man ip
 214
      ping google.com
 215
      host google.com
 216
      hostname
 217
     history
srishtirupa@linux: $ top
```

top - 15:04:24 up 40 min, 1 user, load average: 0.30, 0.24, 0.36 Tasks: **206** total, **1** running, **199** sleeping, **6** stopped, **0** zombie %Cpu(s): **16.3** us, **11.6** sy, **0.0** ni, **72.1** id, **0.0** wa, **0.0** hi, **0.0** si, **0.0** st MiB Mem : **3104.3** total, **1444.5** free, **797.6** used, **862.1** buff/cache MiB Swap: **4840.0** total, **4840.0** free, **0.0** used. **2112.5** avail Mem

			$\overline{}$	$\overline{}$					· ·	, ,	
PIL	D USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM		COMMAND
1357	7 srishti+	20	0	4548668	375824	136640	S	10.0	11.8	3:10.23	gnome-s+
3229	9 srishti+	20	0	21732	4012	3416	R	10.0	0.1	0:00.07	
1	1 root	20	0	166580	11696	8180	S	0.0	0.4	0:04.62	systemd
2	2 root	20	0	0	0	0	S	0.0	0.0	0:00.01	kthreadd
	3 root	0	-20	0	0	0	Ι	0.0	0.0	0:00.00	
1.5	4 root	0	-20	0	0	0	Ι	0.0	0.0	0:00.00	rcu_par+
	5 root	0	-20	0	0	0	Ι	0.0	0.0		slub_fl+
0	6 root	0	-20	0	0	0	Ι	0.0	0.0	0:00.00	netns
8	8 root	0	-20	0	0	0	Ι	0.0	0.0	0:00.00	kworker+
10	0 root	0	-20	0	0	0	Ι	0.0	0.0	0:00.00	mm_perc+
1:	1 root	20	0	0	0	0	Ι	0.0	0.0		rcu_tas+
12	2 root	20	0	0	0	0	I	0.0	0.0	0:00.00	rcu_tas+
1.	3 root	20	0	0	0	0	Ι	0.0	0.0		rcu_tas+
14	4 root	20	0	0	0	0	S	0.0	0.0		ksoftir+
1.	5 root	20	0	0	0	0	Ι	0.0	0.0	0:02.51	rcu_pre+
10	6 root	rt	0	0	0	0	S	0.0	0.0		migrati+
1	7 root	-51	0	0	0	0	S	0.0	0.0		idle_in+
7]+ 9	Stopped			top	9						
16 2 1 1 1											

```
apt install sysstat
Please ask your administrator.
srishtirupa@linux:-$ lsblk
NAME
       MAJ:MIN RM
                     SIZE RO TYPE MOUNTPOINTS
loop0
         7:0
                 0
                       4K
                           1 loop /snap/bare/5
         7:1
                 0
                      62M
                           1 loop /snap/core20/1587
loop1
loop2
         7:2
                 0
                    63.3M
                           1 loop /snap/core20/1852
loop3
         7:3
                 0
                      73M
                           1 loop /snap/core22/607
loop4
         7:4
                 0
                  163.3M
                           1 loop /snap/firefox/1635
loop5
         7:5
                 0 241.9M
                           1 loop /snap/firefox/2559
loop6
         7:6
                  400.8M
                           1 loop /snap/gnome-3-38-2004/112
loop7
         7:7
                  349.7M
                           1 loop /snap/gnome-3-38-2004/137
                 0
         7:8
                 0 460.4M
                          1 loop /snap/gnome-42-2204/68
loop8
loop9
         7:9
                  460.6M
                          1 loop /snap/gnome-42-2204/87
         7:10
                    91.7M
                           1 loop /snap/gtk-common-themes/1535
loop10
                 0
                 0
                    45.9M
                           1 loop /snap/snap-store/582
loop11
         7:11
                    45.9M
                           1 loop /snap/snap-store/638
loop12
         7:12
                 0
                           1 loop /snap/snapd/18596
                    49.8M
loop13
         7:13
                 0
loop14
         7:14
                 0
                     284K
                           1 loop /snap/snapd-desktop-integration/14
                           1 loop /snap/snapd-desktop-integration/57
loop15
         7:15
                 0
                     428K
                           0 disk
sda
         8:0
                 0
                    51.6G
                 0
         8:1
                       1M
                           0 part
 -sda1
 -sda2
         8:2
                 0
                     513M
                           0 part /boot/efi
                           0 part /var/snap/firefox/common/host-hunspell
 -sda3
         8:3
                    51.1G
                    1024M
sr0
        11:0
                 1
                           0 rom
srishtirupa@linux:-$
```

srishtirupa@linux:-\$ iostat

Command 'iostat' not found, but can be installed with: