```
anushka@anushka-VirtualBox:~$ su anushka
Password:
anushka@anushka-VirtualBox:~$ htop
Command 'htop' not found, but can be installed with:
sudo snap install htop  # version 3.2.1, or
sudo apt  install htop  # version 3.0.5-7build2
See 'snap info htop' for additional versions.
anushka@anushka-VirtualBox:~$ ps
    PID TTY          TIME CMD
   3307 pts/3    00:00:00 bash
   3372 pts/3    00:00:00 bash
   3392 pts/3    00:00:00 ps
anushka@anushka-VirtualBox:~$
```

anushka@anushka-VirtualBox: ~/xyz

root@anushk...   ×   anushka@anu...   ×   anushka@anu...   ×   anushka@anu...   ×

```bash
  GNU nano 6.2                        hello_world.sh *
#!/bin/bash
echo
echo $*
echo
echo $@
echo
echo $#
echo
echo $-
echo
echo $$
echo
echo $!
echo
echo $0
echo
echo $_
echo
echo $?
echo
```

^G Help   ^O Write Out   ^W Where Is   ^K Cut   ^T Execute
^X Exit   ^R Read File   ^\ Replace   ^U Paste   ^J Justify

root@anushk... ✕   anushka@anu... ✕   anushka@anu... ✕   anushka@anu... ✕   ⌄

```
anushka@anushka-VirtualBox:~$ echo'echo Hello World!' >hello_world.sh
echoecho Hello World!: command not found
anushka@anushka-VirtualBox:~$ cat hello_world.sh
anushka@anushka-VirtualBox:~$ bash hello_world.sh
anushka@anushka-VirtualBox:~$ echo 'echo Hello World'>hello_world.sh
anushka@anushka-VirtualBox:~$ cat hello_world.sh
echo Hello World
anushka@anushka-VirtualBox:~$ cat<<ALLDONE>
> hello_world_multiline.sh
> echo Hello World!
> echo Yet another line.
> echo This is getting boring
> ALLDONE
bash: syntax error near unexpected token `newline'
anushka@anushka-VirtualBox:~$ cat<< ALLDONE >
> ^C
anushka@anushka-VirtualBox:~$ cat <<ALLDONE>
> ^C
anushka@anushka-VirtualBox:~$ cd xyz
bash: cd: xyz: No such file or directory
anushka@anushka-VirtualBox:~$ mkdir xyz
anushka@anushka-VirtualBox:~$ cd xyz
anushka@anushka-VirtualBox:~/xyz$ touch hello-world.sh
anushka@anushka-VirtualBox:~/xyz$ nano hello-world.sh
anushka@anushka-VirtualBox:~/xyz$ chmod+x hello-world.sh
chmod+x: command not found
anushka@anushka-VirtualBox:~/xyz$ ./hello-world.sh
```

anushka@anushka-VirtualBox: ~

```
anushka@anushka-VirtualBox:~$ cd xyz
anushka@anushka-VirtualBox:~/xyz$ touch hello-world.sh
anushka@anushka-VirtualBox:~/xyz$ nano hello-world.sh
anushka@anushka-VirtualBox:~/xyz$ chmod+x hello-world.sh
chmod+x: command not found
anushka@anushka-VirtualBox:~/xyz$ ./hello-world.sh
bash: ./hello-world.sh: Permission denied
anushka@anushka-VirtualBox:~/xyz$ bash -x -v hello_world.sh
bash: hello_world.sh: No such file or directory
anushka@anushka-VirtualBox:~/xyz$ mkdir hello_world
anushka@anushka-VirtualBox:~/xyz$ bash -x-v hello_world.sh
bash: --: invalid option
Usage:  bash [GNU long option] [option] ...
        bash [GNU long option] [option] script-file ...
