

OS Assignment - 2

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Section :- C

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Subject :- Operating System Lab (BCSC 0803)

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NOTE : [GitHub Repo Link](#)

1. cut - Command

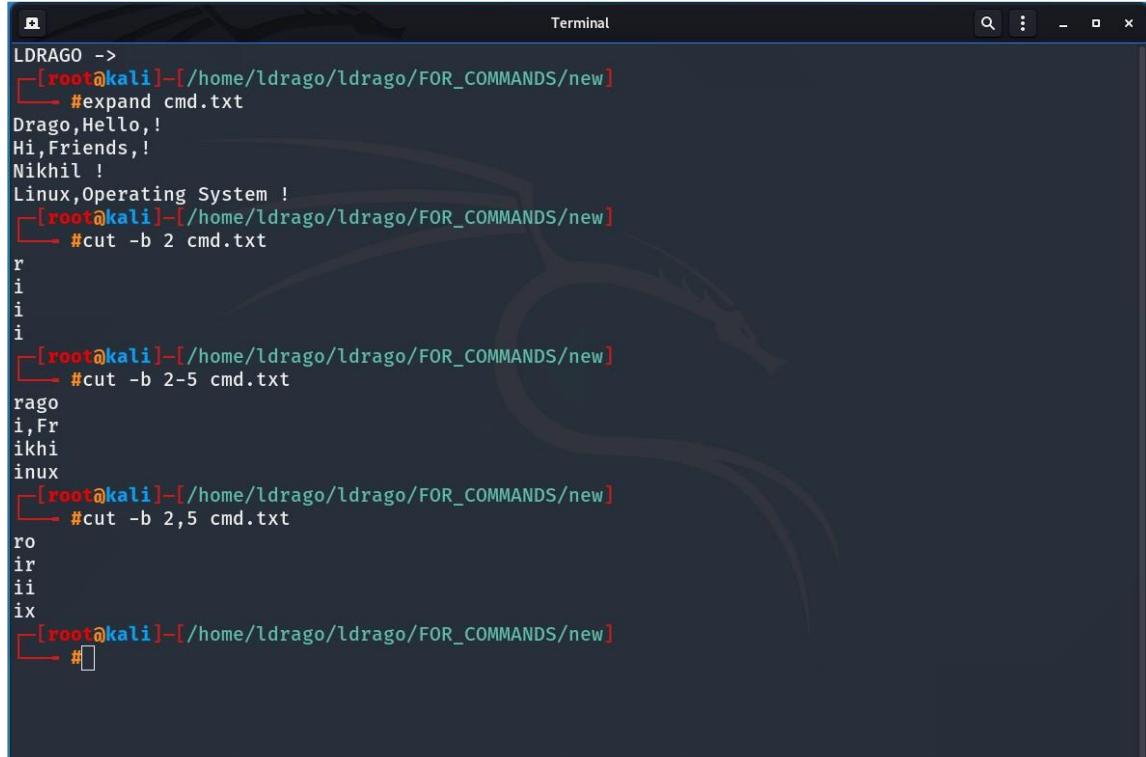
```
cut    # For cutting sections from each line of files and writing the result to standard output.
```

```
SYNTAX : cut Flag Options cmd.txt(File_Name)
```

Flags :

```
-b    # To cut out a section of a line by specifying a byte position use the -b option.
```

OUTPUT :



The screenshot shows a terminal window titled "Terminal" running on a Kali Linux system. The terminal displays the following session:

```
LDRAGO ~>
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #expand cmd.txt
Drago,Hello,!
Hi,Friends,!
Nikhil !
Linux,Operating System !
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #cut -b 2 cmd.txt
r
i
i
i
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #cut -b 2-5 cmd.txt
rago
i,Fr
ikhi
inux
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #cut -b 2,5 cmd.txt
ro
ir
ii
ix
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #
```

```
-c    # To cut by character use the -c option. This selects the characters given to the -c option.
```

OUTPUT:

```
Terminal
-[root@kali]-[~/home/lDrago/lDrago/FOR_COMMANDS/new]
└─#expand cmd.txt
Drago,Hello,!
Hi,Friends,!
Nikhil !
Linux,Operating System !
-[root@kali]-[~/home/lDrago/lDrago/FOR_COMMANDS/new]
└─#cut -c 3 cmd.txt
a
,
k
n
-[root@kali]-[~/home/lDrago/lDrago/FOR_COMMANDS/new]
└─#cut -c 1-4 cmd.txt
Drag
Hi,F
Nikh
Linu
-[root@kali]-[~/home/lDrago/lDrago/FOR_COMMANDS/new]
└─#cut -c 1,4 cmd.txt
Dg
Hf
Nh
Lu
-[root@kali]-[~/home/lDrago/lDrago/FOR_COMMANDS/new]
└─#
```

```
-d    # To cut using a delimiter use the -d option. This is normally used in conjunction with the -f option to specify the field that should be cut. -f    #
select only these fields; also print any line that contains no delimiter character, unless the -s option is specified.
```

OUTPUT:

```
Terminal
-[root@kali]-[~/home/lDrago/lDrago/FOR_COMMANDS/new]
└─#expand cmd.txt
Drago,Hello,!
Hi,Friends,!
Nikhil !
Linux,Operating System !
-[root@kali]-[~/home/lDrago/lDrago/FOR_COMMANDS/new]
└─#cut -d ',' -f 1,2 cmd.txt
Drago,Hello
Hi,Friends
Nikhil !
Linux,Operating System !
-[root@kali]-[~/home/lDrago/lDrago/FOR_COMMANDS/new]
└─#cut -d ',' -f 1-3 cmd.txt
Drago,Hello,!
Hi,Friends,!
Nikhil !
Linux,Operating System !
-[root@kali]-[~/home/lDrago/lDrago/FOR_COMMANDS/new]
└─#
```

```
-s    # Do not print lines not containing delimiters.
```

OUTPUT :

A terminal window titled "Terminal" running on Kali Linux. The session shows several commands being run:

- Expanding a file: `#expand cmd.txt` outputs: Drago,Hello,!
Hi,Friends,!
Nikhil !
Linux,Operating System !
- Cutting the first three fields: `#cut -d ',' -f 1-3 cmd.txt` outputs: Drago,Hello,!
Hi,Friends,!
Nikhil !
Linux,Operating System !
- Cutting the first three fields with -s: `#cut -d ',' -f 1-3 -s cmd.txt` outputs: Drago,Hello,!
Hi,Friends,!
Linux,Operating System !
- Final command: `#`

```
--complement  # The --complement option selects the inverse of the options  
passed to sort.
```

OUTPUT :

A terminal window titled "Terminal" running on Kali Linux. The session shows several commands being run:

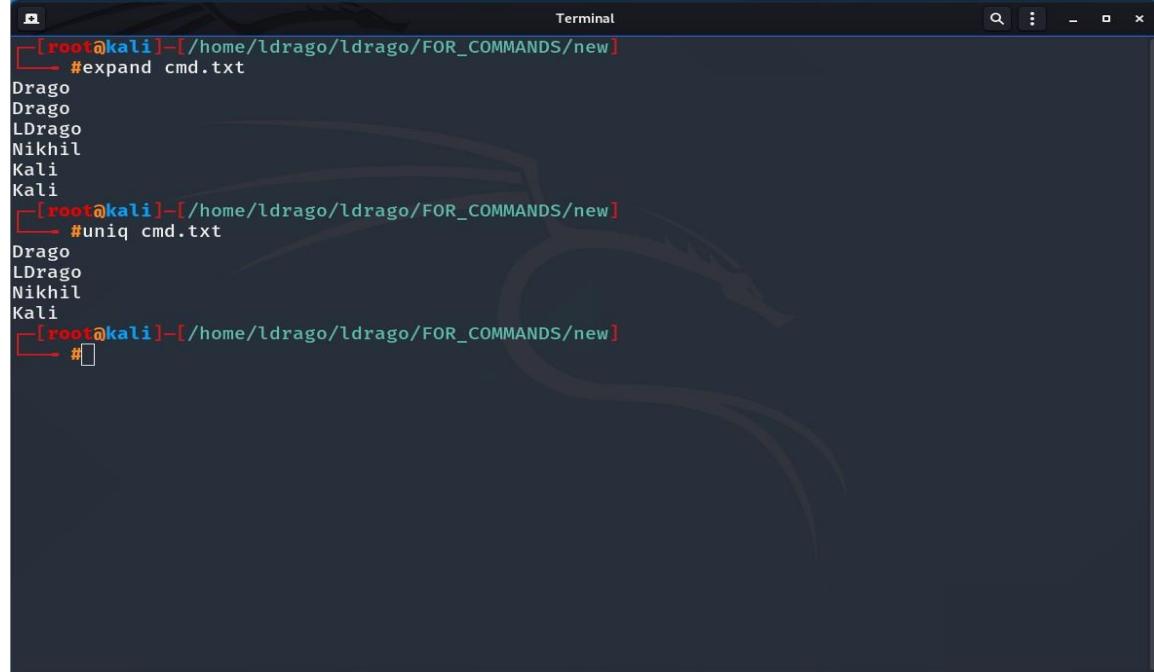
- Expanding a file: `#expand cmd.txt` outputs: Drago,Hello,!
Hi,Friends,!
Nikhil !
Linux,Operating System !
- Cutting columns 1 and 4: `#cut -c 1,4 cmd.txt` outputs: Dg
HF
Nh
Lu
- Cutting columns 1 and 4 with --complement: `#cut -c 1,4 --complement cmd.txt` outputs: rao,Hello,!
i,riends,!
ikil !
inx,Operating System !
- Cutting fields 1-3 with --complement: `#cut -d ',' -f 1-3 --complement cmd.txt` outputs: Nikhil !
- Final command: `#`

2. uniq - Command

```
uniq  # It can remove duplicates, show a count of occurrences, show only  
repeated lines, ignore certain characters and compare on specific fields.
```

SYNTAX : uniq flag option cmd.txt(File_Name)

OUTPUT :

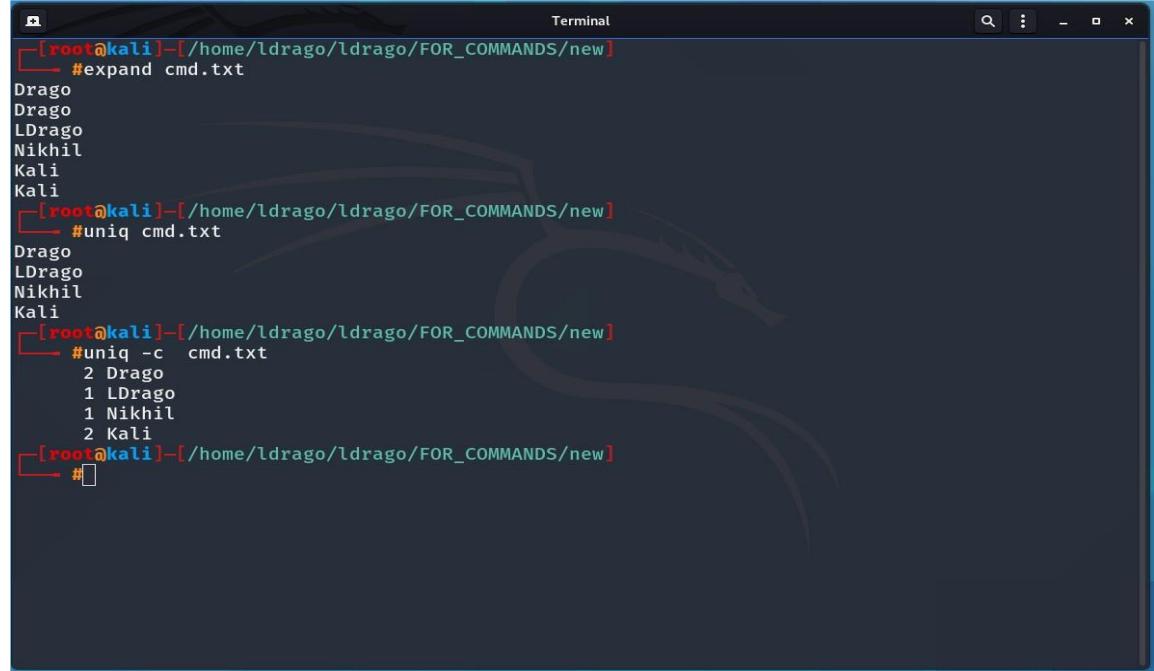


```
[-[root@kali]-[/home/lDrago/lDrago/FOR_COMMANDS/new]  
└─#expand cmd.txt  
Drago  
Drago  
LDrago  
Nikhil  
Kali  
Kali  
[-[root@kali]-[/home/lDrago/lDrago/FOR_COMMANDS/new]  
└─#uniq cmd.txt  
Drago  
LDrago  
Nikhil  
Kali  
[-[root@kali]-[/home/lDrago/lDrago/FOR_COMMANDS/new]  
└─# ]
```

Flags :

```
-c  # To output the number of occurrences of a line use the -c option in  
conjunction with uniq. This prepends a number value to the output of each line.
```

OUTPUT :



```
[-[root@kali]-[/home/lDrago/lDrago/FOR_COMMANDS/new]  
└─#expand cmd.txt  
Drago  
Drago  
LDrago  
Nikhil  
Kali  
Kali  
[-[root@kali]-[/home/lDrago/lDrago/FOR_COMMANDS/new]  
└─#uniq cmd.txt  
Drago  
LDrago  
Nikhil  
Kali  
[-[root@kali]-[/home/lDrago/lDrago/FOR_COMMANDS/new]  
└─#uniq -c cmd.txt  
 2 Drago  
 1 LDrago  
 1 Nikhil  
 2 Kali  
[-[root@kali]-[/home/lDrago/lDrago/FOR_COMMANDS/new]  
└─# ]
```

```
-d    # To only show repeated lines pass the -d option to uniq.
```

OUTPUT :

A screenshot of a terminal window titled "Terminal". The window shows a session on a Kali Linux system. The user has run the command "expand cmd.txt" which outputs several lines: "Drago", "Drago", "LDrago", "Nikhil", "Kali", and "Kali". This output is then piped into the "uniq -d" command, which outputs only the first occurrence of each line: "Drago" and "Kali". Finally, the user runs "uniq -dc cmd.txt" which outputs "2 Drago" and "2 Kali", indicating there are two occurrences of each line. The session ends with a "#".

```
LDRAGO ->
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #expand cmd.txt
Drago
Drago
LDrago
Nikhil
Kali
Kali
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #uniq -d cmd.txt
Drago
Kali
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #uniq -dc cmd.txt
  2 Drago
  2 Kali
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #
```

```
-u    # To only show lines that are not repeated pass the -u option to uniq.
```

OUTPUT :

A screenshot of a terminal window titled "Terminal". The user has run "expand cmd.txt" which outputs: "Drago", "Drago", "LDrago", "Nikhil", "Kali", and "Kali". These are then processed by "uniq -u", which outputs only the lines that appear once: "LDrago" and "Nikhil". Finally, "uniq -uc cmd.txt" is run, which outputs "1 LDrago" and "1 Nikhil", indicating there is one occurrence of each line. The session ends with a "#".

```
[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #expand cmd.txt
Drago
Drago
LDrago
Nikhil
Kali
Kali
[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #uniq -u cmd.txt
LDrago
Nikhil
[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #uniq -uc cmd.txt
  1 LDrago
  1 Nikhil
[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #
```

```

-s   # To return a list of the authors numbers can be ignored by using the -s
option.This will skip the number of characters it is given before doing the
comparison.

# For clean output use 'sed' with piping.

