NAME - VIJAY VISHAL

ROLL NO. -2105594

ASSIGNMENT - 1

1.
```
kiit@BT-2105594:~$ pwd
/home/kiit
```

2.
```
kiit@BT-2105594:~$ ls
Desktop  Documents  Downloads  Music  Pictures  Public  Templates  Videos  thinclient_drives
```

3.
```
kiit@BT-2105594:~$ who
```

4.
```
kiit@BT-2105594:~$ cd Desktop
kiit@BT-2105594:~/Desktop$
```

5.
```
kiit@BT-2105594:~/Desktop$ mkdir OSLAB
```

6.

```
kiit@BT-2105594:~/Desktop$ date
Thu Jan 12 13:22:46 IST 2023
```

7.

```
kiit@BT-2105594:~/Desktop$ touch os1.txt
```

8.

```
kiit@BT-2105594:~/Desktop$ echo I am Vijay Vishal. >>os1.txt
kiit@BT-2105594:~/Desktop$ echo I live in Lucknow. >>os1.txt
```

9.

```
kiit@BT-2105594:~/Desktop$ cat os1.txt
I am Vijay Vishal.
I live in Lucknow.
```

10.

```
kiit@BT-2105594:~/Desktop$ touch os1_copy.txt
kiit@BT-2105594:~/Desktop$ cp os1.txt os1_copy.txt
kiit@BT-2105594:~/Desktop$ cat os1_copy.txt
I am Vijay Vishal.
I live in Lucknow.
```

11.

```
kiit@BT-2105594:~/Desktop$ echo I like sports. >>os1_copy.txt
kiit@BT-2105594:~/Desktop$ cat os1_copy.txt
I am Vijay Vishal.
I live in Lucknow.
I like sports.
kiit@BT-2105594:~/Desktop$ wc os1_copy.txt
 3 11 53 os1_copy.txt
```

12.

```
kiit@BT-2105594:~/Desktop$ wc -l os1_copy.txt
3 os1_copy.txt
```

13.
```
kiit@BT-2105594:~/Desktop$ wc -w os1_copy.txt
11 os1_copy.txt
```

14.
```
kiit@BT-2105594:~/Desktop$ wc -c os1_copy.txt
53 os1_copy.txt
```

15.
```
kiit@BT-2105594:~/Desktop$ head -1 os1_copy.txt
I am Vijay Vishal.
```

16.
```
kiit@BT-2105594:~/Desktop$ tail -2 os1_copy.txt
I live in Lucknow.
I like sports.
```

17.
```
kiit@BT-2105594:~/Desktop$ time

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

18.

```
kiit@BT-2105594:~/Desktop$ times
0m0.067s 0m0.079s
0m0.024s 0m0.002s
```

19.

```
kiit@BT-2105594:~/Desktop$ mv os1_copy.txt Documents
```

20.

```
kiit@BT-2105594:~/Desktop$ rename 's/os1_copy/os1c/' .txt

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

sudo apt install rename
```

21.

```
kiit@BT-2105594:~/Desktop$ tac os1.txt
I live in Lucknow.
I am Vijay Vishal.
```

22.

```
kiit@BT-2105594:~/Desktop$ cat os1.txt | cat | tac | tac | cat
I am Vijay Vishal.
I live in Lucknow.
```

23.

```
kiit@BT-2105594:~/Desktop$ cut -dI -f2 os1.txt
 am Vijay Vishal.
 live in Lucknow.
```

24.

```
kiit@BT-2105594:~/Desktop$ cat os1.txt | grep Vish
I am Vijay Vishal.
```

25.
```
kiit@BT-2105594:~/Desktop$ touch os1cp.txt
kiit@BT-2105594:~/Desktop$ cp os1.txt os1cp.txt
kiit@BT-2105594:~/Desktop$ echo I like sports. >>os1cp.txt
kiit@BT-2105594:~/Desktop$ comm os1.txt os1cp.txt
                I am Vijay Vishal.
                I live in Lucknow.
        I like sports.
comm: file 2 is not in sorted order
```

26.
```
kiit@BT-2105594:~/Desktop$ echo 4thyear | sed 's/4th/2nd/'
2ndyear
```

27.
```
kiit@BT-2105594:~/Desktop$ cat os1.txt | tee os1cp1.txt | tac
I live in Lucknow.
I am Vijay Vishal.
kiit@BT-2105594:~/Desktop$ cat os1cp1.txt
I am Vijay Vishal.
I live in Lucknow.
```

28.
```
kiit@BT-2105594:~/Desktop$ cat os1cp1.txt | tr 'ajwy' 'AJWY'
I Am ViJAY VishAl.
I live in LucknoW.
```

29.