GNU long options:
        --debug
        --debugger
        --dump-po-strings
        --dump-strings
        --help
        --init-file
        --login
        --noediting
        --noprofile
        --norc
        --posix
        --pretty-print
```

⊞   **anushka@anushka-VirtualBox: ~**   Q ≡ — ◻ ✕

root@anushk... ✕   anushka@anu... ✕   anushka@anu... ✕   anushka@anu... ✕   ⌄

```
        --rcfile
        --restricted
        --verbose
        --version
Shell options:
        -ilrsD or -c command or -O shopt_option        (invocation only)
        -abefhkmnptuvxBCHP or -o option
anushka@anushka-VirtualBox:~/xyz$ nano hello_world.sh
anushka@anushka-VirtualBox:~/xyz$ xp.sh
xp.sh: command not found
anushka@anushka-VirtualBox:~/xyz$ nano hello_world.sh
anushka@anushka-VirtualBox:~/xyz$ xp.sh
xp.sh: command not found
anushka@anushka-VirtualBox:~/xyz$  xp.sh
xp.sh: command not found
anushka@anushka-VirtualBox:~/xyz$ hello-world.sh
Command 'hello-world.sh' not found, but can be installed with:
sudo snap install hello-world
anushka@anushka-VirtualBox:~/xyz$ ^C
anushka@anushka-VirtualBox:~/xyz$
anushka@anushka-VirtualBox:~/xyz$ q
Command 'q' not found, but can be installed with:
sudo snap install q                     # version 1.6.3-1, or
sudo apt  install python3-q-text-as-data  # version 3.1.6-1
See 'snap info q' for additional versions.
anushka@anushka-VirtualBox:~/xyz$ cd
anushka@anushka-VirtualBox:~$ ((...))=>
```

```
anushka@anushka-VirtualBox:~$ echo $((12-7))
5
anushka@anushka-VirtualBox:~$ a=1
anushka@anushka-VirtualBox:~$ let a++
anushka@anushka-VirtualBox:~$ echo $a
2
anushka@anushka-VirtualBox:~$ echo uname -n
uname -n
anushka@anushka-VirtualBox:~$ echo 'uname -n'
uname -n
anushka@anushka-VirtualBox:~$ echo $(uname -n)
anushka-VirtualBox
anushka@anushka-VirtualBox:~$ $file<file.txt>
bash: syntax error near unexpected token `newline'
anushka@anushka-VirtualBox:~$ #!/bin/bash
anushka@anushka-VirtualBox:~$ greeting ="Welcome"
greeting: command not found
anushka@anushka-VirtualBox:~$ user=$(whoami)
anushka@anushka-VirtualBox:~$ day=$(date+%A)
date+%A: command not found
anushka@anushka-VirtualBox:~$ .........
.........: command not found
anushka@anushka-VirtualBox:~$ a=4
anushka@anushka-VirtualBox:~$ b=8
anushka@anushka-VirtualBox:~$ echo $a
4
anushka@anushka-VirtualBox:~$ echo $b
```

```
anushka@anushka-VirtualBox:~$ echo $a
4
anushka@anushka-VirtualBox:~$ echo $b
8
anushka@anushka-VirtualBox:~$ echo $[$a+$b]
12
anushka@anushka-VirtualBox:~$ array=(a b c)
anushka@anushka-VirtualBox:~$ echo ${array[*]}
a b c
anushka@anushka-VirtualBox:~$ echo ${array[2]}
c
anushka@anushka-VirtualBox:~$ echo ${#array[*]}
3
anushka@anushka-VirtualBox:~$ cmd< x.in
bash: x.in: No such file or directory
anushka@anushka-VirtualBox:~$ .....
.....: command not found
anushka@anushka-VirtualBox:~$ ls -l foobar
ls: cannot access 'foobar': No such file or directory
anushka@anushka-VirtualBox:~$ mkdir foobar
anushka@anushka-VirtualBox:~$ ls -l foobar
total 0
anushka@anushka-VirtualBox:~$ touch foobar
anushka@anushka-VirtualBox:~$ ls -l foobar
total 0
anushka@anushka-VirtualBox:~$ ls foobar barfoo
ls: cannot access 'barfoo': No such file or directory
```

```
anushka@anushka-VirtualBox:~$ .....