```

OUTPUT :

The screenshot shows a terminal window titled "Terminal" with a dark background featuring a stylized dragon logo. The terminal displays the following command-line session:

```

-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#expand cmd.txt
1. Kali
2. Kali
3. Linux
4. Drago
5. Drago
6. Nikhil
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#uniq -s 1 cmd.txt
1. Kali
3. Linux
4. Drago
6. Nikhil
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#uniq -s 1 cmd.txt | sed s/^//.
. Kali
. Linux
. Drago
. Nikhil
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#uniq -s 1 cmd.txt | sed s/^...//.
Kali
Linux
Drago
Nikhil
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#

```

3. chmod - Command

```
chmod  # For change the permission of files or directories.
```

SYNTAX : chmod Option Permission File_Name

DEFAULT PERMISSION :-

DIRECTORY :	Owner -rwx ,
	Group -rx ,
	Others -rx
FILE :	Owner -rw ,
	Group -r ,
	Others -r

NOTE : r - read

w - write

x - execute

(i) SYMBOLIC METHOD :

```
Reference : u - owner  
            g - group  
            o - other  
            a - all(u,g,o)
```

PERMISSION OPERATORS :-

```
ADD : '+'  
remove : '-'  
set(Exact) : '='
```

OUTPUT :

The screenshot shows a terminal window titled "Terminal". The user is root on a Kali Linux system. The terminal history is as follows:

```
[root@kali]~-[/home/ldrango/ldrango/FOR_COMMANDS]  
└─#ls -l  
total 12  
-rw-r--r-- 1 root root 7 Jul 26 06:52 cmd.txt  
drwxr-xr-x 3 root root 4096 Jul 26 07:08 new  
-rw-r--r-- 1 root root 4 Jul 26 06:52 N.txt  
[root@kali]~-[/home/ldrango/ldrango/FOR_COMMANDS]  
└─#chmod u+x,g+x,o+x cmd.txt  
[root@kali]~-[/home/ldrango/ldrango/FOR_COMMANDS]  
└─#ls -l  
total 12  
-rwxr-xr-x 1 root root 7 Jul 26 06:52 cmd.txt  
drwxr-xr-x 3 root root 4096 Jul 26 07:08 new  
-rw-r--r-- 1 root root 4 Jul 26 06:52 N.txt  
[root@kali]~-[/home/ldrango/ldrango/FOR_COMMANDS]  
└─#chmod ugo-x cmd.txt  
[root@kali]~-[/home/ldrango/ldrango/FOR_COMMANDS]  
└─#ls -l  
total 12  
-rw-r--r-- 1 root root 7 Jul 26 06:52 cmd.txt  
drwxr-xr-x 3 root root 4096 Jul 26 07:08 new  
-rw-r--r-- 1 root root 4 Jul 26 06:52 N.txt  
[root@kali]~-[/home/ldrango/ldrango/FOR_COMMANDS]  
└─#
```

(ii) OCTAL METHOD :

```
rwx --:  
  
0 - 000 - NO PERMISSION  
1 - 001 - EXECUTE  
2 - 010 - WRITE  
3 - 011 - WRITE & EXECUTE  
4 - 100 - READ  
5 - 101 - READ & EXECUTE  
6 - 110 - READ & WRITE  
7 - 111 - READ, WRITE & EXECUTE
```

OUTPUT :

```
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS]
└─#ls -l
total 12
-rw-r--r-- 1 root root 7 Jul 26 06:52 cmd.txt
drwxr-xr-x 3 root root 4096 Jul 26 07:08 new
-rw-r--r-- 1 root root 4 Jul 26 06:52 N.txt
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS]
└─#chmod 755 cmd.txt
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS]
└─#ls -l
total 12
-rwxr-xr-x 1 root root 7 Jul 26 06:52 cmd.txt
drwxr-xr-x 3 root root 4096 Jul 26 07:08 new
-rw-r--r-- 1 root root 4 Jul 26 06:52 N.txt
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS]
└─#chmod 777 cmd.txt
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS]
└─#ls -l
total 12
-rwxrwxrwx 1 root root 7 Jul 26 06:52 cmd.txt
drwxr-xr-x 3 root root 4096 Jul 26 07:08 new
-rw-r--r-- 1 root root 4 Jul 26 06:52 N.txt
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS]
└─#chmod 741 cmd.txt
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS]
└─#ls -l
total 12
-rwxr---x 1 root root 7 Jul 26 06:52 cmd.txt
drwxr-xr-x 3 root root 4096 Jul 26 07:08 new
```

4. du - Command

```
du    # The du command is a command line utility for reporting file system disk space usage.
```

```
SYNTAX : du Flag Dir_Name(Optional)
```

OUTPUT :

```
[root@kali]~[/home/ldrango/ldrango]
└─#du
4      ./My Books
4      ./FOR_COMMANDS/new/Script
60     ./FOR_COMMANDS/new
72     ./FOR_COMMANDS
564    ./WEB DEVELOPEMENT/HTML-Personal site/Images
388    ./WEB DEVELOPEMENT/HTML-Personal site/Css
976    ./WEB DEVELOPEMENT/HTML-Personal site
32     ./WEB DEVELOPEMENT/Linux Commands/html
4      ./WEB DEVELOPEMENT/Linux Commands/css
40     ./WEB DEVELOPEMENT/Linux Commands
8      ./WEB DEVELOPEMENT/CSS/css
1088   ./WEB DEVELOPEMENT/CSS/Images
1120   ./WEB DEVELOPEMENT/CSS
2140   ./WEB DEVELOPEMENT
2224   .
```

Flags :

```
-a # For all files and dir.
```

OUTPUT :



```
#du -sh
[+] [root@kali] -[ /home/ldrag0/ldrag0 ]
[+] #du -a
4.0K ./My Books
4.0K ./FOR_COMMANDS/new/Script
60K ./FOR_COMMANDS/new
72K ./FOR_COMMANDS
564K ./WEB DEVELOPEMENT/HTML-Personal site/Images
388K ./WEB DEVELOPEMENT/HTML-Personal site/Css
976K ./WEB DEVELOPEMENT/HTML-Personal site
32K ./WEB DEVELOPEMENT/Linux Commands/html
4.0K ./WEB DEVELOPEMENT/Linux Commands/css
40K ./WEB DEVELOPEMENT/Linux Commands
8.0K ./WEB DEVELOPEMENT/CSS/css
1.1M ./WEB DEVELOPEMENT/CSS/Images
1.1M ./WEB DEVELOPEMENT/CSS
2.1M ./WEB DEVELOPEMENT
2.2M .

[+] [root@kali] -[ /home/ldrag0/ldrag0 ]
[+] #
```

```
-h # For human readability.
```

OUTPUT :

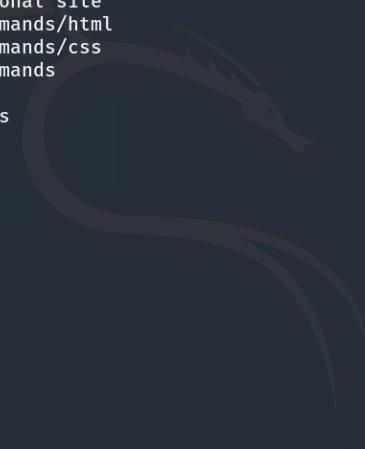


```
[+] [root@kali] -[ /home/ldrag0/ldrag0 ]
[+] #du -h
4.0K ./My Books
4.0K ./FOR_COMMANDS/new/Script
60K ./FOR_COMMANDS/new
72K ./FOR_COMMANDS
564K ./WEB DEVELOPEMENT/HTML-Personal site/Images
388K ./WEB DEVELOPEMENT/HTML-Personal site/Css
976K ./WEB DEVELOPEMENT/HTML-Personal site
32K ./WEB DEVELOPEMENT/Linux Commands/html
4.0K ./WEB DEVELOPEMENT/Linux Commands/css
40K ./WEB DEVELOPEMENT/Linux Commands
8.0K ./WEB DEVELOPEMENT/CSS/css
1.1M ./WEB DEVELOPEMENT/CSS/Images
1.1M ./WEB DEVELOPEMENT/CSS
2.1M ./WEB DEVELOPEMENT
2.2M .

[+] [root@kali] -[ /home/ldrag0/ldrag0 ]
[+] #
```

```
-c # To view a grand total for a directory pass the -c option.
```

OUTPUT :



```
[root@kali]~[~/home/ldragoldragol]
└─#du -c
4      ./My Books
4      ./FOR_COMMANDS/new/Script
60     ./FOR_COMMANDS/new
72     ./FOR_COMMANDS
564    ./WEB DEVELOPEMENT/HTML-Personal site/Images
388    ./WEB DEVELOPEMENT/HTML-Personal site/Css
976    ./WEB DEVELOPEMENT/HTML-Personal site
32     ./WEB DEVELOPEMENT/Linux Commands/html
4      ./WEB DEVELOPEMENT/Linux Commands/css
40     ./WEB DEVELOPEMENT/Linux Commands
8      ./WEB DEVELOPEMENT/CSS/css
1088   ./WEB DEVELOPEMENT/CSS/Images
1120   ./WEB DEVELOPEMENT/CSS
2140   ./WEB DEVELOPEMENT
2224   .
2224   total
[root@kali]~[~/home/ldragoldragol]
└─#
```

```
-sh # For summary of disk usage with human readability.
```

OUTPUT :

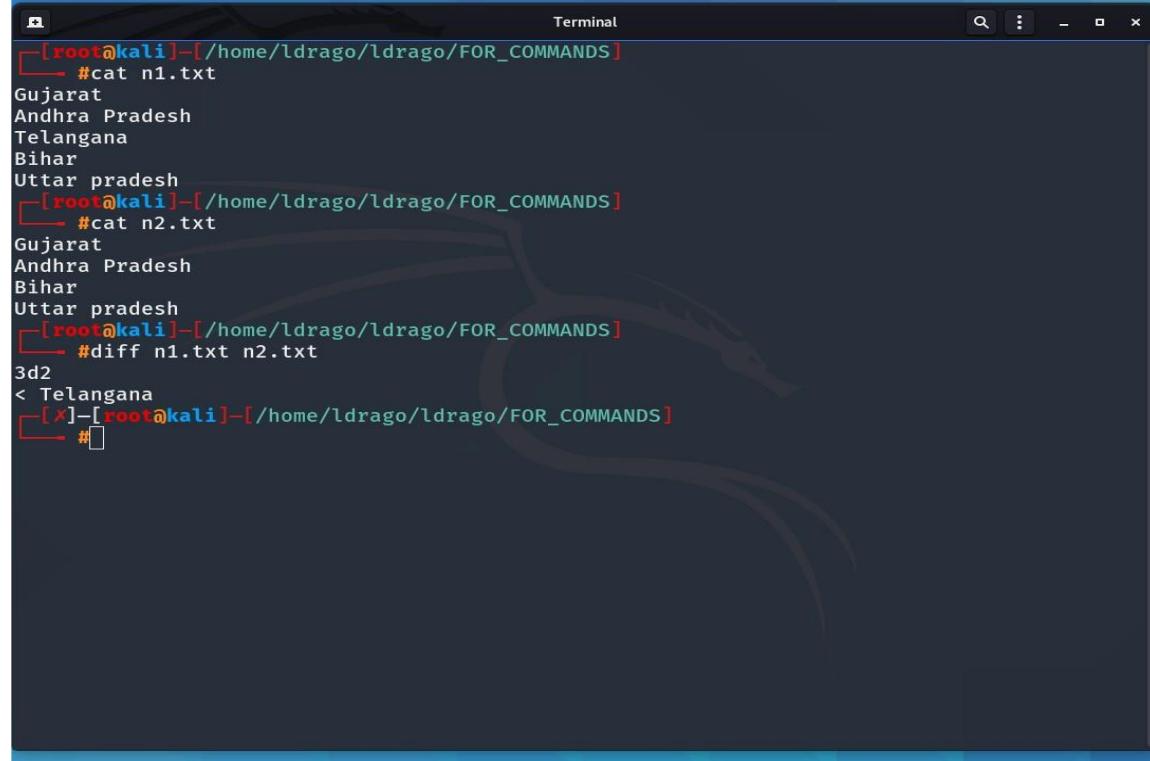


```
[root@kali]~[~/home/ldragoldragol]
└─#du -sh
2.2M .
[root@kali]~[~/home/ldragoldragol]
└─#
```

5. diff - Command

```
diff # Diff command in Linux is used to compare the content of two files line by line.  
  
SYNTAX : diff Flag n1.txt n2.txt(File_Name)
```

OUTPUT :

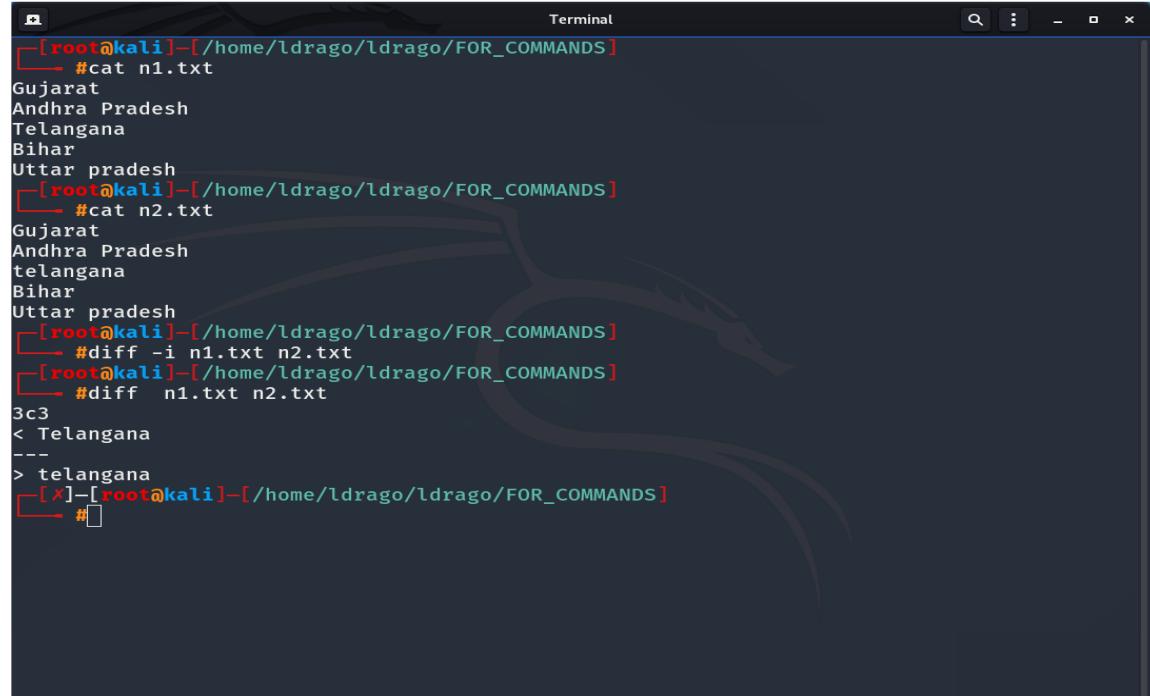


```
Terminal  
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS]  
└─#cat n1.txt  
Gujarat  
Andhra Pradesh  
Telangana  
Bihar  
Uttar pradesh  
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS]  
└─#cat n2.txt  
Gujarat  
Andhra Pradesh  
Bihar  
Uttar pradesh  
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS]  
└─#diff n1.txt n2.txt  
3d2  
< Telangana  
[x]~[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS]  
└─#
```

