DTL Assignment 6

1)pwd:-

2)

```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ pwd
/home/hariom/Desktop/112103048
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ mkdir dir1
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ mkdir dir2 dir3
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ ls
dir1  dir2  dir3
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$
```

mkdir

3) cd

```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ cd dir1
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ cd ..
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ 
```

4) rmdir

```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ ls
dir1  dir2  dir3
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ rmdir dir3
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ ls
dir1  dir2
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$
```

```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ cd dir2
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir2$ mkdir newDi
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir2$ cd ..
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ rmdir dir2
rmdir: failed to remove 'dir2': Directory not empty
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ rm -rf dir2
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ ls
dir1
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ 
```

5) Clear

```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ cd dir2
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir2$ mkdir newDi
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir2$ cd ..
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ rmdir dir2
rmdir: failed to remove 'dir2': Directory not empty
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ rm -rf dir2
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ ls
dir1
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ clear
```

6)

```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$
```

touch

```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ touch /home/hariom/D
ktop/112103048/dir1/newFile.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ cd dir1
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ ls
newFile.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$
```
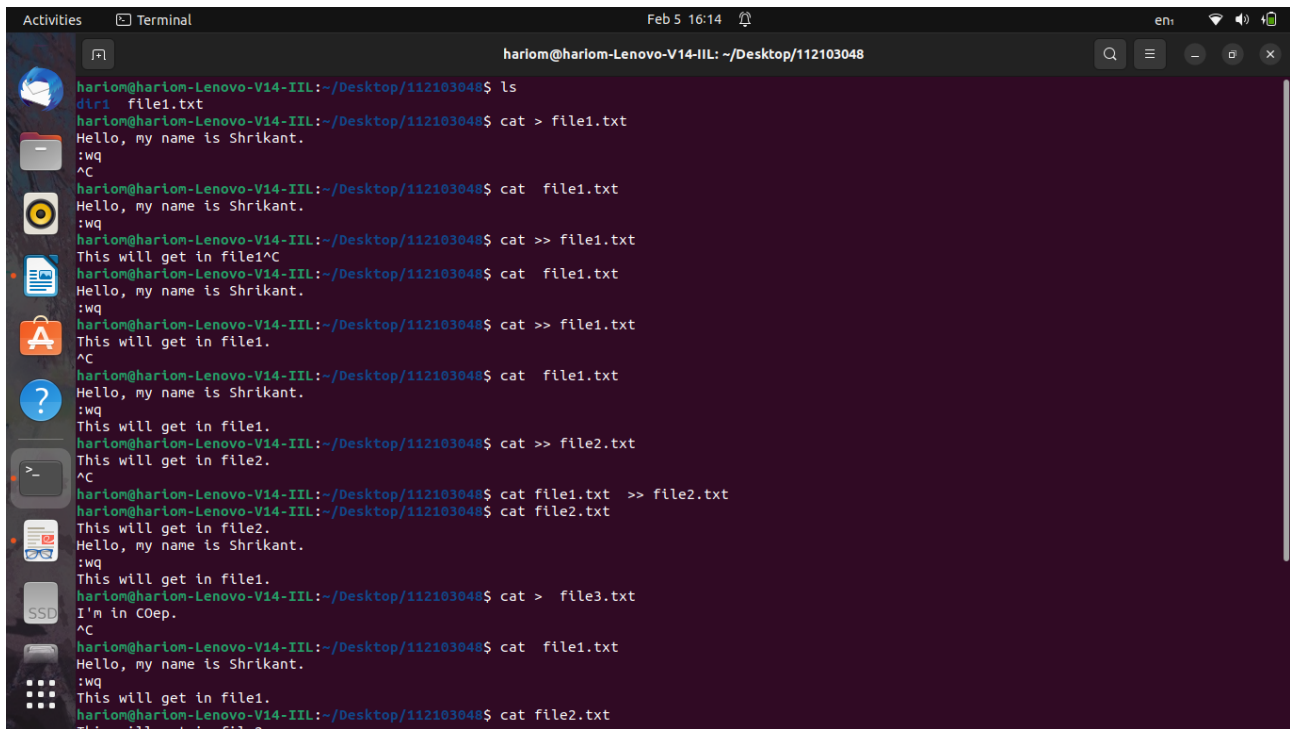
7) rm

```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ rm newFile.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ ls
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$
```