```
kiit@BT-2105594:~/Desktop$ echo Bull is black. >>os1cp1.txt
kiit@BT-2105594:~/Desktop$ sort os1cp1.txt | uniq
Bull is black.
I am Vijay Vishal.
I live in Lucknow.
```

30.
```
kiit@BT-2105594:~/Desktop$ od -t x1 os1cp1.txt
0000000 49 20 61 6d 20 56 69 6a 61 79 20 56 69 73 68 61
0000020 6c 2e 0a 49 20 6c 69 76 65 20 69 6e 20 4c 75 63
0000040 6b 6e 6f 77 2e 0a 42 75 6c 6c 20 69 73 20 62 6c
0000060 61 63 6b 2e 0a
0000065
```

31.
```
kiit@BT-2105594:~/Desktop$ od -c os1cp1.txt
0000000   I       a   m       V   i   j   a   y       V   i   s   h   a
0000020   l   .  \n   I       l   i   v   e       i   n       L   u   c
0000040   k   n   o   w   .  \n   B   u   l   l       i   s       b   l
0000060   a   c   k   .  \n
0000065
```

32.
```
kiit@BT-2105594:~/Desktop$ sort os1cp1.txt
Bull is black.
I am Vijay Vishal.
I live in Lucknow.
```

33.
```
kiit@BT-2105594:~/Desktop$ gzip os1.txt
kiit@BT-2105594:~/Desktop$ ls
Documents  OSLAB  Vijay123  os1.txt.gz  os1cp.txt  os1cp1.txt  oslab.txt
```

34.

```
kiit@BT-2105594:~/Desktop$ gunzip os1.txt
kiit@BT-2105594:~/Desktop$ ls
Documents  OSLAB  Vijay123  os1.txt  os1cp.txt  os1cp1.txt  oslab.txt
```

35.

```
kiit@BT-2105594:~/Desktop$ find . -name "*.txt"
./oslab.txt
./os1cp.txt
./os1cp1.txt
./os1.txt
```

36.

```
kiit@BT-2105594:~/Desktop$ locate os1.txt

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

sudo apt install mlocate
```

37.

```
kiit@BT-2105594:~/Desktop$ cal
     January 2023
Su Mo Tu We Th Fr Sa
 1  2  3  4  5  6  7
 8  9 10 11 12 13 14
15 16 17 18 19 20 21
22 23 24 25 26 27 28
29 30 31
```

38.

```
kiit@BT-2105594:~/Desktop$ gzip os1.txt
kiit@BT-2105594:~/Desktop$ ls
Documents  OSLAB  Vijay123  os1.txt.gz  os1cp.txt  os1cp1.txt  oslab.txt
kiit@BT-2105594:~/Desktop$ zcat os1.txt
I am Vijay Vishal.
I live in Lucknow.
```

39.

```
kiit@BT-2105594:~/Desktop$ df
Filesystem      1K-blocks      Used  Available Use% Mounted on
/dev/sdb       263174212   2556200 247179856   2% /
none             3903928         4   3903924   1% /mnt/wsl
tools          293999612 155173684 138825928  53% /init
none             3901844         0   3901844   0% /dev
none             3903928         0   3903928   0% /run
none             3903928         0   3903928   0% /run/lock
none             3903928         0   3903928   0% /run/shm
none             3903928         0   3903928   0% /run/user
tmpfs            3903928         0   3903928   0% /sys/fs/cgroup
drivers        293999612 155173684 138825928  53% /usr/lib/wsl/drivers
lib            293999612 155173684 138825928  53% /usr/lib/wsl/lib
drvfs          293999612 155173684 138825928  53% /mnt/c
drvfs          204798972   9907684 194891288   5% /mnt/d
drvfs          293999612 162114984 131884628  56% /mnt/g
```

40.