Flags :

```
-i # By default this command is case sensitive. To make this command case insensitive use -i option.
```

OUTPUT :



```
Terminal  
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS]  
└─#cat n1.txt  
Gujarat  
Andhra Pradesh  
Telangana  
Bihar  
Uttar pradesh  
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS]  
└─#cat n2.txt  
Gujarat  
Andhra Pradesh  
telangana  
Bihar  
Uttar pradesh  
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS]  
└─#diff -i n1.txt n2.txt  
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS]  
└─#diff n1.txt n2.txt  
3c3  
< Telangana  
---  
> telangana  
[x]~[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS]  
└─#
```

```
-u      # To view differences in unified mode, use the -u option.
```

OUTPUT :



```
Terminal
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS]
--- #diff -u n1.txt n2.txt
--- n1.txt      2020-07-26 08:12:01.650669681 +0530
+++ n2.txt      2020-07-26 08:12:34.706670626 +0530
@@ -1,5 +1,4 @@
 Gujarat
 Andhra Pradesh
-Telangana
 Bihar
-Uttar pradesh
-[x]-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS]
--- #
```

6. history - Command

```
history # History command is used to view the previously executed command.
```

```
SYNTAX : history Flag
```

OUTPUT :

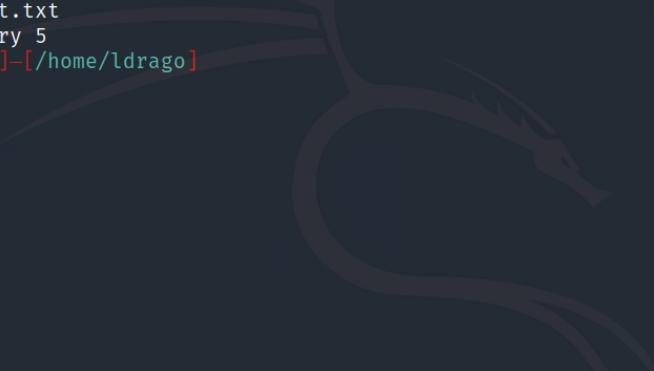


```
Terminal
1044 clear
1045 ls
1046 du ~/cd~/new
1047 du /new/FOR_COMMANDS
1048 du ~/new/FOR_COMMANDS
1049 du ~/new/~FOR_COMMANDS
1050 du ~/cd~/new
1051 du ~
1052 clear
1053 cat > n1.txt
1054 cat > n2.txt
1055 clear
1056 cat n1.txt
1057 cat n2.txt
1058 diff n1.txt n2.txt
1059 clear
1060 diff -u n1.txt n2.txt
1061 clear
1062 diff -i n1.txt n2.txt
1063 cat n2.txt
1064 cat >> n2.txt
1065 cat n2.txt
1066 gedit n2.txt
1067 cat n1.txt
1068 clear
1069 cat n1.txt
1070 cat n2.txt
1071 diff -i n1.txt n2.txt
1072 diff n1.txt n2.txt
1073 history
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS]
--- #
```

Flags :

```
-5    # To show the limited number of commands that executed previously as follows.
```

OUTPUT :



```
File Actions Edit View Help
LDRAGO →
└─[root@kali]─[/home/ldrago]
  └─#history 5
1402 ls
1403 llsh d.sh
1404 ls
1405 rm Out.txt
1406 history 5
└─[root@kali]─[/home/ldrago]
  └─#
```

```
-d # History can also be removed using history -d event_number.
```

OUTPUT :

```
Terminal
```

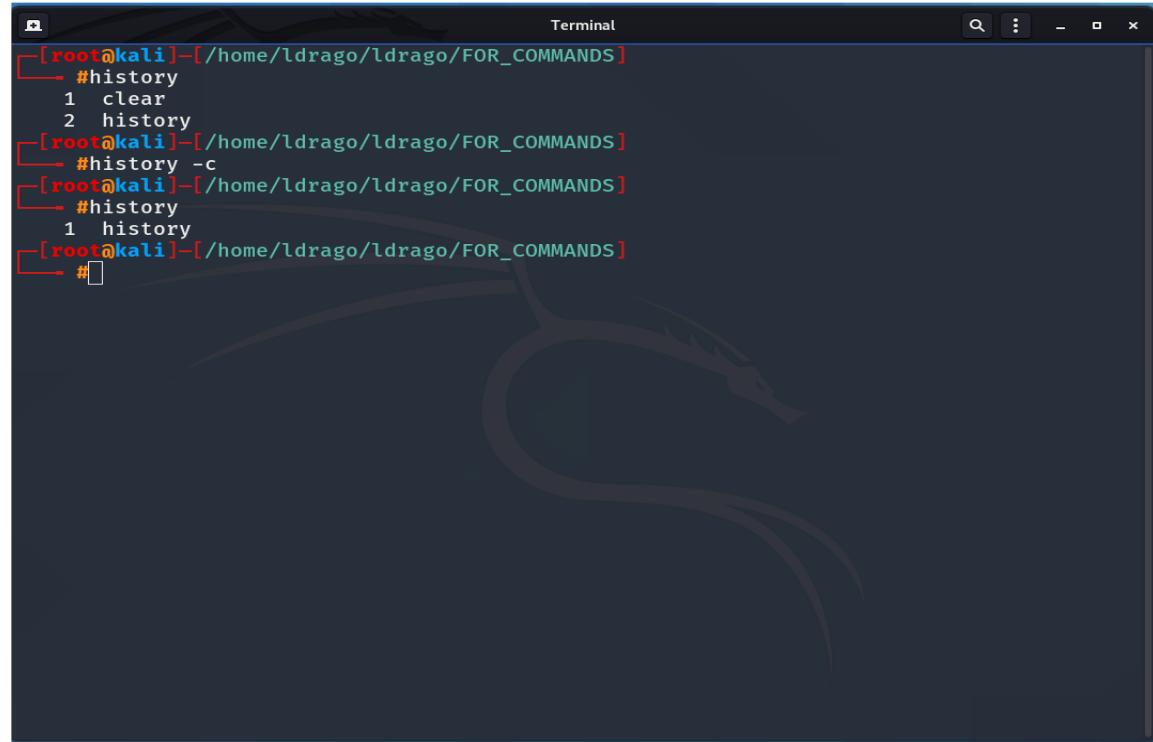
```
1059 clear
1060 diff -u n1.txt n2.txt
1061 clear
1062 diff -i n1.txt n2.txt
1063 cat n2.txt
1064 cat >> n2.txt
1065 cat n2.txt
1066 gedit n2.txt
1067 cat n1.txt
1068 clear
1069 cat n1.txt
1070 cat n2.txt
1071 diff -i n1.txt n2.txt
1072 diff n1.txt n2.txt
1073 history
1074 history 5
1075 history 10
1076 history:p
1077 1075:p
1078 history 10
1079 clear
1080 chmod 741 cmd.txt
1081 history chmod 741 cmd.txt
1082 history 10 history chmod 741 cmd.txt
1083 history 2 history chmod 741 cmd.txt
1084 clear
1085 history 2
1086 history
-[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS]
→ #history -d 1080
-[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS]
→ #
```

```
Terminal
```

```
1058 diff n1.txt n2.txt
1059 clear
1060 diff -u n1.txt n2.txt
1061 clear
1062 diff -i n1.txt n2.txt
1063 cat n2.txt
1064 cat >> n2.txt
1065 cat n2.txt
1066 gedit n2.txt
1067 cat n1.txt
1068 clear
1069 cat n1.txt
1070 cat n2.txt
1071 diff -i n1.txt n2.txt
1072 diff n1.txt n2.txt
1073 history
1074 history 5
1075 history 10
1076 history:p
1077 1075:p
1078 history 10
1079 clear
1080 history chmod 741 cmd.txt
1081 history 10 history chmod 741 cmd.txt
1082 history 2 history chmod 741 cmd.txt
1083 clear
1084 history 2
1085 history
1086 history -d 1080
1087 history
-[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS]
→ #
```

```
-c # The whole history can be removed using history -c option.
```

OUTPUT :

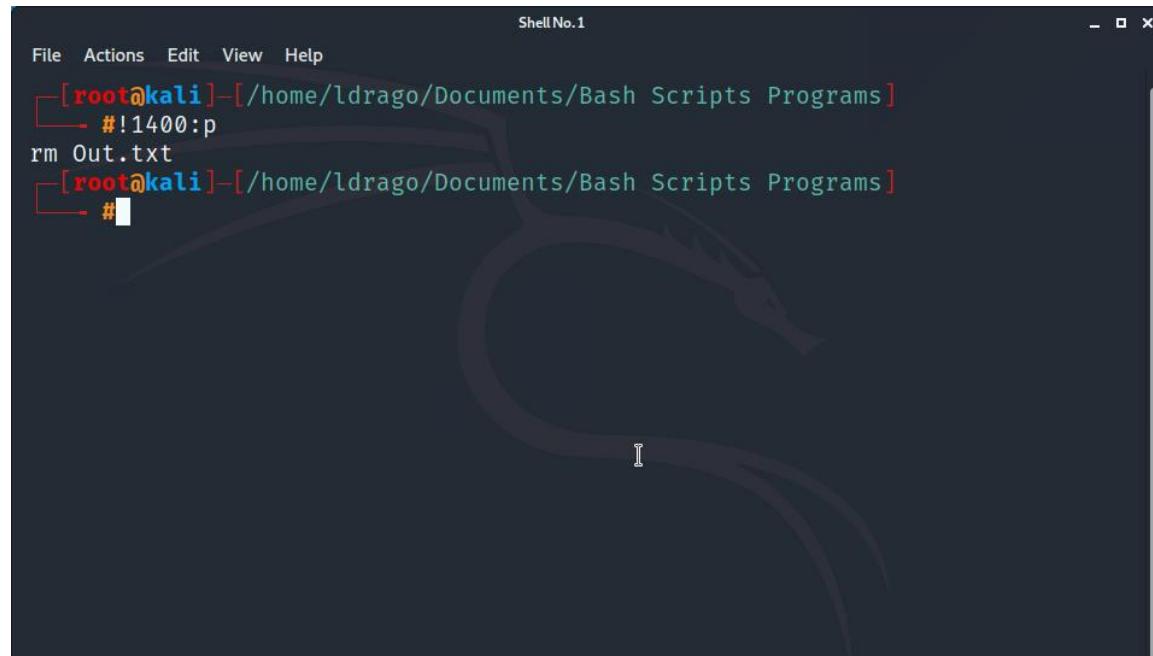


A screenshot of a terminal window titled "Terminal". The window shows a root shell on Kali Linux. The user runs the "history" command twice. The first run shows the history of previous commands: "clear" and "history". The second run, preceded by the "-c" option, removes all history, resulting in an empty history list.

```
[root@kali]~[/home/ldrago/ldrago/FOR_COMMANDS]
└─#history
  1 clear
  2 history
[root@kali]~[/home/ldrago/ldrago/FOR_COMMANDS]
└─#history -c
[root@kali]~[/home/ldrago/ldrago/FOR_COMMANDS]
└─#history
  1 history
[root@kali]~[/home/ldrago/ldrago/FOR_COMMANDS]
└─#
```

```
!Event_Number:p # To print command before executing so that a wrong command
does not get executed use :p after event number of
command.
```

OUTPUT :



A screenshot of a terminal window titled "Shell No.1". The window shows a root shell on Kali Linux. The user runs the command "#!1400:p" followed by "rm Out.txt". The command "#!1400:p" is printed to the screen before being executed, while "rm Out.txt" is executed without being printed.

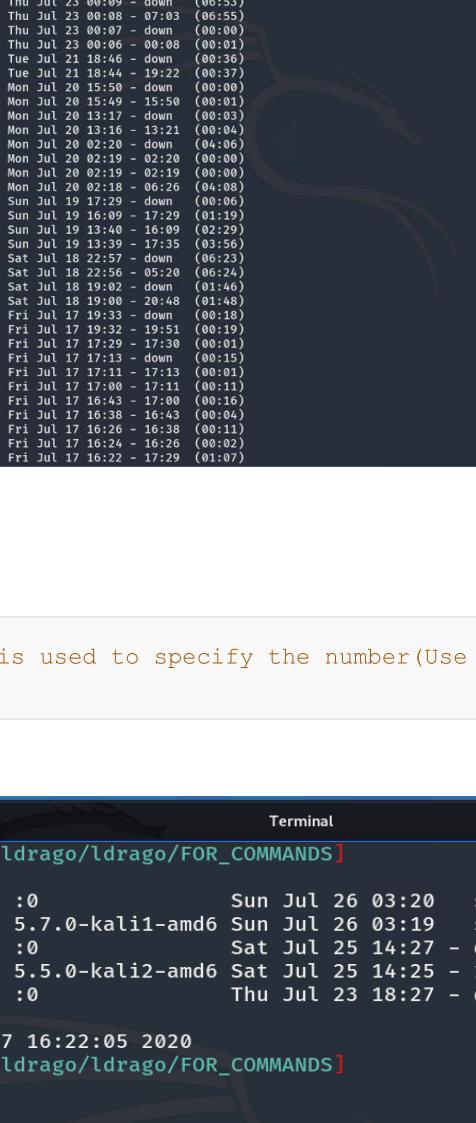
```
File Actions Edit View Help
Shell No.1
[root@kali]~[/home/ldrago/Documents/Bash Scripts Programs]
└─#!1400:p
rm Out.txt
[root@kali]~[/home/ldrago/Documents/Bash Scripts Programs]
└─#
```

7. last - Command

```
last # The last command in Linux is used to display the list of all the users  
logged in and out.
```

SYNTAX : last Flag

OUTPUT :