8) echo

```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ echo Shrikant
Shrikant
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ echo "DTL Assignment"
DTL Assignment
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ echo " 112103048"
 112103048
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ echo "I'm student of Coep"
I'm student of Coep
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ echo "I'm \bstudent \bof \bCoep"
I'm \bstudent \bof \bCoep
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ echo -e  "I'm \bstudent \bof \bCoep"
I'mstudentofCoep
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$
```
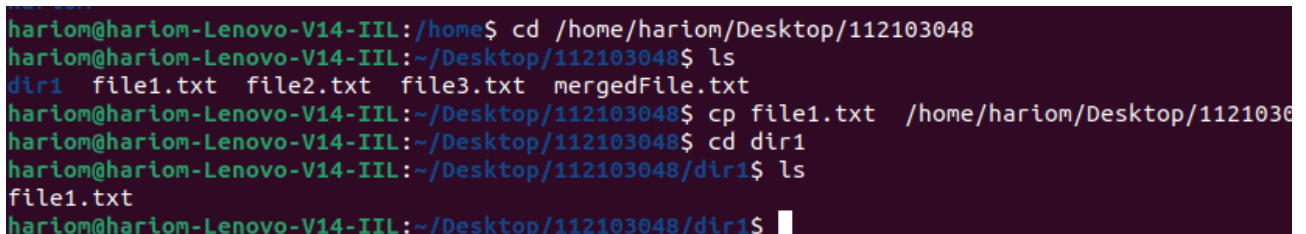
9) cat

10) cp

11)mv

```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ cd ..
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ ls
dir1  file1.txt  file2.txt  file3.txt  mergedFile.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ mv file2.txt  /home/hariom/Desktop/112103048/dir1
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ cd dir1
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ ls
file1.txt  file2.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$
```

12) ls

```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ ls
dir1  file1.txt  file3.txt  mergedFile.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ ls -a
.  ..  dir1  file1.txt  file3.txt  mergedFile.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ ls *[0-9]*
file1.txt  file3.txt

dir1:
file1.txt  file2.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ cd dir1
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ ls -F
file1.txt  file2.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ ls -l
total 8
-rw-rw-r-- 1 hariom hariom 56 Feb  5 16:23 file1.txt
-rw-rw-r-- 1 hariom hariom 80 Feb  5 16:10 file2.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ ls -l
total 8
-rw-rw-r-- 1 hariom hariom 56 Feb  5 16:23 file1.txt
-rw-rw-r-- 1 hariom hariom 80 Feb  5 16:10 file2.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ chmod u+x
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ ls -l
total 8
-rwxrw-r-- 1 hariom hariom 56 Feb  5 16:23 file1.txt
-rw-rw-r-- 1 hariom hariom 80 Feb  5 16:10 file2.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$
```

13) less

```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ ls
dir1  file1.txt  file3.txt  mergedFile.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ less mergedFile.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$
```

```
Hello, my name is Shrikant.
:wq
This will get in file1.
I'm in COep.
mergedFile.txt (END)
```