.....: command not found
anushka@anushka-VirtualBox:~$ ls -l foobar
ls: cannot access 'foobar': No such file or directory
anushka@anushka-VirtualBox:~$ mkdir foobar
anushka@anushka-VirtualBox:~$ ls -l foobar
total 0
anushka@anushka-VirtualBox:~$ touch foobar
anushka@anushka-VirtualBox:~$ ls -l foobar
total 0
anushka@anushka-VirtualBox:~$ ls foobar barfoo
ls: cannot access 'barfoo': No such file or directory
foobar:
anushka@anushka-VirtualBox:~$ ls foobar barfoo > stdout.txt
ls: cannot access 'barfoo': No such file or directory
anushka@anushka-VirtualBox:~$ ls foobar barfoo 2> stderr.txt
foobar:
anushka@anushka-VirtualBox:~$ ls foobar barfoo &>stdoutandstderr.txt
anushka@anushka-VirtualBox:~$ cat stdout.txt
foobar:
anushka@anushka-VirtualBox:~$ cat stderr.txt
ls: cannot access 'barfoo': No such file or directory
anushka@anushka-VirtualBox:~$ cat stdoutandstderr.txt
ls: cannot access 'barfoo': No such file or directory
foobar:
anushka@anushka-VirtualBox:~$ ....
....: command not found
```

```
See 'snap info <snapname>' for additional versions.
anushka@anushka-VirtualBox:~$ .....
.....: command not found
anushka@anushka-VirtualBox:~$ a=1
anushka@anushka-VirtualBox:~$ b=2
anushka@anushka-VirtualBox:~$ [$a-lt $b]
[1-lt: command not found
anushka@anushka-VirtualBox:~$ ....
....: command not found
anushka@anushka-VirtualBox:~$ a=1
anushka@anushka-VirtualBox:~$ b-2
Command 'b-2' not found, did you mean:
  command 'b2' from deb libboost1.74-tools-dev (1.74.0-14ubuntu3)
Try: sudo apt install <deb name>
anushka@anushka-VirtualBox:~$ a=1
anushka@anushka-VirtualBox:~$ b=2
anushka@anushka-VirtualBox:~$ [$a -1t $b]
[1: command not found
anushka@anushka-VirtualBox:~$ echo $?
127
anushka@anushka-VirtualBox:~$ ["apples"="oranges"]
[apples=oranges]: command not found
anushka@anushka-VirtualBox:~$ echo $?
127
```

```
anushka@anushka-VirtualBox:~$ str1="apples"
anushka@anushka-VirtualBox:~$ str2="oranges"
anushka@anushka-VirtualBox:~$ [$str1 = $str2]
[apples: command not found
anushka@anushka-VirtualBox:~$ echo $?
127
anushka@anushka-VirtualBox:~$ ...
...: command not found
anushka@anushka-VirtualBox:~$ a=$((12+5))
anushka@anushka-VirtualBox:~$ echo $a
17
anushka@anushka-VirtualBox:~$ echo $((12+5))
17
anushka@anushka-VirtualBox:~$ echo $((100-1))
99
anushka@anushka-VirtualBox:~$ echo $((3*11))
33
anushka@anushka-VirtualBox:~$ dividion=$((100/10))
anushka@anushka-VirtualBox:~$ echo $division

anushka@anushka-VirtualBox:~$ division =$((100/10))
division: command not found
anushka@anushka-VirtualBox:~$ dividion=$((100/10))
anushka@anushka-VirtualBox:~$ echo $dividion
10
```

```
anushka@anushka-VirtualBox:~$ $ x=10;y=33;
$: command not found
anushka@anushka-VirtualBox:~$ x=10;y=33
anushka@anushka-VirtualBox:~$ z=$(($x*$y))
anushka@anushka-VirtualBox:~$ echo $z
330
anushka@anushka-VirtualBox:~$ expr 2+2
2+2
anushka@anushka-VirtualBox:~$ expr 6*6
6*6
anushka@anushka-VirtualBox:~$ let a=2+2
anushka@anushka-VirtualBox:~$ echo $a
4
anushka@anushka-VirtualBox:~$ let b=4*($a-1)