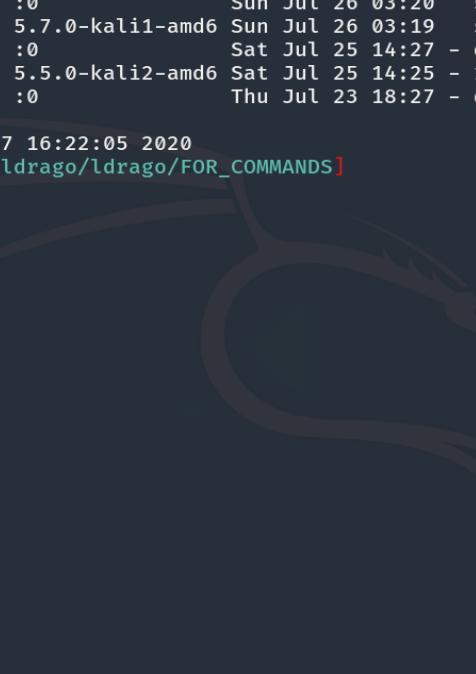


```
[root@kali]~[/home/lDrago/lDrago/FOR_COMMANDS]  
└─#last  
lDrago :0 :0 Sun Jul 26 03:20 still logged in  
reboot system boot 5.7.0-kali1-amd6 Sun Jul 26 03:19 still running  
lDrago :0 :0 Sat Jul 25 14:27 - down (02:39)  
reboot system boot 5.5.0-kali2-amd6 Sat Jul 25 14:25 - 17:06 (02:40)  
lDrago :0 :0 Thu Jul 23 18:27 - down (00:52)  
reboot system boot 5.5.0-kali2-amd6 Thu Jul 23 18:26 - 19:19 (00:53)  
reboot system boot 5.5.0-kali2-amd6 Thu Jul 23 07:58 - 07:58 (00:00)  
lDrago tty2 tty2 Thu Jul 23 00:09 - down (06:53)  
reboot system boot 5.5.0-kali2-amd6 Thu Jul 23 00:08 - 07:03 (06:55)  
lDrago :0 :0 Thu Jul 23 00:07 - down (00:00)  
reboot system boot 5.5.0-kali2-amd6 Thu Jul 23 00:06 - 00:08 (00:01)  
lDrago :0 :0 Tue Jul 21 18:46 - down (00:36)  
reboot system boot 5.5.0-kali2-amd6 Tue Jul 21 18:44 - 19:22 (00:37)  
lDrago tty2 tty2 Mon Jul 20 15:50 - down (00:00)  
reboot system boot 5.5.0-kali2-amd6 Mon Jul 20 15:49 - 15:50 (00:01)  
lDrago tty2 tty2 Mon Jul 20 13:17 - down (00:03)  
reboot system boot 5.5.0-kali2-amd6 Mon Jul 20 13:16 - 13:21 (00:04)  
lDrago tty2 tty2 Mon Jul 20 02:20 - down (04:06)  
lDrago :0 :0 Mon Jul 20 02:19 - 02:20 (00:00)  
lDrago :0 :0 Mon Jul 20 02:19 - 02:19 (00:00)  
reboot system boot 5.5.0-kali2-amd6 Mon Jul 20 02:18 - 06:26 (04:08)  
lDrago :0 :0 Sun Jul 19 17:29 - down (00:06)  
lDrago tty2 tty2 Sun Jul 19 16:09 - 17:29 (01:19)  
lDrago tty2 tty2 Sun Jul 19 13:40 - 16:09 (02:29)  
reboot system boot 5.5.0-kali2-amd6 Sun Jul 19 13:39 - 17:35 (03:56)  
lDrago tty2 tty2 Sat Jul 18 22:57 - down (06:23)  
reboot system boot 5.5.0-kali2-amd6 Sat Jul 18 22:56 - 05:20 (06:24)  
lDrago tty2 tty2 Sat Jul 18 19:02 - down (01:46)  
reboot system boot 5.5.0-kali2-amd6 Sat Jul 18 19:00 - 20:48 (01:48)  
lDrago tty2 tty2 Fri Jul 17 19:33 - down (00:18)  
reboot system boot 5.5.0-kali2-amd6 Fri Jul 17 19:32 - 19:51 (00:19)  
reboot system boot 5.5.0-kali2-amd6 Fri Jul 17 17:29 - 17:30 (00:01)  
lDrago tty2 tty2 Fri Jul 17 17:13 - down (00:15)  
lDrago :0 :0 Fri Jul 17 17:11 - 17:13 (00:01)  
lDrago tty2 tty2 Fri Jul 17 17:00 - 17:11 (00:11)  
lDrago tty2 tty2 Fri Jul 17 16:43 - 17:00 (00:16)  
lDrago :0 :0 Fri Jul 17 16:38 - 16:43 (00:04)  
lDrago tty2 tty2 Fri Jul 17 16:26 - 16:38 (00:11)  
lDrago tty2 tty2 Fri Jul 17 16:24 - 16:26 (00:02)  
reboot system boot 5.5.0-kali2-amd6 Fri Jul 17 16:22 - 17:29 (01:07)
```

Flags :

```
-5 # This Flag is used to specify the number(Use Any Number) of lines to  
display.
```

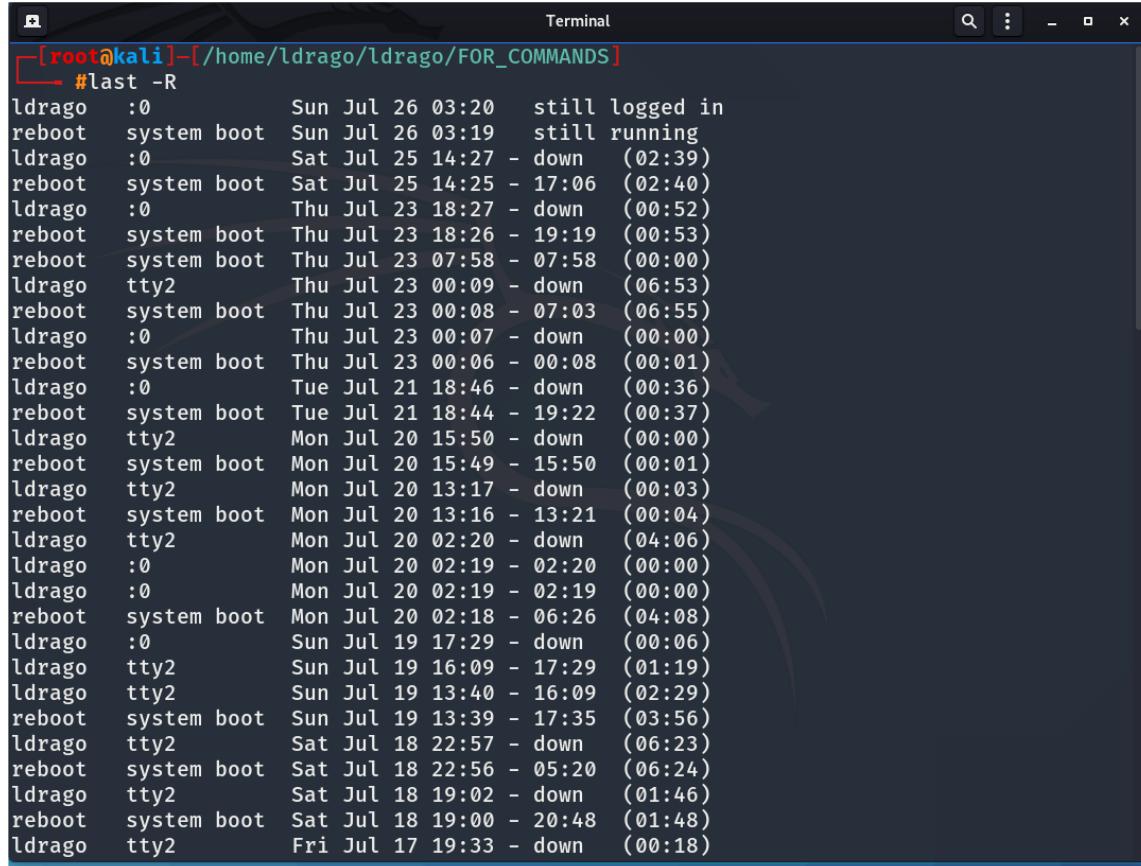
OUTPUT :



```
[root@kali]~[/home/lDrago/lDrago/FOR_COMMANDS]  
└─#last -5  
lDrago :0 :0 Sun Jul 26 03:20 still logged in  
reboot system boot 5.7.0-kali1-amd6 Sun Jul 26 03:19 still running  
lDrago :0 :0 Sat Jul 25 14:27 - down (02:39)  
reboot system boot 5.5.0-kali2-amd6 Sat Jul 25 14:25 - 17:06 (02:40)  
lDrago :0 :0 Thu Jul 23 18:27 - down (00:52)  
  
wtmp begins Fri Jul 17 16:22:05 2020  
[root@kali]~[/home/lDrago/lDrago/FOR_COMMANDS]  
└─#
```

```
-R # This Flag is used to hide the host-name field.
```

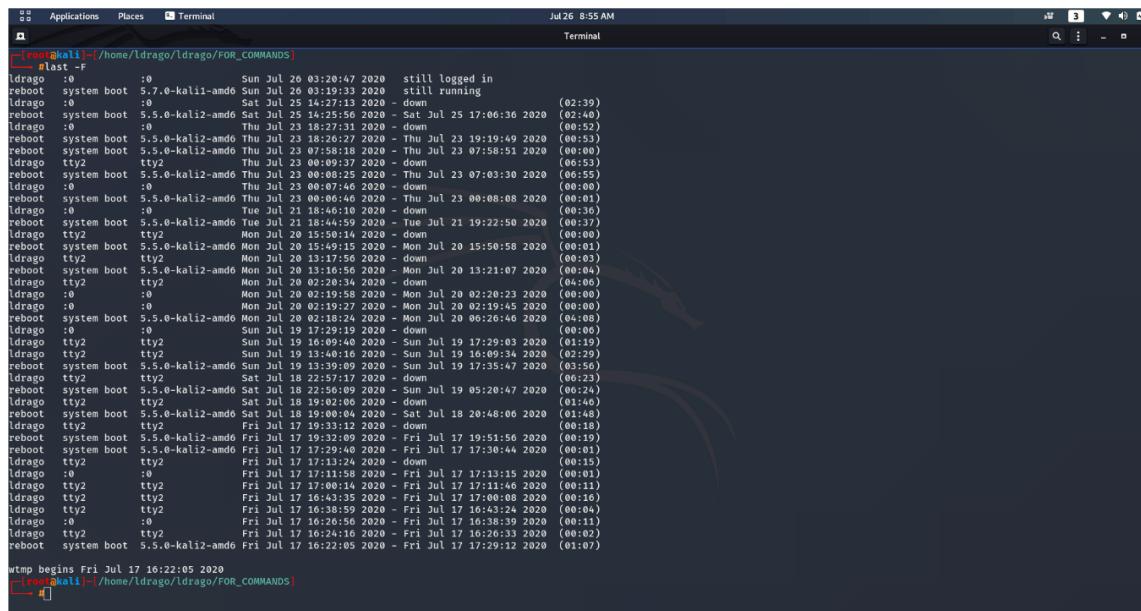
OUTPUT :



```
[root@kali]~[/home/ldrago/ldrago/FOR_COMMANDS]
└─#last -R
ldrago :0 Sun Jul 26 03:20 still logged in
reboot system boot Sun Jul 26 03:19 still running
ldrago :0 Sat Jul 25 14:27 - down (02:39)
reboot system boot Sat Jul 25 14:25 - 17:06 (02:40)
ldrago :0 Thu Jul 23 18:27 - down (00:52)
reboot system boot Thu Jul 23 18:26 - 19:19 (00:53)
reboot system boot Thu Jul 23 07:58 - 07:58 (00:00)
ldrago tty2 Thu Jul 23 00:09 - down (06:53)
reboot system boot Thu Jul 23 00:08 - 07:03 (06:55)
ldrago :0 Thu Jul 23 00:07 - down (00:00)
reboot system boot Thu Jul 23 00:06 - 00:08 (00:01)
ldrago :0 Tue Jul 21 18:46 - down (00:36)
reboot system boot Tue Jul 21 18:44 - 19:22 (00:37)
ldrago tty2 Mon Jul 20 15:50 - down (00:00)
reboot system boot Mon Jul 20 15:49 - 15:50 (00:01)
ldrago tty2 Mon Jul 20 13:17 - down (00:03)
reboot system boot Mon Jul 20 13:16 - 13:21 (00:04)
ldrago tty2 Mon Jul 20 02:20 - down (04:06)
ldrago :0 Mon Jul 20 02:19 - 02:20 (00:00)
ldrago :0 Mon Jul 20 02:19 - 02:19 (00:00)
reboot system boot Mon Jul 20 02:18 - 06:26 (04:08)
ldrago :0 Sun Jul 19 17:29 - down (00:06)
ldrago tty2 Sun Jul 19 16:09 - 17:29 (01:19)
ldrago tty2 Sun Jul 19 13:40 - 16:09 (02:29)
reboot system boot Sun Jul 19 13:39 - 17:35 (03:56)
ldrago tty2 Sat Jul 18 22:57 - down (06:23)
reboot system boot Sat Jul 18 22:56 - 05:20 (06:24)
ldrago tty2 Sat Jul 18 19:02 - down (01:46)
reboot system boot Sat Jul 18 19:00 - 20:48 (01:48)
ldrago tty2 Fri Jul 17 19:33 - down (00:18)
```

```
-F # This Flag is used to display the login and logout time including the dates.
```

OUTPUT :