14) head


```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ ls
dir1  file1.txt  file3.txt  linux.txt  mergedFile.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ head linux.txt
Linux (/ˈliːnʊks/ (listen) LEE-nuuks or /ˈlɪnʊks/ LIN-uuks)[11] is a family of open-source Unix-like operating systems based on the Linux kern
el,[12] an operating system kernel first released on September 17, 1991, by Linus Torvalds.[13][14][15] Linux is typically packaged as a Linux
 distribution, which includes the kernel and supporting system software and libraries, many of which are provided by the GNU Project. Many Lin
ux distributions use the word "Linux" in their name, but the Free Software Foundation uses the name "GNU/Linux" to emphasize the importance of
 GNU software, causing some controversy.[16][17]

Popular Linux distributions[18][19][20] include Debian, Fedora Linux, and Ubuntu, the latter of which itself consists of many different distri
butions and modifications, including Lubuntu and Xubuntu. Commercial distributions include Red Hat Enterprise Linux and SUSE Linux Enterprise.
 Desktop Linux distributions include a windowing system such as X11 or Wayland, and a desktop environment such as GNOME or KDE Plasma. Distrib
utions intended for servers may omit graphics altogether, or include a solution stack such as LAMP. Because Linux is freely redistributable, a
nyone may create a distribution for any purpose.[21]

Linux was originally developed for personal computers based on the Intel x86 architecture, but has since been ported to more platforms than an
y other operating system.[22] Because of the dominance of the Linux-based Android on smartphones, Linux, including Android, has the largest in
stalled base of all general-purpose operating systems, as of May 2022.[23][24][25] Although Linux is, as of November 2022, used by only around
 2.6 percent of desktop computers,[26] the Chromebook, which runs the Linux kernel-based ChromeOS, dominates the US K-12 education market and
represents nearly 20 percent of sub-$300 notebook sales in the US.[27] Linux is the leading operating system on servers (over 96.4% of the top
 1 million web servers' operating systems are Linux),[28] leads other big iron systems such as mainframe computers, and is used on all of the
world's 500 fastest supercomputers[d] (since November 2017, having gradually displaced all competitors).[29][30][31]

Linux also runs on embedded systems, i.e. devices whose operating system is typically built into the firmware and is highly tailored to the sy
stem. This includes routers, automation controls, smart home devices, video game consoles,[32] televisions (Samsung and LG Smart TVs),[33][34]
[35] automobiles (Tesla, Audi, Mercedes-Benz, Hyundai and Toyota),[36] and spacecraft (Falcon 9 rocket, Dragon crew capsule and the Perseveran
ce rover).[37][38]

Linux is one of the most prominent examples of free and open-source software collaboration. The source code may be used, modified and distribu
ted commercially or non-commercially by anyone under the terms of its respective licenses, such as the GNU General Public License (GPL). The L
inux kernel, for example, is licensed under the GPLv2.[e]
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$
```

15) tail


```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ ls
dir1  file1.txt  file3.txt  linux.txt  mergedFile.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ tail linux.txt
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inux kernel, for example, is licensed under the GPLv2.[e]
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$
```

16) grep

17) find

18) df

```
112103040/files.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop$ cd 112103048/dir1
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ df
Filesystem        1K-blocks      Used Available Use% Mounted on
tmpfs                793496      2112    791384   1% /run
/dev/nvme0n1p6     78986876  15429872  59498944  21% /
tmpfs               3967464         0   3967464   0% /dev/shm
tmpfs                  5120         4      5116   1% /run/lock
tmpfs                793492      4740    788752   1% /run/user/1000
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$
```

```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ df -h
Filesystem        Size  Used Avail Use% Mounted on
tmpfs             775M  2.1M  773M   1% /run
/dev/nvme0n1p6     76G   15G   57G  21% /
tmpfs             3.8G     0  3.8G   0% /dev/shm
tmpfs             5.0M  4.0K  5.0M   1% /run/lock
tmpfs             775M  4.7M  771M   1% /run/user/1000
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ df -m
Filesystem        1M-blocks  Used Available Use% Mounted on
tmpfs                   775     3       773   1% /run
/dev/nvme0n1p6        77136 15069     58105  21% /
tmpfs                  3875     0      3875   0% /dev/shm
tmpfs                     5     1         5   1% /run/lock
tmpfs                   775     5       771   1% /run/user/1000
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ df -k
Filesystem        1K-blocks      Used Available Use% Mounted on
tmpfs                793496      2112    791384   1% /run
/dev/nvme0n1p6     78986876  15429956  59498860  21% /
tmpfs               3967464         0   3967464   0% /dev/shm
tmpfs                  5120         4      5116   1% /run/lock
tmpfs                793492      4740    788752   1% /run/user/1000
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ df -T
Filesystem     Type  1K-blocks      Used Available Use% Mounted on
tmpfs          tmpfs    793496      2112    791384   1% /run
/dev/nvme0n1p6 ext4   78986876  15429956  59498860  21% /
tmpfs          tmpfs   3967464         0   3967464   0% /dev/shm
tmpfs          tmpfs      5120         4      5116   1% /run/lock
tmpfs          tmpfs    793492      4740    788752   1% /run/user/1000
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$
```