```
kiit@BT-2105594:~/Desktop$ mount
/dev/sdb on / type ext4 (rw,relatime,discard,errors=remount-ro,data=ordered)
none on /mnt/wsl type tmpfs (rw,relatime)
tools on /init type 9p (ro,relatime,dirsync,aname=tools;fmask=022,loose,access=client,msize=65536,trans=fd,rfd=7,wfd=7)
none on /dev type devtmpfs (rw,nosuid,relatime,size=3901844k,nr_inodes=975461,mode=755)
sysfs on /sys type sysfs (rw,nosuid,nodev,noexec,noatime)
proc on /proc type proc (rw,nosuid,nodev,noexec,noatime)
devpts on /dev/pts type devpts (rw,nosuid,noexec,noatime,gid=5,mode=620,ptmxmode=000)
none on /run type tmpfs (rw,nosuid,noexec,noatime,mode=755)
none on /run/lock type tmpfs (rw,nosuid,nodev,noexec,noatime)
none on /run/shm type tmpfs (rw,nosuid,nodev,noatime)
none on /run/user type tmpfs (rw,nosuid,nodev,noexec,noatime,mode=755)
binfmt_misc on /proc/sys/fs/binfmt_misc type binfmt_misc (rw,relatime)
tmpfs on /sys/fs/cgroup type tmpfs (rw,nosuid,nodev,noexec,relatime,mode=755)
cgroup2 on /sys/fs/cgroup/unified type cgroup2 (rw,nosuid,nodev,noexec,relatime,nsdelegate)
cgroup on /sys/fs/cgroup/cpuset type cgroup (rw,nosuid,nodev,noexec,relatime,cpuset)
cgroup on /sys/fs/cgroup/cpu type cgroup (rw,nosuid,nodev,noexec,relatime,cpu)
cgroup on /sys/fs/cgroup/cpuacct type cgroup (rw,nosuid,nodev,noexec,relatime,cpuacct)
cgroup on /sys/fs/cgroup/blkio type cgroup (rw,nosuid,nodev,noexec,relatime,blkio)
cgroup on /sys/fs/cgroup/memory type cgroup (rw,nosuid,nodev,noexec,relatime,memory)
cgroup on /sys/fs/cgroup/devices type cgroup (rw,nosuid,nodev,noexec,relatime,devices)
cgroup on /sys/fs/cgroup/freezer type cgroup (rw,nosuid,nodev,noexec,relatime,freezer)
cgroup on /sys/fs/cgroup/net_cls type cgroup (rw,nosuid,nodev,noexec,relatime,net_cls)
cgroup on /sys/fs/cgroup/perf_event type cgroup (rw,nosuid,nodev,noexec,relatime,perf_event)
cgroup on /sys/fs/cgroup/net_prio type cgroup (rw,nosuid,nodev,noexec,relatime,net_prio)
cgroup on /sys/fs/cgroup/hugetlb type cgroup (rw,nosuid,nodev,noexec,relatime,hugetlb)
cgroup on /sys/fs/cgroup/pids type cgroup (rw,nosuid,nodev,noexec,relatime,pids)
```

41.

```
kiit@BT-2105594:~/Desktop$ 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: bond0: <BROADCAST,MULTICAST,MASTER> mtu 1500 qdisc noop state DOWN group default qlen 1000
    link/ether 42:09:30:15:e9:ef brd ff:ff:ff:ff:ff:ff
3: dummy0: <BROADCAST,NOARP> mtu 1500 qdisc noop state DOWN group default qlen 1000
    link/ether c2:d0:d7:1e:60:93 brd ff:ff:ff:ff:ff:ff
4: tunl0@NONE: <NOARP> mtu 1480 qdisc noop state DOWN group default qlen 1000
    link/ipip 0.0.0.0 brd 0.0.0.0
5: sit0@NONE: <NOARP> mtu 1480 qdisc noop state DOWN group default qlen 1000
    link/sit 0.0.0.0 brd 0.0.0.0
6: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc mq state UP group default qlen 1000
    link/ether 00:15:5d:97:ba:e2 brd ff:ff:ff:ff:ff:ff
    inet 172.28.10.92/20 brd 172.28.15.255 scope global eth0
        valid_lft forever preferred_lft forever
    inet6 fe80::215:5dff:fe97:bae2/64 scope link
        valid_lft forever preferred_lft forever
```

42.

```
kiit@BT-2105594:~/Desktop$ mail -s "Hello Babua" vijayvishal0004@outlook.com

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

sudo apt install mailutils
```

43.