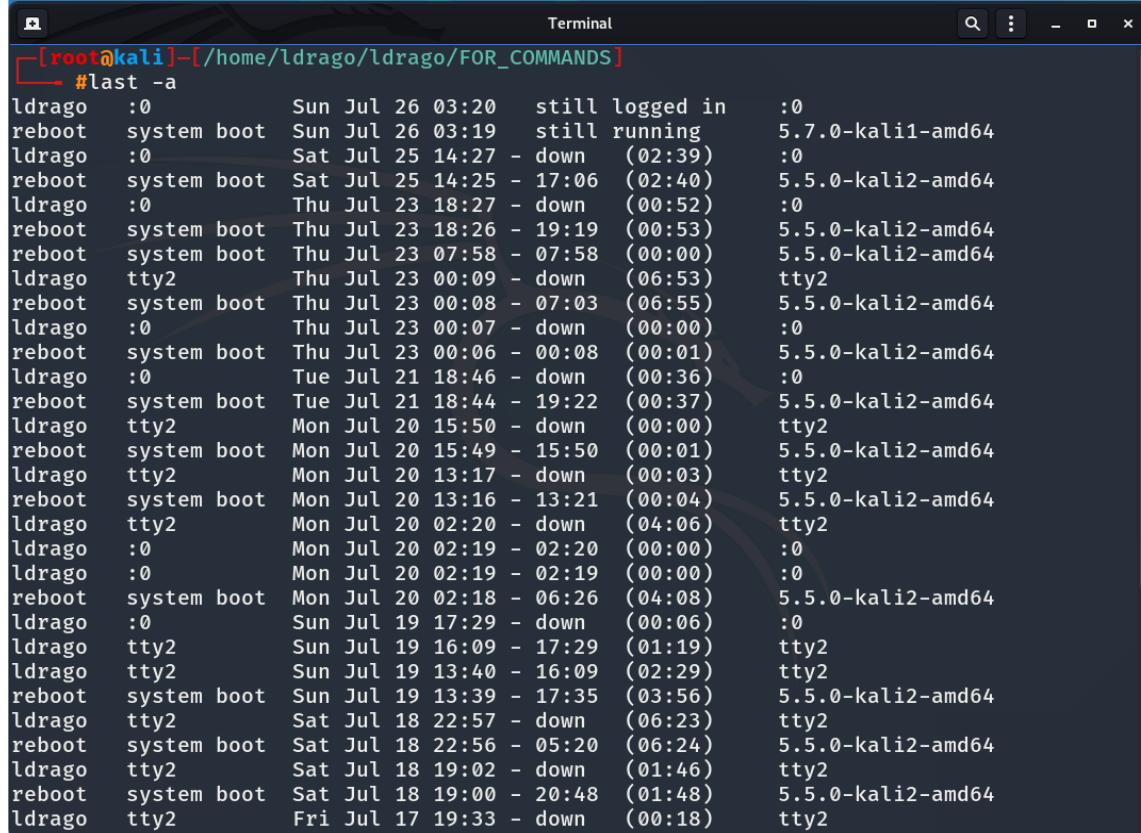


```
[root@kali]~[/home/ldrago/ldrago/FOR_COMMANDS]
└─#last -F
ldrago :0 Sun Jul 26 02:29:47 2020 still logged in
reboot system boot 5.7.0-kalil2-amd6 Sun Jul 26 03:19:33 2020 still running
ldrago :0 Sat Jul 25 14:27:18 2020 - down (02:39)
reboot system boot 5.5.0-kalil2-amd6 Sat Jul 25 14:25:58 2020 - Sat Jul 25 17:06:36 2020 (02:40)
ldrago :0 Thu Jul 23 18:27:31 2020 - down (00:52)
reboot system boot 5.5.0-kalil2-amd6 Thu Jul 23 18:26:32 2020 - Thu Jul 23 19:19:49 2020 (00:53)
reboot system boot 5.5.0-kalil2-amd6 Mon Jul 23 07:58:51 2020 - Mon Jul 23 07:58:51 2020 (00:00)
ldrago tty2 Thu Jul 23 00:09:37 2020 - down (06:53)
reboot system boot 5.5.0-kalil2-amd6 Thu Jul 23 00:09:25 2020 - Thu Jul 23 07:03:30 2020 (06:55)
ldrago :0 Thu Jul 23 00:07:44 2020 - down (00:00)
reboot system boot 5.5.0-kalil2-amd6 Thu Jul 23 00:06:46 2020 - Thu Jul 23 00:08:08 2020 (00:02)
ldrago :0 Tue Jul 21 18:46:10 2020 - down (00:36)
reboot system boot 5.5.0-kalil2-amd6 Mon Jul 20 18:46:09 2020 - Mon Jul 21 19:22:58 2020 (00:37)
ldrago tty2 Mon Jul 20 13:40:14 2020 - down (00:00)
reboot system boot 5.5.0-kalil2-amd6 Mon Jul 20 15:49:15 2020 - Mon Jul 20 15:50:58 2020 (00:01)
ldrago tty2 Mon Jul 20 13:17:56 2020 - down (00:03)
reboot system boot 5.5.0-kalil2-amd6 Mon Jul 20 13:16:56 2020 - Mon Jul 20 13:21:07 2020 (00:04)
ldrago tty2 Mon Jul 20 02:20:34 2020 - down (04:06)
ldrago :0 Mon Jul 20 02:19:54 2020 - Mon Jul 20 02:20:23 2020 (00:00)
ldrago :0 Mon Jul 20 02:19:54 2020 - Mon Jul 20 02:19:45 2020 (00:01)
reboot system boot 5.5.0-kalil2-amd6 Mon Jul 20 02:18:24 2020 - Mon Jul 20 06:26:46 2020 (04:08)
ldrago :0 Sun Jul 19 17:29:19 2020 - down (00:00)
ldrago tty2 Sun Jul 19 16:09:40 2020 - Sun Jul 19 17:29:03 2020 (01:19)
ldrago tty2 Sun Jul 19 13:46:18 2020 - Sun Jul 19 16:09:34 2020 (02:29)
reboot system boot 5.5.0-kalil2-amd6 Sun Jul 19 13:39:09 2020 - Sun Jul 19 17:35:47 2020 (03:56)
ldrago tty2 Sat Jul 18 22:57:17 2020 - down (06:23)
reboot system boot 5.5.0-kalil2-amd6 Sat Jul 18 22:56:09 2020 - Sat Jul 19 05:20:47 2020 (06:24)
ldrago tty2 Sat Jul 18 19:02:06 2020 - down (01:46)
reboot system boot 5.5.0-kalil2-amd6 Sat Jul 18 19:00:04 2020 - Sat Jul 18 20:48:00 2020 (01:48)
ldrago tty2 Fri Jul 17 19:33:18 2020 - down (00:18)
reboot system boot 5.5.0-kalil2-amd6 Fri Jul 17 19:32:09 2020 - Fri Jul 17 19:51:56 2020 (00:19)
reboot system boot 5.5.0-kalil2-amd6 Fri Jul 17 17:29:40 2020 - Fri Jul 17 17:30:44 2020 (00:01)
ldrago tty2 Fri Jul 17 17:11:00 2020 - down (00:15)
ldrago :0 Fri Jul 17 17:11:00 2020 - Fri Jul 17 17:13:15 2020 (00:15)
ldrago tty2 Fri Jul 17 17:00:14 2020 - Fri Jul 17 17:11:46 2020 (00:11)
ldrago tty2 Fri Jul 17 16:42:35 2020 - Fri Jul 17 17:00:08 2020 (00:16)
ldrago tty2 Fri Jul 17 16:38:59 2020 - Fri Jul 17 16:43:24 2020 (00:04)
ldrago :0 Fri Jul 17 16:26:59 2020 - Fri Jul 17 16:38:39 2020 (00:11)
ldrago tty2 Fri Jul 17 16:24:16 2020 - Fri Jul 17 16:26:33 2020 (00:02)
reboot system boot 5.5.0-kalil2-amd6 Fri Jul 17 16:22:05 2020 - Fri Jul 17 17:29:12 2020 (01:07)

wtmp begins Fri Jul 17 16:22:05 2020
```

```
-a # This Flag is used is to display the host-name in the last column.
```

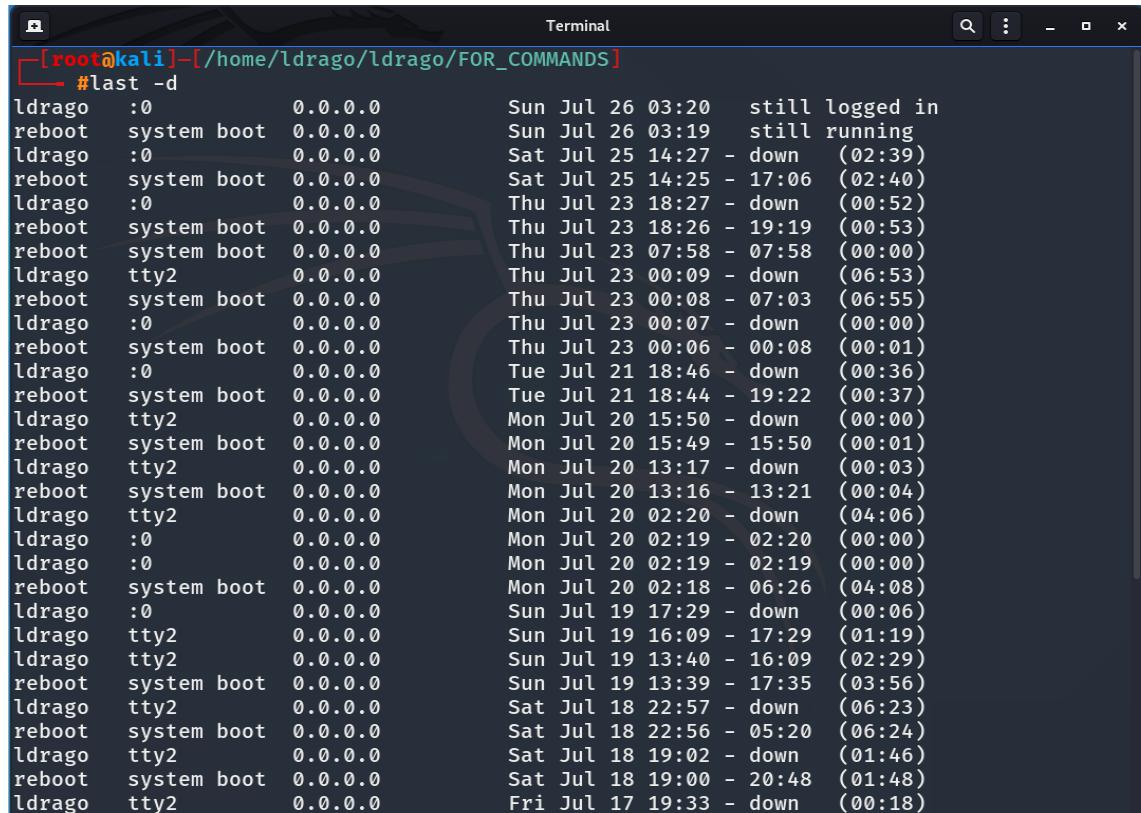
OUTPUT :



```
[-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS]
└─#last -a
ldrango :0          Sun Jul 26 03:20  still logged in   :0
reboot system boot  Sun Jul 26 03:19  still running    5.7.0-kali1-amd64
ldrango :0          Sat Jul 25 14:27 - down   (02:39)      :0
reboot system boot  Sat Jul 25 14:25 - 17:06 (02:40)    5.5.0-kali2-amd64
ldrango :0          Thu Jul 23 18:27 - down   (00:52)      :0
reboot system boot  Thu Jul 23 18:26 - 19:19 (00:53)    5.5.0-kali2-amd64
reboot system boot  Thu Jul 23 07:58 - 07:58 (00:00)    5.5.0-kali2-amd64
ldrango tty2        Thu Jul 23 00:09 - down   (06:53)      tty2
reboot system boot  Thu Jul 23 00:08 - 07:03 (06:55)    5.5.0-kali2-amd64
ldrango :0          Thu Jul 23 00:07 - down   (00:00)      :0
reboot system boot  Thu Jul 23 00:06 - 00:08 (00:01)    5.5.0-kali2-amd64
ldrango :0          Tue Jul 21 18:46 - down   (00:36)      :0
reboot system boot  Tue Jul 21 18:44 - 19:22 (00:37)    5.5.0-kali2-amd64
ldrango tty2        Mon Jul 20 15:50 - down   (00:00)      tty2
reboot system boot  Mon Jul 20 15:49 - 15:50 (00:01)    5.5.0-kali2-amd64
ldrango tty2        Mon Jul 20 13:17 - down   (00:03)      tty2
reboot system boot  Mon Jul 20 13:16 - 13:21 (00:04)    5.5.0-kali2-amd64
ldrango tty2        Mon Jul 20 02:20 - down   (04:06)      tty2
ldrango :0          Mon Jul 20 02:19 - 02:20 (00:00)      :0
ldrango :0          Mon Jul 20 02:19 - 02:19 (00:00)      :0
reboot system boot  Mon Jul 20 02:18 - 06:26 (04:08)    5.5.0-kali2-amd64
ldrango :0          Sun Jul 19 17:29 - down   (00:06)      :0
ldrango tty2        Sun Jul 19 16:09 - 17:29 (01:19)      tty2
ldrango tty2        Sun Jul 19 13:40 - 16:09 (02:29)      tty2
reboot system boot  Sun Jul 19 13:39 - 17:35 (03:56)    5.5.0-kali2-amd64
ldrago tty2         Sat Jul 18 22:57 - down   (06:23)      tty2
reboot system boot  Sat Jul 18 22:56 - 05:20 (06:24)    5.5.0-kali2-amd64
ldrango tty2        Sat Jul 18 19:02 - down   (01:46)      tty2
reboot system boot  Sat Jul 18 19:00 - 20:48 (01:48)    5.5.0-kali2-amd64
ldrango tty2        Fri Jul 17 19:33 - down   (00:18)      tty2
```

```
-d # This Flag is used to translate the IP address back into its host-name.
```

OUTPUT :



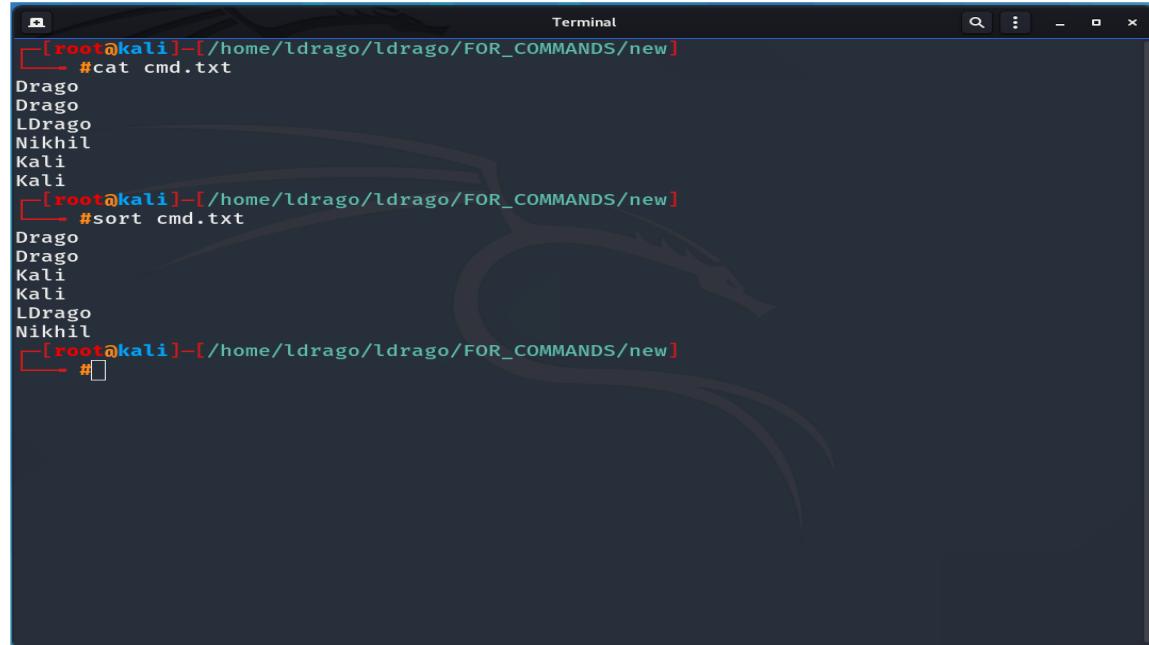
```
[-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS]
└─#last -d
ldrango :0          0.0.0.0           Sun Jul 26 03:20  still logged in
reboot system boot  0.0.0.0           Sun Jul 26 03:19  still running
ldrango :0          0.0.0.0           Sat Jul 25 14:27 - down   (02:39)
reboot system boot  0.0.0.0           Sat Jul 25 14:25 - 17:06 (02:40)
ldrango :0          0.0.0.0           Thu Jul 23 18:27 - down   (00:52)
reboot system boot  0.0.0.0           Thu Jul 23 18:26 - 19:19 (00:53)
reboot system boot  0.0.0.0           Thu Jul 23 07:58 - 07:58 (00:00)
ldrango tty2        0.0.0.0           Thu Jul 23 00:09 - down   (06:53)
reboot system boot  0.0.0.0           Thu Jul 23 00:08 - 07:03 (06:55)
ldrango :0          0.0.0.0           Thu Jul 23 00:07 - down   (00:00)
reboot system boot  0.0.0.0           Thu Jul 23 00:06 - 00:08 (00:01)
ldrango :0          0.0.0.0           Tue Jul 21 18:46 - down   (00:36)
reboot system boot  0.0.0.0           Tue Jul 21 18:44 - 19:22 (00:37)
ldrango tty2        0.0.0.0           Mon Jul 20 15:50 - down   (00:00)
reboot system boot  0.0.0.0           Mon Jul 20 15:49 - 15:50 (00:01)
ldrango tty2        0.0.0.0           Mon Jul 20 13:17 - down   (00:03)
reboot system boot  0.0.0.0           Mon Jul 20 13:16 - 13:21 (00:04)
ldrango tty2        0.0.0.0           Mon Jul 20 02:20 - down   (04:06)
ldrango :0          0.0.0.0           Mon Jul 20 02:19 - 02:20 (00:00)
ldrango :0          0.0.0.0           Mon Jul 20 02:19 - 02:19 (00:00)
reboot system boot  0.0.0.0           Mon Jul 20 02:18 - 06:26 (04:08)
ldrango :0          0.0.0.0           Sun Jul 19 17:29 - down   (00:06)
ldrango tty2        0.0.0.0           Sun Jul 19 16:09 - 17:29 (01:19)
ldrango tty2        0.0.0.0           Sun Jul 19 13:40 - 16:09 (02:29)
reboot system boot  0.0.0.0           Sun Jul 19 13:39 - 17:35 (03:56)
ldrango tty2        0.0.0.0           Sat Jul 18 22:57 - down   (06:23)
reboot system boot  0.0.0.0           Sat Jul 18 22:56 - 05:20 (06:24)
ldrango tty2        0.0.0.0           Sat Jul 18 19:02 - down   (01:46)
reboot system boot  0.0.0.0           Sat Jul 18 19:00 - 20:48 (01:48)
ldrango tty2        0.0.0.0           Fri Jul 17 19:33 - down   (00:18)
```