19) du

```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ du /home/hariom/Desktop/112103048/
16      /home/hariom/Desktop/112103048/dir1
36      /home/hariom/Desktop/112103048/
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ du -s
16      .
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ du -m
1       .
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ du -k
16      .
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ du -h
16K     .
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ 
```

20) diff

```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ cat file1.txt
Hello, my name is Shrikant.
:wq
This will get in file1.
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ cat file2.txt
This will get in file2.
Hello, my name is Shrikant.
:wq
This will get in file1.
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ diff file1.txt file2.txt
0a1
> This will get in file2.
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ diff -c file1.txt file2.txt
*** file1.txt    2023-02-05 16:23:43.599797308 +0530
--- file2.txt    2023-02-05 16:10:02.068910882 +0530
***************
*** 1,3 ****
--- 1,4 ----
+ This will get in file2.
  Hello, my name is Shrikant.
    :wq
  This will get in file1.
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ diff -u file1.txt file2.txt
--- file1.txt    2023-02-05 16:23:43.599797308 +0530
+++ file2.txt    2023-02-05 16:10:02.068910882 +0530
@@ -1,3 +1,4 @@
+This will get in file2.
 Hello, my name is Shrikant.
 :wq
 This will get in file1.
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ 
```

21) tar

```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ ls
dir1  file1.txt  file3.txt  linux.txt  mergedFile.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ tar -cvf newArchive.tar /home/hariom/Desktop/112103048/dir1
tar: Removing leading `/' from member names
/home/hariom/Desktop/112103048/dir1/
/home/hariom/Desktop/112103048/dir1/file1.txt
/home/hariom/Desktop/112103048/dir1/shri
/home/hariom/Desktop/112103048/dir1/file2.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$
```

22) zip,unzip

```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ ls
dir1  file1.txt  file3.txt  linux.txt  mergedFile.txt  newArchive.tar
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ zip newZip.zip /home/hariom/Desktop/112103048/dir1
  adding: home/hariom/Desktop/112103048/dir1/ (stored 0%)
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ ls
dir1  file1.txt  file3.txt  linux.txt  mergedFile.txt  newArchive.tar  newZip.zip
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ unzip newZip.zip
Archive:  newZip.zip
   creating: home/hariom/Desktop/112103048/dir1/
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ ls
dir1  file1.txt  file3.txt  home  linux.txt  mergedFile.txt  newArchive.tar  newZip.zip
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$
```

23) sudo

```
abhishek@DESKTOP-JFQGD3E:~/112103134$ sudo apt install zip
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  unzip
The following NEW packages will be installed:
  unzip zip
0 upgraded, 2 newly installed, 0 to remove and 71 not upgraded.
Need to get 350 kB of archives.
After this operation, 929 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 unzip amd64 6.0-26ubuntu3.1 [174 kB]
Get:2 http://archive.ubuntu.com/ubuntu jammy/main amd64 zip amd64 3.0-12build2 [176 kB]
Fetched 350 kB in 3s (140 kB/s)
Selecting previously unselected package unzip.
(Reading database ... 29775 files and directories currently installed.)
Preparing to unpack .../unzip_6.0-26ubuntu3.1_amd64.deb ...
Unpacking unzip (6.0-26ubuntu3.1) ...
Selecting previously unselected package zip.
Preparing to unpack .../zip_3.0-12build2_amd64.deb ...
Unpacking zip (3.0-12build2) ...
Setting up unzip (6.0-26ubuntu3.1) ...
Setting up zip (3.0-12build2) ...
Processing triggers for man-db (2.10.2-1) ...
abhishek@DESKTOP-JFQGD3E:~/112103134$
```