```
kiit@BT-2105594:~/Desktop$ ping amazon.com
PING amazon.com (52.94.236.248) 56(84) bytes of data.
64 bytes from 52.94.236.248 (52.94.236.248): icmp_seq=1 ttl=231 time=299 ms
64 bytes from 52.94.236.248 (52.94.236.248): icmp_seq=2 ttl=231 time=254 ms
64 bytes from 52.94.236.248 (52.94.236.248): icmp_seq=3 ttl=231 time=249 ms
64 bytes from 52.94.236.248 (52.94.236.248): icmp_seq=4 ttl=231 time=313 ms
64 bytes from 52.94.236.248 (52.94.236.248): icmp_seq=5 ttl=231 time=333 ms
64 bytes from 52.94.236.248 (52.94.236.248): icmp_seq=6 ttl=231 time=261 ms
64 bytes from 52.94.236.248 (52.94.236.248): icmp_seq=7 ttl=231 time=276 ms
64 bytes from 52.94.236.248 (52.94.236.248): icmp_seq=8 ttl=231 time=250 ms
64 bytes from 52.94.236.248 (52.94.236.248): icmp_seq=9 ttl=231 time=259 ms
64 bytes from 52.94.236.248 (52.94.236.248): icmp_seq=10 ttl=231 time=342 ms
64 bytes from 52.94.236.248 (52.94.236.248): icmp_seq=11 ttl=231 time=248 ms
^C
--- amazon.com ping statistics ---
38 packets transmitted, 38 received, 0% packet loss, time 37519ms
rtt min/avg/max/mdev = 247.119/281.378/387.724/40.591 ms
```

44.

```
kiit@BT-2105594:~/Desktop$ host amazon.com
amazon.com has address 54.239.28.85
amazon.com has address 52.94.236.248
amazon.com has address 205.251.242.103
amazon.com mail is handled by 5 amazon-smtp.amazon.com.
```

45.

```
kiit@BT-2105594:~/Desktop$ more os1.txt
I am Vijay Vishal.
I live in Lucknow.
```
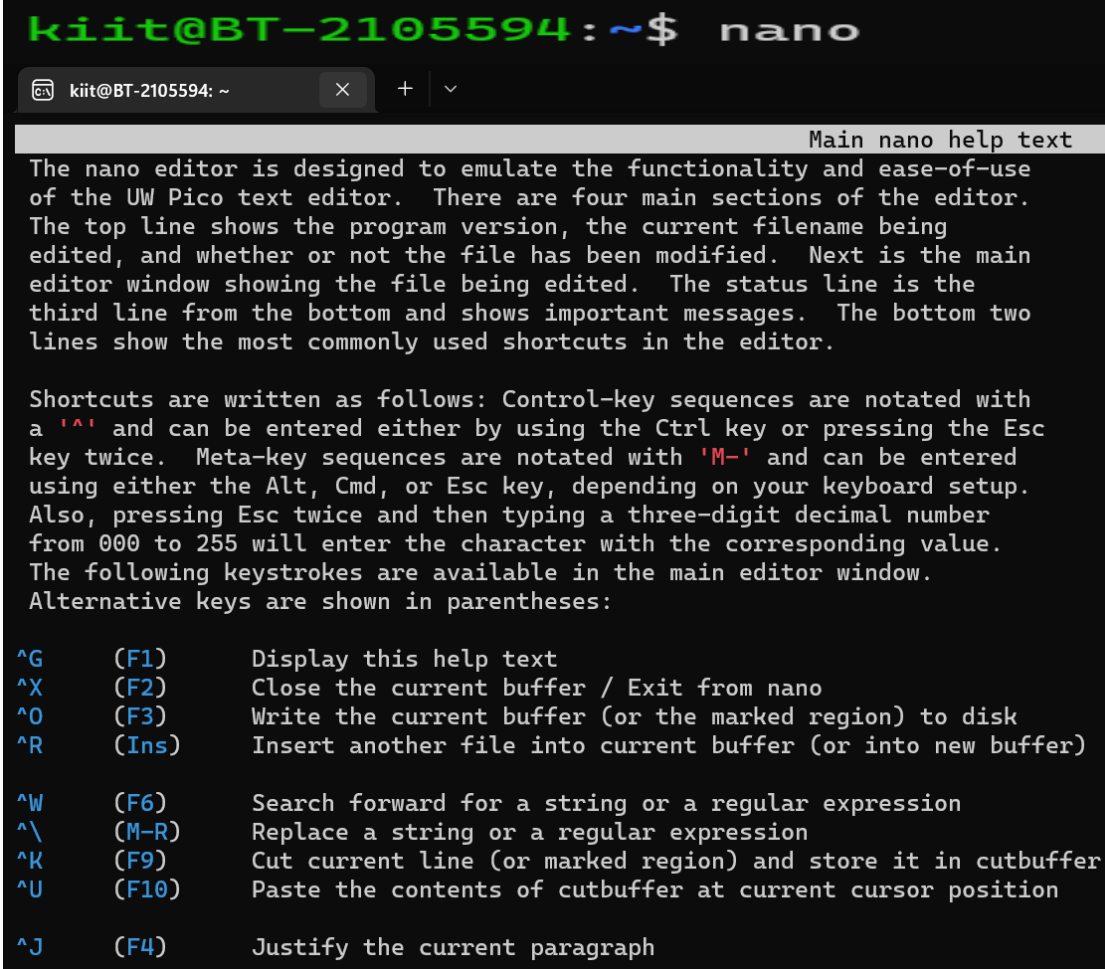
```
kiit@BT-2105594:~/Desktop$ less os1.txt
```

kiit@BT-2105594: ~/Desktop ✕ ＋ ⌄