8. sort - Command

```
sort # Sort command is used to sort a file, arranging the records in a particular order. (Default According to ASCII)
```

```
SYNTAX : sort Flag File_Name(cmd.txt)
```

OUTPUT :

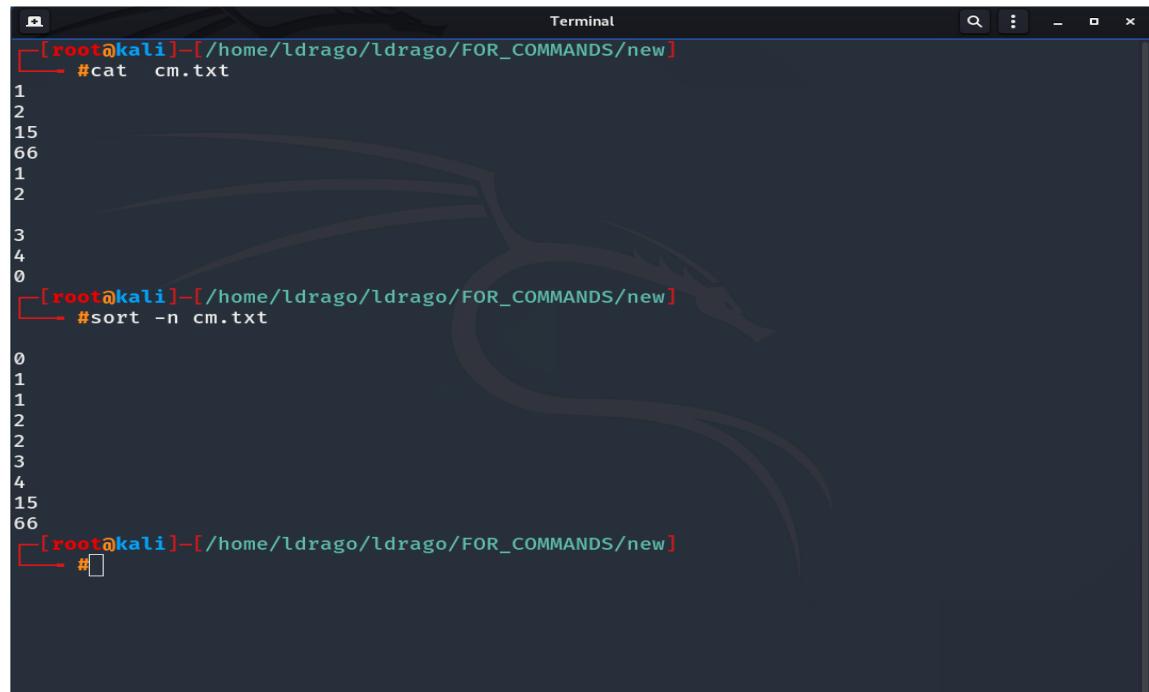


```
Terminal
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #cat cmd.txt
Drago
Drago
LDrago
Nikhil
Kali
Kali
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #sort cmd.txt
Drago
Drago
Kali
Kali
LDrago
Nikhil
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #
```

Flags :

```
-n # To sort a file numerically used -n option.
```

OUTPUT :



```
Terminal
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #cat cm.txt
1
2
15
66
1
2
3
4
0
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #sort -n cm.txt
0
1
1
2
2
3
4
15
66
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #
```

```
-r # To sort a file reverse-order used -r option.
```

OUTPUT :



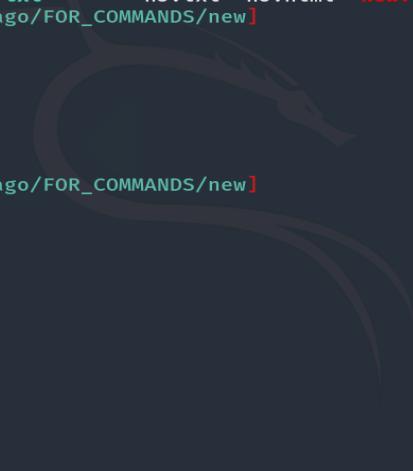
```
Terminal
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #sort -n cm.txt

0
1
1
2
2
3
4
15
66
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #sort -rn cm.txt
66
15
4
3
2
2
1
1
0

-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #
```

```
-o # To sort file and write it's output in the other file then we use -o
Flag.
```

OUTPUT :



```
Terminal
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #sort cmd.txt > output.txt
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #sort -o output.txt cmd.txt
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #ls
cmds.txt  cm.txt          FOR_COMMANDS  n2.txt  n4.txt  n5.txt  output.txt
cmd.txt   command_Script.sh  n1.txt      n3.txt  n5.html new.tar  Uniq.txt
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #expand output.txt
Drago
Drago
Kali
Kali
LDrago
Nikhil
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #
```

9. sed - Command

```
sed # Sed is a powerful text stream editor. Can do insertion, deletion, search  
and replace(substitution).
```

Replacing Text :

```
sed 's/Drago/coco/' cmd.txt # Sed command is mostly used to replace the text  
in a file.
```

OUTPUT :

```
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS/new]  
└─#cat cmd.txt  
Drago  
Drago  
LDrago  
Nikhil  
Kali  
Kali  
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS/new]  
└─#sed 's/Drago/coco/' cmd.txt  
coco  
coco  
Lcoco  
Nikhil  
Kali  
Kali  
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS/new]  
└─#
```

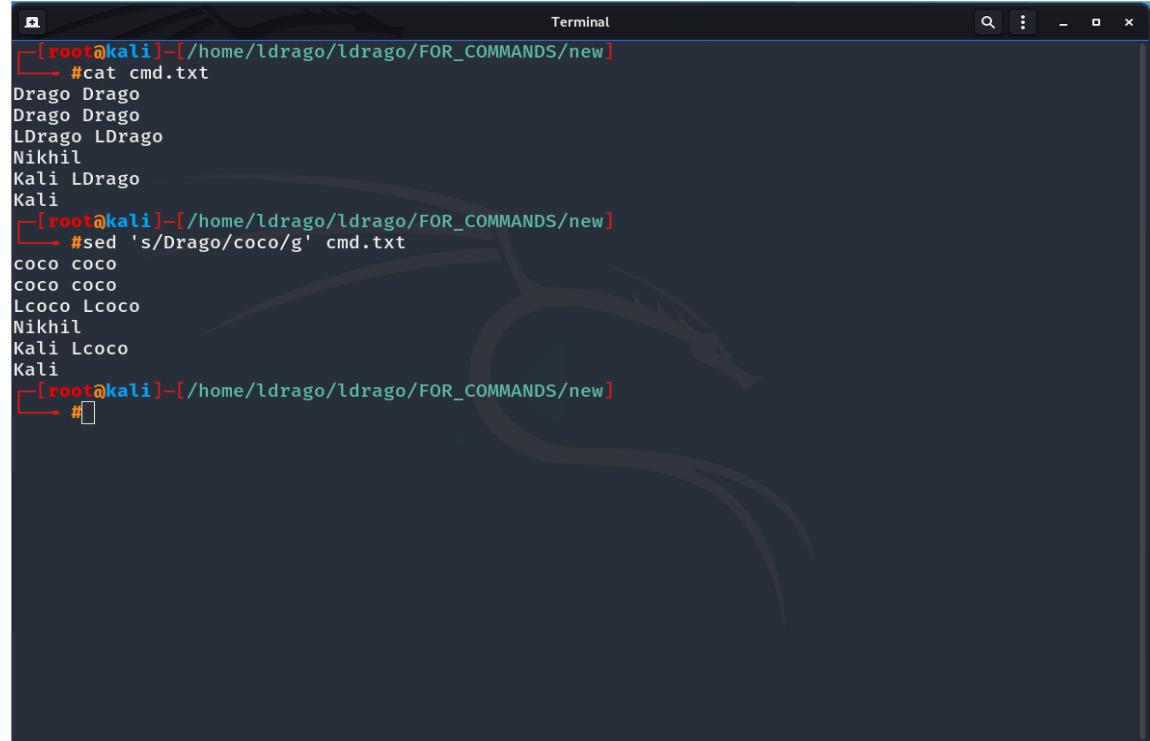
```
sed 's/Drago/coco/2' cmd.txt # Use the /1, /2...etc flags to replace the  
first, second occurrence of a pattern in a line.
```

OUTPUT :

```
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS/new]  
└─#cat cmd.txt  
Drago Drago  
Drago Drago  
LDrago LDrago  
Nikhil  
Kali LDrago  
Kali  
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS/new]  
└─#sed 's/Drago/coco/2' cmd.txt  
Drago coco  
Drago coco  
LDrago Lcoco  
Nikhil  
Kali LDrago  
Kali  
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS/new]  
└─#
```

```
sed 's/Drago/coco/g' cmd.txt # The substitute flag /g (global replacement) specifies the sed command to replace all the occurrences of the string in the line.
```

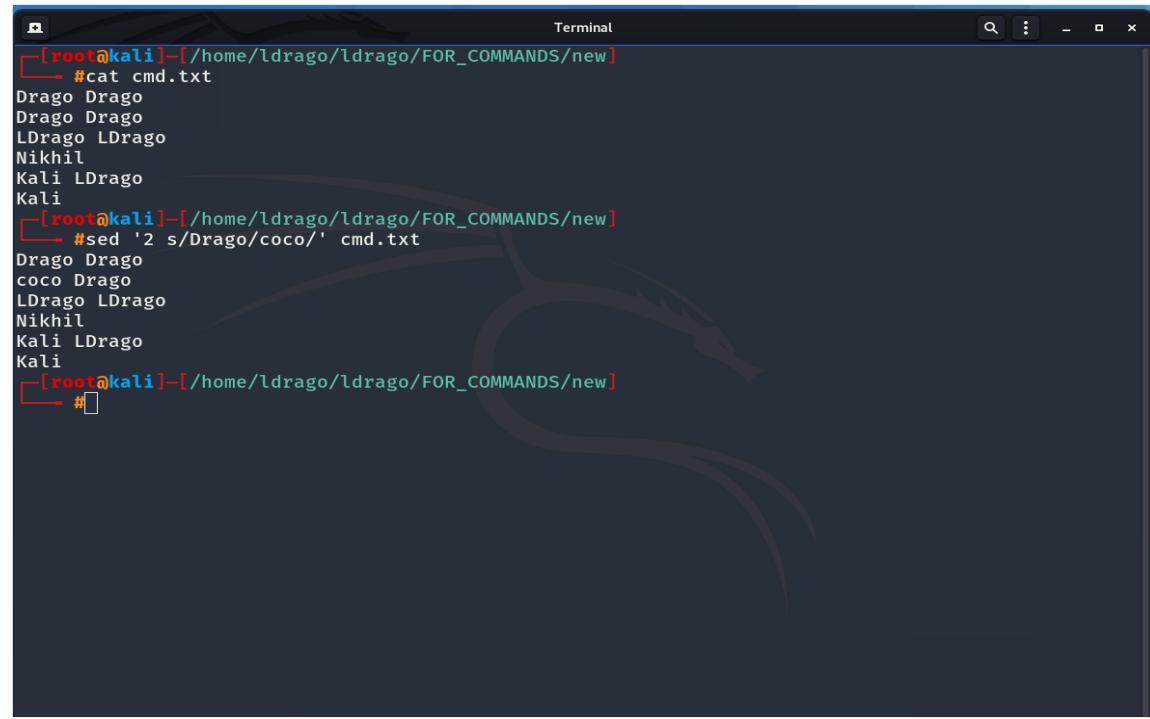
OUTPUT :



```
[-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #cat cmd.txt
Drago Drago
Drago Drago
LDrago LDrago
Nikhil
Kali LDrago
Kali
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #sed 's/Drago/coco/g' cmd.txt
coco coco
coco coco
Lcoco Lcoco
Nikhil
Kali Lcoco
Kali
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #
```

```
sed '2 s/Drago/coco/g' cmd.txt # For only replace 2nd line word.
```

OUTPUT :

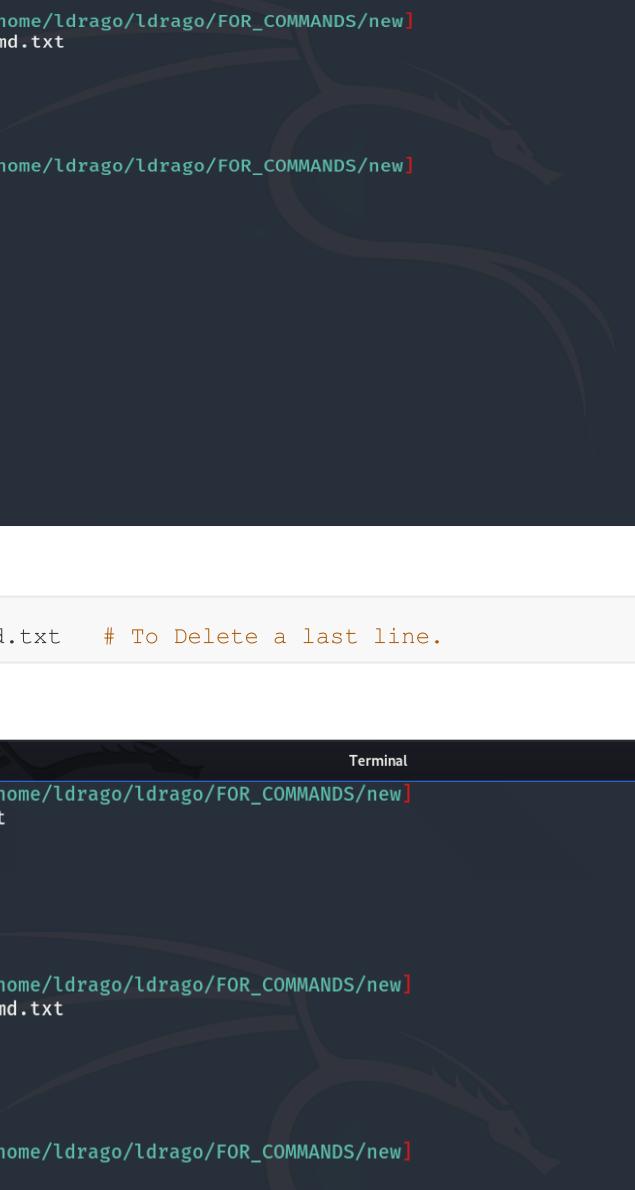


```
[-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #cat cmd.txt
Drago Drago
Drago Drago
LDrago LDrago
Nikhil
Kali LDrago
Kali
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #sed '2 s/Drago/coco/' cmd.txt
Drago Drago
coco Drago
LDrago LDrago
Nikhil
Kali LDrago
Kali
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└── #
```