24) chmod

```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ ls
dir1  file1.txt  file3.txt  home  linux.txt  mergedFile.txt  newArchive.tar  newZip.zip
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048$ cd dir1
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ ls
file1.txt  file2.txt  shri
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ ls -l
total 12
-rwxrw-r-- 1 hariom hariom 56 Feb  5 16:23 file1.txt
-rw-rw-r-- 1 hariom hariom 80 Feb  5 16:10 file2.txt
-rw-rw-r-- 1 hariom hariom  6 Feb  5 16:50 shri
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ chmod +x file2.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ ls -l
total 12
-rwxrw-r-- 1 hariom hariom 56 Feb  5 16:23 file1.txt
-rwxrwxr-x 1 hariom hariom 80 Feb  5 16:10 file2.txt
-rw-rw-r-- 1 hariom hariom  6 Feb  5 16:50 shri
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ chmod +777 file1.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ ls -l
total 12
-rwxrwxrwx 1 hariom hariom 56 Feb  5 16:23 file1.txt
-rwxrwxr-x 1 hariom hariom 80 Feb  5 16:10 file2.txt
-rw-rw-r-- 1 hariom hariom  6 Feb  5 16:50 shri
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ chmod -311 file2.txt
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ ls -l
total 12
-rwxrwxrwx 1 hariom hariom 56 Feb  5 16:23 file1.txt
-r--rw-r-- 1 hariom hariom 80 Feb  5 16:10 file2.txt
-rw-rw-r-- 1 hariom hariom  6 Feb  5 16:50 shri
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$
```

25) hostname

```
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$ hostname
hariom-Lenovo-V14-IIL
hariom@hariom-Lenovo-V14-IIL:~/Desktop/112103048/dir1$
```

26) ifconfig

```
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 172.26.206.43  netmask 255.255.240.0  broadcast 172.26.207.255
        inet6 fe80::215:5dff:fef6:8b0d  prefixlen 64  scopeid 0x20<link>
        ether 00:15:5d:f6:8b:0d  txqueuelen 1000  (Ethernet)
        RX packets 7709  bytes 6363223 (6.3 MB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 2016  bytes 142622 (142.6 KB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  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 0  bytes 0 (0.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 0  bytes 0 (0.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
        TX packets 0  bytes 0 (0.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

27) free

28) watch

29) cal

```
                          2023
        January                February                March
Su Mo Tu We Th Fr Sa   Su Mo Tu We Th Fr Sa   Su Mo Tu We Th Fr Sa
 1  2  3  4  5  6  7             1  2  3  4             1  2  3  4
 8  9 10 11 12 13 14    5  6  7  8  9 10 11    5  6  7  8  9 10 11
15 16 17 18 19 20 21   12 13 14 15 16 17 18   12 13 14 15 16 17 18
22 23 24 25 26 27 28   19 20 21 22 23 24 25   19 20 21 22 23 24 25
29 30 31               26 27 28               26 27 28 29 30 31


         April                   May                   June
Su Mo Tu We Th Fr Sa   Su Mo Tu We Th Fr Sa   Su Mo Tu We Th Fr Sa
                   1       1  2  3  4  5  6             1  2  3
 2  3  4  5  6  7  8    7  8  9 10 11 12 13    4  5  6  7  8  9 10
 9 10 11 12 13 14 15   14 15 16 17 18 19 20   11 12 13 14 15 16 17
16 17 18 19 20 21 22   21 22 23 24 25 26 27   18 19 20 21 22 23 24
23 24 25 26 27 28 29   28 29 30 31            25 26 27 28 29 30
30