anushka@anushka-VirtualBox:~$ echo $b
12
anushka@anushka-VirtualBox:~$ let c=($b**3)/2
anushka@anushka-VirtualBox:~$ echo $c
864
anushka@anushka-VirtualBox:~$ let c++
anushka@anushka-VirtualBox:~$ echo $c
865
anushka@anushka-VirtualBox:~$ let c--
anushka@anushka-VirtualBox:~$ echo $c
864
```

```
anushka@anushka-VirtualBox:~$ echo '8.5/2.3'| bc
3
anushka@anushka-VirtualBox:~$ echo 'scale=2;8.5/2.3'| bc
3.69
anushka@anushka-VirtualBox:~$ echo 'scale=30;8.5/2.3'| bc
3.695652173913043478260869565217
anushka@anushka-VirtualBox:~$ squareroot=$(echo 'scale=50;sqrt(50)'| bc)
anushka@anushka-VirtualBox:~$ echo $squareroot
7.07106781186547524400844362104849039284835937688474
anushka@anushka-VirtualBox:~$
```

```
anushka@anushka-VirtualBox:~$ sudo
usage: sudo -h | -K | -k | -V
usage: sudo -v [-ABknS] [-g group] [-h host] [-p prompt] [-u user]
usage: sudo -l [-ABknS] [-g group] [-h host] [-p prompt] [-U user] [-u user]
           [command]
usage: sudo [-ABbEHknPS] [-r role] [-t type] [-C num] [-D directory] [-g
           group] [-h host] [-p prompt] [-R directory] [-T timeout] [-u user]
           [VAR=value] [-i|-s] [<command>]
usage: sudo -e [-ABknS] [-r role] [-t type] [-C num] [-D directory] [-g group]
           [-h host] [-p prompt] [-R directory] [-T timeout] [-u user] file
           ...
anushka@anushka-VirtualBox:~$ pwd
/home/anushka
anushka@anushka-VirtualBox:~$ cd
anushka@anushka-VirtualBox:~$ cd Desktop
anushka@anushka-VirtualBox:~/Desktop$ pwd
/home/anushka/Desktop
anushka@anushka-VirtualBox:~/Desktop$ ls
anushka@anushka-VirtualBox:~/Desktop$ cd..
cd..: command not found
anushka@anushka-VirtualBox:~/Desktop$ cd ..
anushka@anushka-VirtualBox:~$ cat file.txt-a.txt
cat: file.txt-a.txt: No such file or directory
anushka@anushka-VirtualBox:~$ cat f-g
cat: f-g: No such file or directory
anushka@anushka-VirtualBox:~$ cd file.txt-a.txt
bash: cd: file.txt-a.txt: No such file or directory
```

```
cat: f-g: No such file or directory
anushka@anushka-VirtualBox:~$ cd file.txt-a.txt
bash: cd: file.txt-a.txt: No such file or directory
anushka@anushka-VirtualBox:~$ cd file.txt-a.txt
bash: cd: file.txt-a.txt: No such file or directory
anushka@anushka-VirtualBox:~$ cp file.txt a.txt
anushka@anushka-VirtualBox:~$ mv file.txt a.txt
anushka@anushka-VirtualBox:~$ mkdir
mkdir: missing operand
Try 'mkdir --help' for more information.
anushka@anushka-VirtualBox:~$ mkdir file.txt a.txt
mkdir: cannot create directory 'a.txt': File exists
anushka@anushka-VirtualBox:~$ mkdir file.txt
mkdir: cannot create directory 'file.txt': File exists
anushka@anushka-VirtualBox:~$ mv file.txt a.txt
mv: cannot overwrite non-directory 'a.txt' with directory 'file.txt'
anushka@anushka-VirtualBox:~$ mv a.txt file.txt
anushka@anushka-VirtualBox:~$ rmdir file.txt
rmdir: failed to remove 'file.txt': Directory not empty
anushka@anushka-VirtualBox:~$ mkdir b.txt
mkdir: cannot create directory 'b.txt': File exists
anushka@anushka-VirtualBox:~$ mkdir
mkdir: missing operand
Try 'mkdir --help' for more information.