Deleting Line :

```
sed 'nd' cmd.txt # To Delete a particular line say n(Any_Number) in this example.
```

OUTPUT :



```
Terminal
-[root@kali]-[~/home/lDrago/lDrago/FOR_COMMANDS/new]
└── #cat cmd.txt
Drago Drago
Drago Drago
LDrago LDrago
Nikhil
Kali LDrago
Kali
-[root@kali]-[~/home/lDrago/lDrago/FOR_COMMANDS/new]
└── #sed '3d' cmd.txt
Drago Drago
Drago Drago
Nikhil
Kali LDrago
Kali
-[root@kali]-[~/home/lDrago/lDrago/FOR_COMMANDS/new]
└── #
```

```
sed '$d' cmd.txt # To Delete a last line.
```

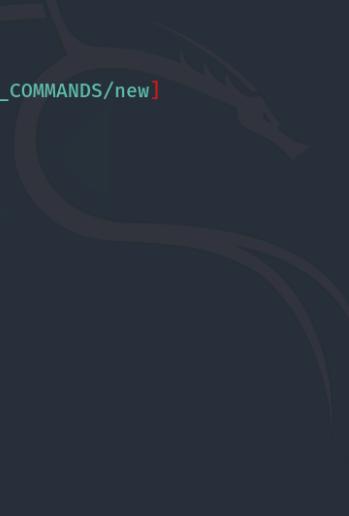
OUTPUT :



```
Terminal
-[root@kali]-[~/home/lDrago/lDrago/FOR_COMMANDS/new]
└── #cat cmd.txt
Drago Drago
Drago Drago
LDrago LDrago
Nikhil
Kali LDrago
Kali
-[root@kali]-[~/home/lDrago/lDrago/FOR_COMMANDS/new]
└── #sed '$d' cmd.txt
Drago Drago
Drago Drago
LDrago LDrago
Nikhil
Kali LDrago
-[root@kali]-[~/home/lDrago/lDrago/FOR_COMMANDS/new]
└── #
```

```
sed 'x,yd' cmd.txt # To Delete line from range x to y.(x,y is any Number)
```

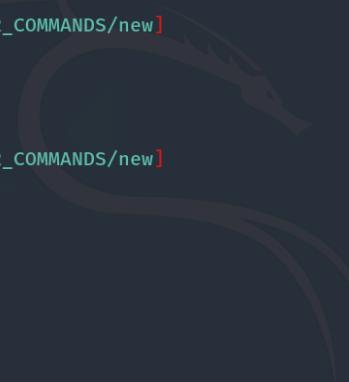
OUTPUT :



```
[-[root@kali]-[/home/lDrago/lDrago/FOR_COMMANDS/new]
└─#cat cmd.txt
Drago Drago
Drago Drago
LDrago LDrago
Nikhil
Kali LDrago
Kali
[-[root@kali]-[/home/lDrago/lDrago/FOR_COMMANDS/new]
└─#sed '1,3d' cmd.txt
Nikhil
Kali LDrago
Kali
[-[root@kali]-[/home/lDrago/lDrago/FOR_COMMANDS/new]
└─#]
```

```
sed '/kali/d' cmd.txt # To Delete pattern matching line.
```

OUTPUT :

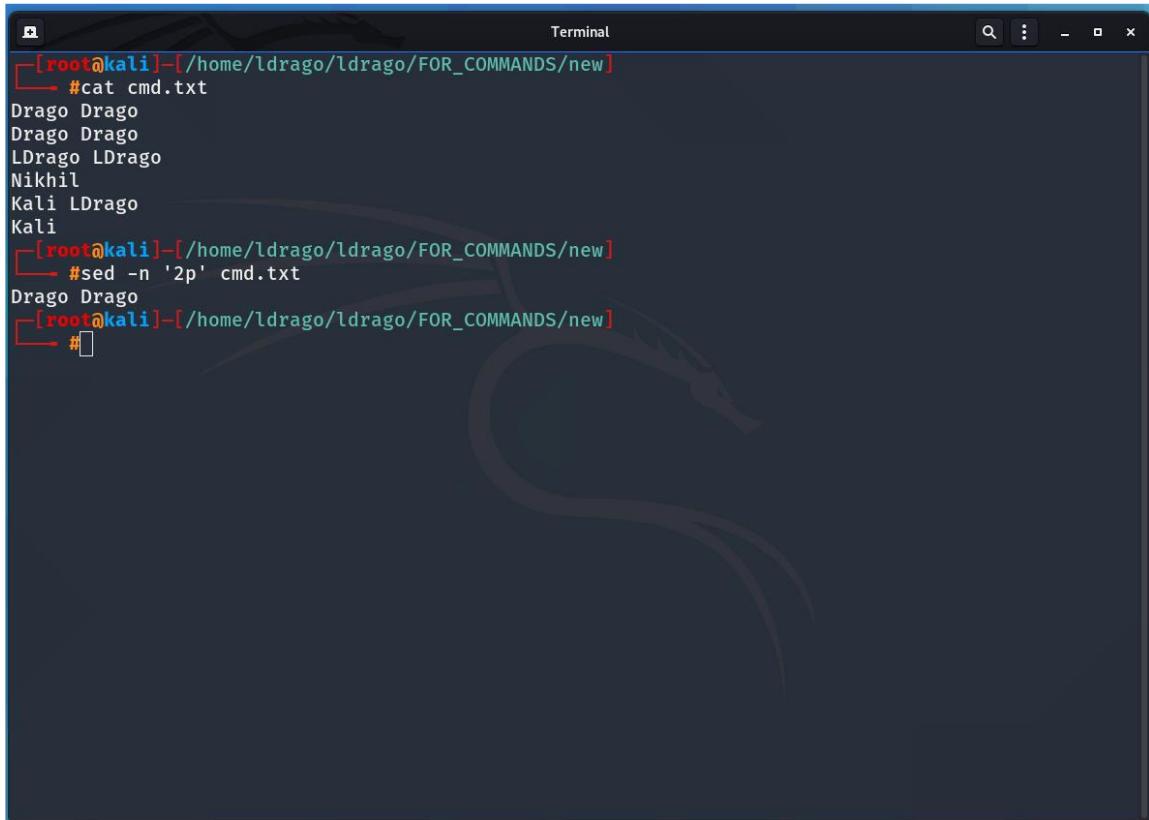


```
[-[root@kali]-[/home/lDrago/lDrago/FOR_COMMANDS/new]
└─#cat cmd.txt
Drago Drago
Drago Drago
LDrago LDrago
Nikhil
Kali LDrago
Kali
[-[root@kali]-[/home/lDrago/lDrago/FOR_COMMANDS/new]
└─#sed -n '2p' cmd.txt
Drago Drago
[-[root@kali]-[/home/lDrago/lDrago/FOR_COMMANDS/new]
└─#sed '/Kali/d' cmd.txt
Drago Drago
Drago Drago
LDrago LDrago
Nikhil
[-[root@kali]-[/home/lDrago/lDrago/FOR_COMMANDS/new]
└─#]
```

Specified Line :

```
sed -n '2p' cmd.txt # To see any line content.(2(Any_Number)p)
```

OUTPUT :



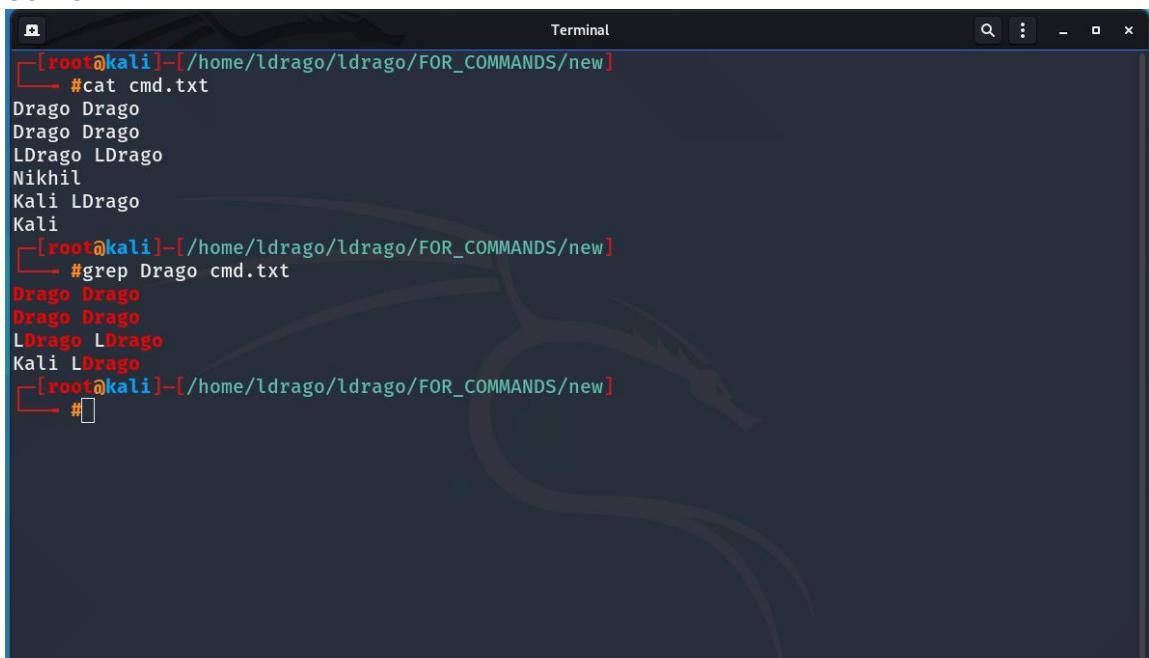
```
Terminal
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#cat cmd.txt
Drago Drago
Drago Drago
LDrago LDrago
Nikhil
Kali LDrago
Kali
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#sed -n '2p' cmd.txt
Drago Drago
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#
```

10. grep - Command

```
grep   # The grep filter searches a file for a particular pattern of characters.

SYNTAX : grep Flag Pattern File_Name(cmd.txt)
```

OUTPUT :

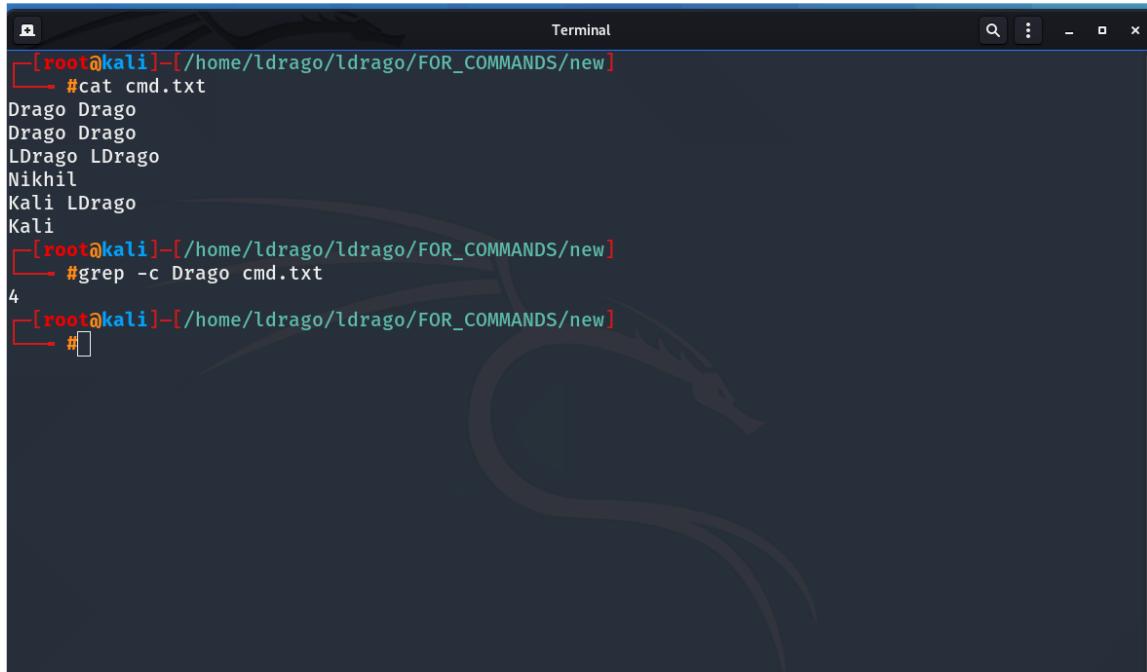


```
Terminal
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#cat cmd.txt
Drago Drago
Drago Drago
LDrago LDrago
Nikhil
Kali LDrago
Kali
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#grep Drago cmd.txt
Drago Drago
Drago Drago
LDrago LDrago
Kali LDrago
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#
```

Flags :

```
-c # This prints only a count of the lines that match a pattern.
```

OUTPUT :

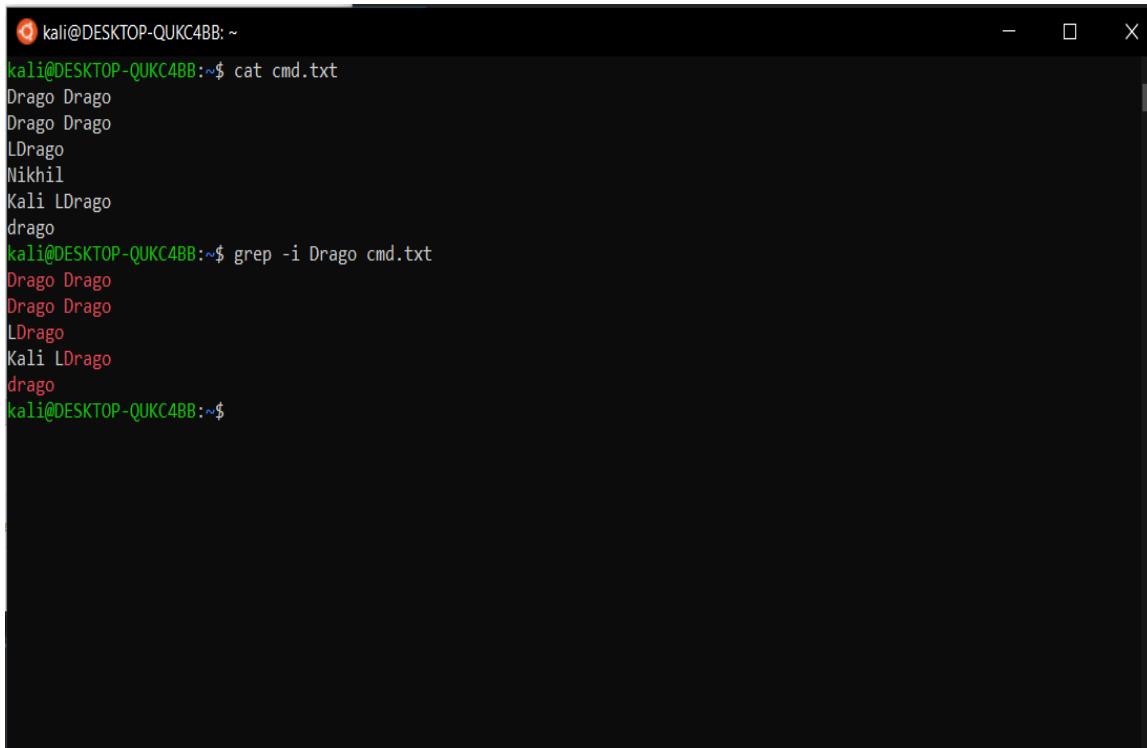


A screenshot of a terminal window titled "Terminal". The window shows a command-line session. The user runs "cat cmd.txt" which outputs several names: Drago, Drago, Drago, LDrago, LDrago, Nikhil, Kali, LDrago, Kali. Then, the user runs "grep -c Drago cmd.txt" which outputs the number 4, indicating there are 4 lines containing the word "Drago".

```
[root@kali]~[/home/ldrago/ldrag/FOR_COMMANDS/new]
└─#cat cmd.txt
Drago Drago
Drago Drago
Drago Drago
LDrago LDrago
Nikhil
Kali LDrago
Kali
[root@kali]~[/home/ldrag/ldrag/FOR_COMMANDS/new]
└─#grep -c Drago cmd.txt
4
[root@kali]~[/home/ldrag/ldrag/FOR_COMMANDS/new]
└─#
```

```
-i # Ignores, case for matching.
```