         July                 August               September
Su Mo Tu We Th Fr Sa   Su Mo Tu We Th Fr Sa   Su Mo Tu We Th Fr Sa
                   1          1  2  3  4  5                   1  2
 2  3  4  5  6  7  8    6  7  8  9 10 11 12    3  4  5  6  7  8  9
 9 10 11 12 13 14 15   13 14 15 16 17 18 19   10 11 12 13 14 15 16
16 17 18 19 20 21 22   20 21 22 23 24 25 26   17 18 19 20 21 22 23
23 24 25 26 27 28 29   27 28 29 30 31         24 25 26 27 28 29 30
30 31

        October               November              December
Su Mo Tu We Th Fr Sa   Su Mo Tu We Th Fr Sa   Su Mo Tu We Th Fr Sa
 1  2  3  4  5  6  7             1  2  3  4                   1  2
 8  9 10 11 12 13 14    5  6  7  8  9 10 11    3  4  5  6  7  8  9
15 16 17 18 19 20 21   12 13 14 15 16 17 18   10 11 12 13 14 15 16
22 23 24 25 26 27 28   19 20 21 22 23 24 25   17 18 19 20 21 22 23
29 30 31               26 27 28 29 30         24 25 26 27 28 29 30
                                              31
```

30) useradd

```
abhishek@DESKTOP-JFQGD3E:~$ ls /home/
abhishek
abhishek@DESKTOP-JFQGD3E:~$ sudo useradd vampire -m
abhishek@DESKTOP-JFQGD3E:~$ sudo passwd vampire
New password:
Retype new password:
passwd: password updated successfully
abhishek@DESKTOP-JFQGD3E:~$
```

31) userdel

```
abhishek@DESKTOP-JFQGD3E:~$ ls /home/
abhishek   vampire
abhishek@DESKTOP-JFQGD3E:~$ sudo userdel -r vampire
userdel: vampire mail spool (/var/mail/vampire) not found
abhishek@DESKTOP-JFQGD3E:~$ ls /home/
abhishek
abhishek@DESKTOP-JFQGD3E:~$
```

32) top

33) ping

34) uname

35) wget

```
hariom@hariom-Lenovo-V14-IIL:~$ wget https://www.coep.org.in/download/file/fid/7930
--2023-02-05 19:47:46--  https://www.coep.org.in/download/file/fid/7930
Resolving www.coep.org.in (www.coep.org.in)... 210.212.183.5
Connecting to www.coep.org.in (www.coep.org.in)|210.212.183.5|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 348042 (340K) [application/pdf]
Saving to: '7930'

7930               100%[===================================================================>] 339.88K   525KB/s    in 0.6s

2023-02-05 19:47:47 (525 KB/s) - '7930' saved [348042/348042]

hariom@hariom-Lenovo-V14-IIL:~$
```

36) man

```
hariom@hariom-Lenovo-V14-IIL:~$ man sudo
hariom@hariom-Lenovo-V14-IIL:~$
```

```
SUDO(8)                          BSD System Manager's Manual                          SUDO(8)

NAME
     sudo, sudoedit — execute a command as another user

SYNOPSIS
     sudo -h | -K | -k | -V
     sudo -v [-ABknS] [-g group] [-h host] [-p prompt] [-u user]
     sudo -l [-ABknS] [-g group] [-h host] [-p prompt] [-U user] [-u user] [command]
     sudo [-ABbEHnPS] [-C num] [-D directory] [-g group] [-h host] [-p prompt] [-R directory] [-r role] [-t type] [-T timeout] [-u user]
          [VAR=value] [-i | -s] [command]
     sudoedit [-ABknS] [-C num] [-D directory] [-g group] [-h host] [-p prompt] [-R directory] [-r role] [-t type] [-T timeout] [-u user]
          file ...