anushka@anushka-VirtualBox:~$ mkdir 112103011
anushka@anushka-VirtualBox:~$ touch web
anushka@anushka-VirtualBox:~$ find find -f
```

```
find: unknown predicate `-f'
anushka@anushka-VirtualBox:~$ find 112103011
112103011
anushka@anushka-VirtualBox:~$ grep file.txt
df -h
df -m
df -k

^C
anushka@anushka-VirtualBox:~$ df-T
df-T: command not found
anushka@anushka-VirtualBox:~$ du file.txt
8        file.txt
anushka@anushka-VirtualBox:~$ du 112103011
4        112103011
anushka@anushka-VirtualBox:~$ head file.txt
head: error reading 'file.txt': Is a directory
anushka@anushka-VirtualBox:~$ head a.txt
head: cannot open 'a.txt' for reading: No such file or directory
anushka@anushka-VirtualBox:~$ head 112103011
head: error reading '112103011': Is a directory
anushka@anushka-VirtualBox:~$ head b.txt
anushka@anushka-VirtualBox:~$ head -n
head: option requires an argument -- 'n'
Try 'head --help' for more information.
anushka@anushka-VirtualBox:~$ head b.txt
abcdef
```

```
anushka@anushka-VirtualBox:~$ head b.txt
abcdef
pqrs

anushka@anushka-VirtualBox:~$ head -n
head: option requires an argument -- 'n'
Try 'head --help' for more information.
anushka@anushka-VirtualBox:~$ head --lines
head: option '--lines' requires an argument
Try 'head --help' for more information.
anushka@anushka-VirtualBox:~$ tail -n 2file.txt
tail: invalid number of lines: '2file.txt'
anushka@anushka-VirtualBox:~$ tail -n 2b.txt
tail: invalid number of lines: '2b.txt'
anushka@anushka-VirtualBox:~$ tail -n 1b.txt
tail: invalid number of lines: '1b.txt'
anushka@anushka-VirtualBox:~$ tail -n 5.txt
tail: invalid number of lines: '5.txt'
anushka@anushka-VirtualBox:~$ tail -n 5b.txt
tail: invalid number of lines: '5b.txt'
anushka@anushka-VirtualBox:~$ diff file.txt b.txt
diff: file.txt/b.txt: No such file or directory
anushka@anushka-VirtualBox:~$ diff a.txt b.txt
diff: a.txt: No such file or directory
```

```
anushka@anushka-VirtualBox:~$ diff b.txt c.txt
1,11d0
< abcdef
< pqrs
< g
< n
< u
< f
< n
< f
< o
< l
<
```

```
<
anushka@anushka-VirtualBox:~$ tar 112103011
tar: Options '-[0-7][lmh]' not supported by *this* tar
Try 'tar --help' or 'tar --usage' for more information.
anushka@anushka-VirtualBox:~$ tar c.txt
tar: invalid option -- '.'
Try 'tar --help' or 'tar --usage' for more information.
anushka@anushka-VirtualBox:~$ tar b.txt
tar: Old option 'b' requires an argument.
Try 'tar --help' or 'tar --usage' for more information.
anushka@anushka-VirtualBox:~$ tar -c.txt
tar: invalid option -- '.'
Try 'tar --help' or 'tar --usage' for more information.
anushka@anushka-VirtualBox:~$ chmod file.txt
chmod: missing operand after 'file.txt'
Try 'chmod --help' for more information.
anushka@anushka-VirtualBox:~$ chmode -c
Command 'chmode' not found, did you mean:
  command 'chmod' from deb coreutils (8.32-4.1ubuntu1)
Try: sudo apt install <deb name>
anushka@anushka-VirtualBox:~$ chmod -c
chmod: missing operand
Try 'chmod --help' for more information.
```

```
anushka@anushka-VirtualBox:~$ chown anushka c.txt
anushka@anushka-VirtualBox:~$ job jobID
Command 'job' not found, did you mean:
   command 'mob' from snap mob-sh (4.1.1)
   command 'jo' from snap jo (1.9)
   command 'jtb' from deb jtb (1.4.12-2)
   command 'jdb' from deb openjdk-11-jdk-headless (11.0.17+8-1ubuntu2~22.04)
   command 'jdb' from deb openjdk-17-jdk-headless (17.0.5+8-2ubuntu1~22.04)
   command 'jdb' from deb openjdk-18-jdk-headless (18.0.2+9-2~22.04)
   command 'jdb' from deb openjdk-19-jdk-headless (19.0.1+10-1ubuntu1~22.04)
   command 'jdb' from deb openjdk-8-jdk-headless (8u352-ga-1~22.04)
   command 'jo' from deb jo (1.4-1)
   command 'joe' from deb joe (4.6-1build2)
   command 'joe' from deb joe-jupp (3.1.40-1)
   command 'jot' from deb athena-jot (9.0-8)
   command 'wob' from deb wob (0.12-1)
See 'snap info <snapname>' for additional versions.