OUTPUT :

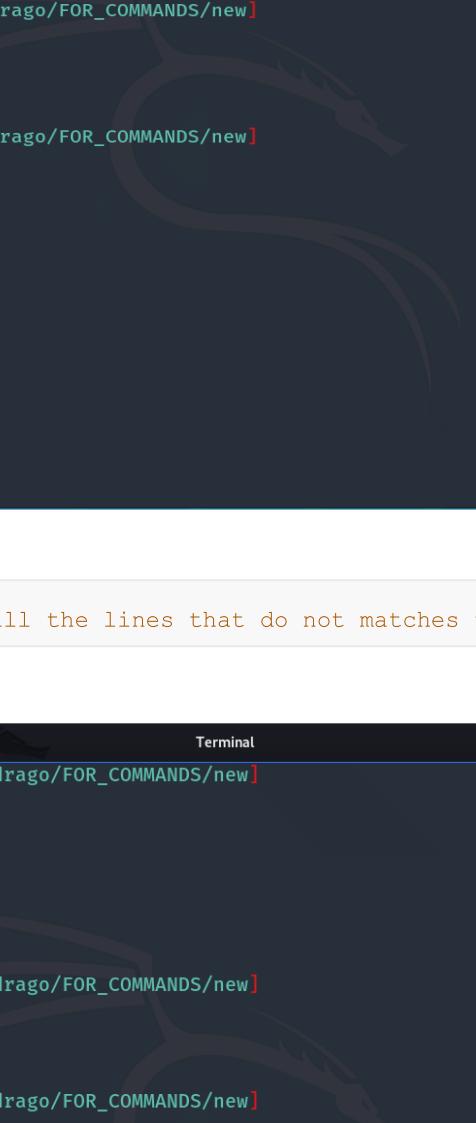


A screenshot of a terminal window showing two runs of grep. First, "cat cmd.txt" is run, outputting the same list of names as before. Then, "grep -i Drago cmd.txt" is run, which also outputs the same list of names, demonstrating that the search is case-insensitive.

```
kali@DESKTOP-QUKC4BB:~$ cat cmd.txt
Drago Drago
Drago Drago
Drago Drago
LDrago
Nikhil
Kali LDrago
drago
kali@DESKTOP-QUKC4BB:~$ grep -i Drago cmd.txt
Drago Drago
Drago Drago
Drago Drago
LDrago
Kali LDrago
drago
kali@DESKTOP-QUKC4BB:~$
```

```
-n # Display the matched lines and their line numbers.
```

OUTPUT :



```
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#cat cmd.txt
Drago Drago
Drago Drago
LDrago LDrago
Nikhil
Kali LDrago
Kali
drago
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#grep -n Drago cmd.txt
1:Drago Drago
2:Drago Drago
3:LDrago LDrago
5:Kali LDrago
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#
```

```
-v # This prints out all the lines that do not matches the pattern.
```

OUTPUT :



```
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#cat cmd.txt
Drago Drago
Drago Drago
LDrago LDrago
Nikhil
Kali LDrago
Kali
drago
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#grep -v Drago cmd.txt
Nikhil
Kali
drago
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#
```

11. pipe - Command

```
| # Pipe is a command in Linux that lets you use two or more commands such  
that output of one command serves as input to the next.
```

SYNTAX : Input_Command | Output_Command

```
ls -l | more
```

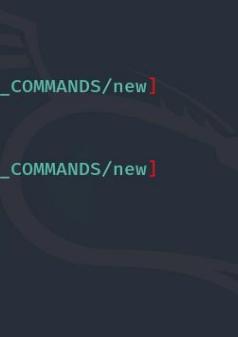
OUTPUT :



```
[root@kali]~[~/etc]  
└─#ls -l | more  
total 1576  
-rw-r--r-- 1 root root 2981 Jul 17 15:00 adduser.conf  
drwxr-xr-x 3 root root 4096 Jul 17 15:13 alsamixer  
drwxr-xr-x 2 root root 20480 Jul 26 03:43 alternatives  
drwxr-xr-x 2 root root 4096 Jul 17 15:51 amap  
drwxr-xr-x 8 root root 4096 Jul 17 16:10 apache2  
-rw-r--r-- 1 root root 433 Aug 7 2019 apg.conf  
drwxr-xr-x 3 root root 4096 Jul 25 15:28 apparmor  
drwxr-xr-x 8 root root 4096 Jul 25 17:05 apparmor.d  
drwxr-xr-x 3 root root 4096 Jul 25 16:18 apport  
-rw-r--r-- 1 root root 769 Jan 18 2020 appstream.conf  
drwxr-xr-x 7 root root 4096 Jul 26 03:25 apt  
drwxr-xr-x 2 root root 4096 Jul 17 16:01 arpwatch  
drwxr-xr-x 3 root root 4096 Jul 25 15:35 avahi  
-rw-r--r-- 1 root root 1994 Feb 25 17:14 bash.bashrc  
-rw-r--r-- 1 root root 45 Jan 25 2020 bash_completion  
drwxr-xr-x 2 root root 4096 Jul 25 15:32 bash_completion.d  
drwxr-xr-x 2 root root 4096 Jul 17 16:17 beef-xs5  
-rw-r--r-- 1 root root 367 Jul 29 2019 bindresvport.blacklist  
drwxr-xr-x 2 root root 4096 Apr 10 15:25 binfmt.d  
drwxr-xr-x 2 root root 4096 Jul 17 16:00 bluetooth  
-rw-r--r-- 1 root root 866 Jan 24 2020 btscanner.dtd  
-rw-r--r-- 1 root root 1559 Jan 24 2020 btscanner.xml  
drwxr-xr-x 3 root root 4096 Jul 17 15:12 ca-certificates  
-rw-r--r-- 1 root root 6151 Jul 25 15:28 ca-certificates.conf  
-rw-r--r-- 1 root root 5713 Jul 17 16:00 ca-certificates.conf.dpkg-old  
drwxr-xr-x 2 root root 4096 Jul 17 15:01 calendar  
-rw-r--r-- 1 root root 119 Sep 14 2017 catdocrc  
drwxr-s--- 2 root dip 4096 Jul 17 16:02 chatscripts  
-rw-r--r-- 1 root root 56 Jul 17 16:05 chkrootkit.conf  
drwxr-xr-x 3 root root 4096 Jul 17 15:24 chromium  
drwxr-xr-x 2 root root 4096 Jul 17 16:03 cifs-utils  
--More--]
```

```
cat cmd.txt | head -2
```

OUTPUT :



```
[root@kali]~[/home/lDrago/lDrago/FOR_COMMANDS/new]  
└─#cat cmd.txt  
Drago Drago  
Drago Drago  
LDrago LDrago  
Nikhil  
Kali LDrago  
Kali  
drago  
[root@kali]~[/home/lDrago/lDrago/FOR_COMMANDS/new]  
└─#cat cmd.txt | head -2  
Drago Drago  
Drago Drago  
[root@kali]~[/home/lDrago/lDrago/FOR_COMMANDS/new]  
└─#
```

QUERIES :

1. Total no of users connected to system currently .

BY Using 'last' Command.

OUTPUT :

```
[root@kali]~[~/home/ldragoldragofOR_COMMANDS]
└─#last
ldragor :0 :0 Sun Jul 26 03:20 still logged in
reboot system boot 5.7.0-kali1-amd6 Sun Jul 26 03:19 still running
ldragor :0 :0 Sat Jul 25 14:27 - down (02:39)
reboot system boot 5.5.0-kali2-amd6 Sat Jul 25 14:25 - 17:06 (02:40)
ldragor :0 :0 Thu Jul 23 18:27 - down (00:52)
reboot system boot 5.5.0-kali2-amd6 Thu Jul 23 18:26 - 19:19 (00:53)
reboot system boot 5.5.0-kali2-amd6 Thu Jul 23 07:58 - 07:58 (00:00)
ldragor tty2 tty2 Thu Jul 23 00:09 - down (06:53)
reboot system boot 5.5.0-kali2-amd6 Thu Jul 23 00:08 - 07:03 (06:55)
ldragor :0 :0 Thu Jul 23 00:07 - down (00:00)
reboot system boot 5.5.0-kali2-amd6 Thu Jul 23 00:06 - 00:08 (00:01)
ldragor :0 :0 Tue Jul 21 18:46 - down (00:36)
reboot system boot 5.5.0-kali2-amd6 Tue Jul 21 18:44 - 19:22 (00:37)
ldragor tty2 tty2 Mon Jul 20 15:50 - down (00:00)
reboot system boot 5.5.0-kali2-amd6 Mon Jul 20 15:49 - 15:50 (00:01)
ldragor tty2 tty2 Mon Jul 20 13:17 - down (00:03)
reboot system boot 5.5.0-kali2-amd6 Mon Jul 20 13:16 - 13:21 (00:04)
ldragor tty2 tty2 Mon Jul 20 02:20 - down (04:06)
ldragor :0 :0 Mon Jul 20 02:19 - 02:20 (00:00)
ldragor :0 :0 Mon Jul 20 02:19 - 02:19 (00:00)
reboot system boot 5.5.0-kali2-amd6 Mon Jul 20 02:18 - 06:26 (04:08)
ldragor :0 :0 Sun Jul 19 17:29 - down (00:06)
ldragor tty2 tty2 Sun Jul 19 16:09 - 17:29 (01:19)
ldragor tty2 tty2 Sun Jul 19 13:40 - 16:09 (02:29)
reboot system boot 5.5.0-kali2-amd6 Sun Jul 19 13:39 - 17:35 (03:56)
ldragor tty2 tty2 Sat Jul 18 22:57 - down (06:23)
reboot system boot 5.5.0-kali2-amd6 Sat Jul 18 22:56 - 05:20 (06:24)
ldragor tty2 tty2 Sat Jul 18 19:02 - down (01:46)
reboot system boot 5.5.0-kali2-amd6 Sat Jul 18 19:00 - 20:48 (01:48)
ldragor tty2 tty2 Fri Jul 17 19:33 - down (00:18)
reboot system boot 5.5.0-kali2-amd6 Fri Jul 17 19:32 - 19:51 (00:19)
reboot system boot 5.5.0-kali2-amd6 Fri Jul 17 17:29 - 17:30 (00:01)
ldragor tty2 tty2 Fri Jul 17 17:13 - down (00:15)
ldragor :0 :0 Fri Jul 17 17:11 - 17:13 (00:01)
ldragor tty2 tty2 Fri Jul 17 17:00 - 17:11 (00:11)
ldragor tty2 tty2 Fri Jul 17 16:43 - 17:00 (00:16)
ldragor :0 :0 Fri Jul 17 16:38 - 16:43 (00:04)
ldragor tty2 tty2 Fri Jul 17 16:26 - 16:38 (00:11)
reboot system boot 5.5.0-kali2-amd6 Fri Jul 17 16:22 - 17:29 (01:07)
```

2. Display only current local time of system.

BY Using 'date +%H:%M:%S' Command.

OUTPUT :

```
[root@kali]~[~/home/ldragoldragofOR_COMMANDS/new]
└─#date "+DATE: %d-%h-%y TIME: %H:%M:%S"
DATE: 26-Jul-20 TIME: 11:09:50
[root@kali]~[~/home/ldragoldragofOR_COMMANDS/new]
└─#date +%H:%M:%S
11:10:15
[root@kali]~[~/home/ldragoldragofOR_COMMANDS/new]
└─#]
```

3. Arranging the files of directory on ascending order of their sizes.

By Using '`ls -lsh`' Command. Here `s` for sorting , `h` for human readability & `l` full details.

OUTPUT :

```
File Actions Edit View Help
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#ls -lsh
total 80K
4.0K -rw-r--r-- 1 root root 53 Jul 26 06:13 cmd.txt
4.0K -rwxr--r-- 1 root root 94 Jul 26 11:29 cmd.txt
4.0K -rw-r--r-- 1 root root 21 Jul 26 09:20 cm.txt
4.0K -rwxr-xr-x 1 root root 34 Jul 20 04:35 command_Script.sh
4.0K -rw-r--r-- 1 root root 96 Jul 26 11:36 employee.txt
4.0K drwxr-xr-x 2 root root 4.0K Jul 19 01:53 FOR_COMMANDS
4.0K -rw-r--r-- 1 root root 11 Jul 26 11:25 Info.txt
4.0K -rwx--xr-x 1 root root 332 Jul 23 18:42 n1.txt
4.0K -rwxrw-r-- 1 root root 10 Jul 25 15:16 n2.txt
4.0K -rw-r--r-- 1 root root 10 Jul 25 15:17 n3.txt
4.0K -rw-r--r-- 1 root root 13 Jul 19 14:51 n4.txt
4.0K -rw-r--r-- 1 root root 42 Jul 19 14:55 n5.html
4.0K -rw-r--r-- 1 root root 331 Jul 21 19:04 n5.txt
12K -rw-r--r-- 1 root root 10K Jul 22 09:52 new.tar
4.0K -rw-r--r-- 1 root root 36 Jul 26 09:25 output.txt
4.0K -rw-r--r-- 1 root root 36 Jul 26 09:25 out.txt
4.0K -rw-r--r-- 1 root root 249 Jul 26 12:15 SPECIAL_CHARACTER.sh
4.0K -rw-r--r-- 1 root root 108 Jul 26 06:23 Uniq.txt
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#
```

4. Display 5 th character of your name.

By Using '`cut -c 5 Info.txt`' Command.

OUTPUT :

```
Terminal
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#cat Info.txt
Priyanshu.
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#cut -c 5 Info.txt
a
-[root@kali]-[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#
```

5. Display 7 th line of a file.

By Using 'sed -n '7p' cmd.txt' Command.

OUTPUT :

```
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#cat cmd.txt
Drago Drago
Drago Drago
LDrago LDrago
Nikhil
Kali LDrago
Kali
drago
Hello Class !
Thank You !
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#sed -n '7p' cmd.txt
drago
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#sed -n '7p' cmd.txt
```

6. Sort a file on second column basis.

By Using 'sort -k 2n employee.txt' Command. Here k for Column sorting & 2n for Column Number.

OUTPUT :

```
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#cat employee.txt
manager    5000
clerk      4000
employee   6000
peon       4500
director   9000
guard      3000
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#sort -k 2n employee.txt
guard      3000
clerk      4000
peon       4500
manager    5000
employee   6000
director   9000
[root@kali]~[/home/ldrango/ldrango/FOR_COMMANDS/new]
└─#
```