DESCRIPTION
     sudo allows a permitted user to execute a command as the superuser or another user, as specified by the security policy.  The invok-
     ing user's real (not effective) user-ID is used to determine the user name with which to query the security policy.

     sudo supports a plugin architecture for security policies, auditing, and input/output logging.  Third parties can develop and dis-
     tribute their own plugins to work seamlessly with the sudo front-end.  The default security policy is sudoers, which is configured
     via the file /etc/sudoers, or via LDAP.  See the Plugins section for more information.

     The security policy determines what privileges, if any, a user has to run sudo.  The policy may require that users authenticate them-
     selves with a password or another authentication mechanism.  If authentication is required, sudo will exit if the user's password is
     not entered within a configurable time limit.  This limit is policy-specific; the default password prompt timeout for the sudoers se-
     curity policy is 0 minutes.

     Security policies may support credential caching to allow the user to run sudo again for a period of time without requiring authenti-
     cation.  By default, the sudoers policy caches credentials on a per-terminal basis for 15 minutes.  See the timestamp_type and
     timestamp_timeout options in sudoers(5) for more information.  By running sudo with the -v option, a user can update the cached cre-
     dentials without running a command.

     On systems where sudo is the primary method of gaining superuser privileges, it is imperative to avoid syntax errors in the security
     policy configuration files.  For the default security policy, sudoers(5), changes to the configuration files should be made using the
     visudo(8) utility which will ensure that no syntax errors are introduced.

     When invoked as sudoedit, the -e option (described below), is implied.
 Manual page sudo(8) line 1 (press h for help or q to quit)
```

37) history

```
hariom@hariom-Lenovo-V14-IIL:~$ history
    1  mkdir hari
    2  cd hari
    3  vi hello.c
    4  gcc -g hello.c
    5  sudo apt install gcc
    6  sudo apt update
    7  sudo apt install build-essential
    8  clear
    9  ls
   10  gcc -g hello.c
   11  ls
   12  vim hello.c
   13  vim hariom
   14  vi hari
   15  vi hello.c
   16  vim
   17  sudo apt update
   18  sudo apt install vim
   19  vim
   20  sudo apt update
   21  sudo apt install vim
   22  vim
   23  -ls
   24  ls
   25  vi add.c
   26  ls
   27  ls -a
   28  ls -ls
   29  ls -lt
   30  vi add.c
   31  gcc add.c
   32  ./a.out
   33  vi add.c
   34  gcc add.c
   35  ./a.out
   36  clear
```

```
hariom@hariom-Lenovo-V14-IIL:~$ history -c
hariom@hariom-Lenovo-V14-IIL:~$ history
    1  history
hariom@hariom-Lenovo-V14-IIL:~$
```

38) netstat

```
abhishek@DESKTOP-JFQGD3E:~$ whatis netstat
netstat (8)          - Print network connections, routing tables, interface statistics, masquerade connections, and multicast memberships
abhishek@DESKTOP-JFQGD3E:~$ netstat
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address          Foreign Address          State
Active UNIX domain sockets (w/o servers)
Proto RefCnt Flags        Type        State        I-Node    Path
abhishek@DESKTOP-JFQGD3E:~$ netstat -a
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address          Foreign Address          State
Active UNIX domain sockets (servers and established)
Proto RefCnt Flags        Type        State        I-Node    Path
unix  2      [ ACC ]     SEQPACKET  LISTENING     937       /run/WSL/1769_interop
abhishek@DESKTOP-JFQGD3E:~$ netstat -l
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address          Foreign Address          State
Active UNIX domain sockets (only servers)
Proto RefCnt Flags        Type        State        I-Node    Path
unix  2      [ ACC ]     SEQPACKET  LISTENING     937       /run/WSL/1769_interop
abhishek@DESKTOP-JFQGD3E:~$
```

39) whoami


```
hariom@hariom-Lenovo-V14-IIL:~$ whoami
hariom
hariom@hariom-Lenovo-V14-IIL:~$
```

40) exit


```
hariom@hariom-Lenovo-V14-IIL:~$ exit
```