anushka@anushka-VirtualBox:~$ jobs jobID
bash: jobs: jobID: no such job
anushka@anushka-VirtualBox:~$ jobs
anushka@anushka-VirtualBox:~$ -l
-l: command not found
anushka@anushka-VirtualBox:~$ jobs -l
anushka@anushka-VirtualBox:~$ jobs -n
anushka@anushka-VirtualBox:~$ jobs -p
anushka@anushka-VirtualBox:~$ kil pid
```

```
anushka@anushka-VirtualBox:~$ kill pid
bash: kill: pid: arguments must be process or job IDs
anushka@anushka-VirtualBox:~$ ping c.txt
ping: c.txt: Temporary failure in name resolution
anushka@anushka-VirtualBox:~$ wget url
--2023-01-19 22:56:19--  http://url/
Resolving url (url)...

^C
anushka@anushka-VirtualBox:~$ wget https://www.loggly.com/wp-content/uploads/2
15/05/Linux-Cheat_Sheet-Sponsored-By-Loggly.pdf
--2023-01-19 22:58:03--  https://www.loggly.com/wp-content/uploads/2015/05/Lir
x-Cheat_Sheet-Sponsored-By-Loggly.pdf
Resolving www.loggly.com (www.loggly.com)... ^C
anushka@anushka-VirtualBox:~$ uname
Linux
anushka@anushka-VirtualBox:~$ uname -a
Linux anushka-VirtualBox 5.15.0-43-generic #46-Ubuntu SMP Tue Jul 12 10:30:17
TC 2022 x86_64 x86_64 x86_64 GNU/Linux
anushka@anushka-VirtualBox:~$ uname -s
Linux
anushka@anushka-VirtualBox:~$ uname -n
anushka-VirtualBox
```

```
anushka@anushka-VirtualBox:~$ top

top - 22:59:29 up  1:12,  2 users,  load average: 0.11, 0.06, 0.10
Tasks: 180 total,   1 running, 179 sleeping,   0 stopped,   0 zombie
%Cpu(s):  1.0 us,  0.0 sy,  0.0 ni, 99.0 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 s
MiB Mem :   1977.7 total,     89.0 free,    770.8 used,   1117.9 buff/cache
MiB Swap:   2680.0 total,   2679.7 free,      0.3 used.   1006.9 avail Mem

  PID USER        PR  NI    VIRT    RES    SHR S  %CPU  %MEM     TIME+ COMMAND
 1737 anushka     20   0   83.7g 141336 105728 S   1.3   7.0   0:47.36 gnome--
  390 systemd+    20   0   25524  13800   9652 S   0.3   0.7   0:00.86 system-
 1385 anushka     20   0 3743680 322076 133976 S   0.3  15.9   1:41.55 gnome--
 1876 anushka     20   0  570652  52476  39892 S   0.3   2.6   0:12.24 gnome--
 3283 anushka     20   0   21732   3928   3332 R   0.3   0.2   0:00.02 top
    1 root        20   0  166688  11836   8272 S   0.0   0.6   0:01.69 systemc
    2 root        20   0       0      0      0 S   0.0   0.0   0:00.00 kthrea-
    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_pa-
    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 kworke-
   10 root         0 -20       0      0      0 I   0.0   0.0   0:00.00 mm_per-
   11 root        20   0       0      0      0 S   0.0   0.0   0:00.00 rcu_ta-
   12 root        20   0       0      0      0 S   0.0   0.0   0:00.00 rcu_ta-
   13 root        20   0       0      0      0 S   0.0   0.0   0:00.33 ksofti-
   14 root        20   0       0      0      0 I   0.0   0.0   0:01.49 rcu_sc-
   15 root        rt   0       0      0      0 S   0.0   0.0   0:00.06 migrat-
   16 root       -51   0       0      0      0 S   0.0   0.0   0:00.00 idle_i-
```

```
anushka@anushka-VirtualBox:~$ history
    1  vi hello.c
    2  gcc -v
    3  sudo apt-get install gcc
    4  vi gcc.c
    5  gcc --version
    6  sudo apt install build-essential
    7  sudo apt update
    8  sudo
    9  pwd
   10  cd
   11  cd Desktop
   12  pwd
   13  ls
   14  cd..