```
I am Vijay Vishal.
I live in Lucknow.
os1.txt (END)
```

46.

```
kiit@BT-2105594:~/Desktop$ rmdir OSLAB
kiit@BT-2105594:~/Desktop$ cd OSLAB
-bash: cd: OSLAB: No such file or directory
```

47.

```
kiit@BT-2105594:~$ nano

  kiit@BT-2105594: ~        X    +  ∨

                                              Main nano help text
The nano editor is designed to emulate the functionality and ease-of-use
of the UW Pico text editor.  There are four main sections of the editor.
The top line shows the program version, the current filename being
edited, and whether or not the file has been modified.  Next is the main
editor window showing the file being edited.  The status line is the
third line from the bottom and shows important messages.  The bottom two
lines show the most commonly used shortcuts in the editor.

Shortcuts are written as follows: Control-key sequences are notated with
a '^' and can be entered either by using the Ctrl key or pressing the Esc
key twice.  Meta-key sequences are notated with 'M-' and can be entered
using either the Alt, Cmd, or Esc key, depending on your keyboard setup.
Also, pressing Esc twice and then typing a three-digit decimal number
from 000 to 255 will enter the character with the corresponding value.
The following keystrokes are available in the main editor window.
Alternative keys are shown in parentheses:

^G      (F1)      Display this help text
^X      (F2)      Close the current buffer / Exit from nano
^O      (F3)      Write the current buffer (or the marked region) to disk
^R      (Ins)     Insert another file into current buffer (or into new buffer)

^W      (F6)      Search forward for a string or a regular expression
^\      (M-R)     Replace a string or a regular expression
^K      (F9)      Cut current line (or marked region) and store it in cutbuffer
^U      (F10)     Paste the contents of cutbuffer at current cursor position

^J      (F4)      Justify the current paragraph
```

48.

```
kiit@BT-2105594:~$ man mkdir
```

```
kiit@BT-2105594: ~          ×    + ⌄

MKDIR(1)                                        User Commands

NAME
       mkdir — make directories

SYNOPSIS
       mkdir [OPTION]... DIRECTORY...

DESCRIPTION
       Create the DIRECTORY(ies), if they do not already exist.

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

       -m, --mode=MODE
              set file mode (as in chmod), not a=rwx - umask

       -p, --parents
              no error if existing, make parent directories as needed

       -v, --verbose
              print a message for each created directory

       -Z     set SELinux security context of each created directory to the default type

       --context[=CTX]
              like -Z, or if CTX is specified then set the SELinux or SMACK security context to CTX
```

49.

```
kiit@BT-2105594:~$ time

real    0m0.000s
user    0m0.000s
sys     0m0.000s
kiit@BT-2105594:~$ cal
     January 2023
Su Mo Tu We Th Fr Sa
 1  2  3  4  5  6  7
 8  9 10 11 12 13 14
15 16 17 18 19 20 21
22 23 24 25 26 27 28
29 30 31

kiit@BT-2105594:~$ clear
```

```
kiit@BT-2105594:~$
```

50.

```
kiit@BT-2105594:~$ exit
```