   15  cd ..
   16  cat file.txt-a.txt
   17  cat f-g
   18  cd file.txt-a.txt
   19  cp file.txt a.txt
   20  mv file.txt a.txt
   21  mkdir
   22  mkdir file.txt a.txt
   23  mkdir file.txt
   24  mv file.txt a.txt
   25  mv a.txt file.txt
```

```
24  mv file.txt a.txt
25  mv a.txt file.txt
26  rmdir file.txt
27  mkdir b.txt
28  mkdir
29  mkdir 112103011
30  touch web
31  find find -f
32  find 112103011
33  grep file.txt
34  df-T
35  du file.txt
36  du 112103011
37  head file.txt
38  head a.txt
39  head 112103011
40  head b.txt
41  head -n
42  head b.txt
43  head -n
44  head --lines
45  tail -n 2file.txt
46  tail -n 2b.txt
47  tail -n 1b.txt
48  tail -n 5.txt
49  tail -n 5b.txt
```

```
48  tail -n 5.txt
49  tail -n 5b.txt
50  diff file.txt b.txt
51  diff a.txt b.txt
52  diff b.txt c.txt
53  tar 112103011
54  tar c.txt
55  tar b.txt
56  tar -c.txt
57  chmod file.txt
58  chmode -c
59  chmod -c
60  chown anushka c.txt
61  job jobID
62  jobs jobID
63  jobs
64  -l
65  jobs -l
66  jobs -n
67  jobs -p
68  kil pid
69  kill pid
70  ping c.txt
71  wget url
72  wget https://www.loggly.com/wp-content/uploads/2015/05/Linux-Cheat_Shee
-Sponsored-By-Loggly.pdf
```

```
   73  uname
   74  uname -a
   75  uname -s
   76  uname -n
   77  top
   78  history
anushka@anushka-VirtualBox:~$ man ls
anushka@anushka-VirtualBox:~$
```

```
anushka@anushka-VirtualBox:~$ echo anushka
anushka
anushka@anushka-VirtualBox:~$ echo -n
anushka@anushka-VirtualBox:~$ echo -e

anushka@anushka-VirtualBox:~$ zip 112103011.zip c.txt
  adding: c.txt (stored 0%)
anushka@anushka-VirtualBox:~$ unzip 112103011.zip
Archive:  112103011.zip
replace c.txt? [y]es, [n]o, [A]ll, [N]one, [r]ename: y
 extracting: c.txt
anushka@anushka-VirtualBox:~$ hostname
anushka-VirtualBox
anushka@anushka-VirtualBox:~$ useradd anushka
useradd: user 'anushka' already exists
anushka@anushka-VirtualBox:~$ useradd xyz
useradd: Permission denied.
useradd: cannot lock /etc/passwd; try again later.
```

```
anushka@anushka-VirtualBox:~$ apt-get upgrade
E: Could not open lock file /var/lib/dpkg/lock-frontend - open (13: Permission
denied)
E: Unable to acquire the dpkg frontend lock (/var/lib/dpkg/lock-frontend), are
you root?
anushka@anushka-VirtualBox:~$ apt-get update
Reading package lists... Done
E: Could not open lock file /var/lib/apt/lists/lock - open (13: Permission den
ed)
E: Unable to lock directory /var/lib/apt/lists/
W: Problem unlinking the file /var/cache/apt/pkgcache.bin - RemoveCaches (13:
ermission denied)
W: Problem unlinking the file /var/cache/apt/srcpkgcache.bin - RemoveCaches (
: Permission denied)
anushka@anushka-VirtualBox:~$ nano c.txt
anushka@anushka-VirtualBox:~$ vi add
anushka@anushka-VirtualBox:~$ alias k='kill'
anushka@anushka-VirtualBox:~$ unalias k
anushka@anushka-VirtualBox:~$ su abc
su: user abc does not exist or the user entry does not contain all the require
 fields
```