

## Linux Command

1. `cat [file name]` → Display file's contents to the standard output device.
2. `cd / directory path` → Change to directory
3. `chmod [options] mode filename` → change a file's permission.
4. `chown [options] filename` → Change who owns a file.
5. `clear` → Clear a commands from screen.
6. `cp [options] source destination` → Copy files and directories.
7. `date [options]` → Display or set the system date and time.
8. `df [options]` → Display used and available disk space.
9. `du [options]` → Show how much space each file takes up.
10. `file [option] filename` → Determine what type of data is within a file.
11. `find [pathname] [expression]` → Search for files matching a provided pattern.

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12. `grep [options] pattern [filename]` → Search files or output for a particular pattern.
13. `Kill [options] pid` → Stop a process. If the process refuses to stop, use `Kill -9 pid`.
14. `less [options] [filename]` → View the contents of a file one page at a time.
15. `ln [options] source [destination]` → Create a shortcut.
16. `locate filename` → Search a copy of your file-system for the specified filename.
17. `lpr [options]` → Send a print job.
18. `ls [options]` → List directory contents.
19. `man [command]` → Display the help information for the specified command.
20. `mkdir [options] directory` → Create a new directory.
21. `mv [options] source destination` → Rename or move files or directories.
22. `passwd [name] [password]` → Change the password. or allows to change password.

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23. `ps [options]` → Display a Snap shot of the currently running processes.
24. `pwd` → Display present working directory
25. `rm [options] directory` → Remove files and or directory.
26. `rmdir [options] directory` → Delete empty directories.
27. `ssh [options] user@machine` → Remotely log in to another Linux machine, over the network. Leave on ssh session by typing `exit`.
28. `su [options] [user [arguments]]` → switch to another user account.
29. `tail [options] [filename]` → Display the last n lines of a file.
30. `tar [options] filename` → Store and extract files from a tarfile (.tar) or tarball (.tar.gz or .tgz)
31. `top` → Displays the resources being used on your system. Press `q` to exit.
32. `touch filename` → Create an empty file with the specified name.
33. `who [options]` → Display who is logged on.



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### Program 1

Write a program to display the line between given input line number from file.

```
echo "Enter the file name"
read fname
echo "enter starting line number"
read sl
echo "enter ending line number"
read el
d = expr $el - $sl
if [-f $fname]
then
echo "the lines between $sl and $el of given file are"
head - $el $fname | tail - $d
else
echo "file doesn't exist"
fi
```

Input: sh

prog1.sh

enter the file

name file1

enter starting line number

15

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enter ending line number  
20

Output:- It displays 15 to 20 between lines.

### Program - 2

Read file name from command line arguments and display lines inverse of specified word.

```
if [ $# -ne 0 ]
```

```
then
```

```
    echo "enter the word"
```

```
    read word
```

```
    for fname in
```

```
        $* do
```

```
        if [ -f $fname ]
```

```
        then
```

```
            echo the given input filename is : $fname
```

```
            grep -v "$word" $fname
```

```
        else
```

```
            echo "its not a"
```

```
            file fi
```

```
        done
```

```
    else
```

```
        echo "enter atleast one argument as input"
```

```
fi
```

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• INPUT :- sh prog2.sh 3.sh  
enter the word  
echo

• Output :- The given input file name is : 3.sh  
It display all the lines other than matching word.

### Program - 3

Write a program to print a pattern.

```
# do the following for  
loop echo "stars"
```

```
# outer loop
```

```
for ( i=1 ; i<=5 ; i++)
```

```
do
```

```
# inner loop
```

```
for ( j=1 ; j<=i ; j++)
```

```
do
```

```
echo -n "*" 
```

```
done
```

```
echo " "
```

```
done
```

```
#
```

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Output :- \*

\* \*

\* \* \*

\* \* \* \*

\* \* \* \* \*

### Program - 4

Write a program to print a pattern of number

```
0
1 0
2 1 0
3 2 1 0
4 3 2 1 0
5 4 3 2 1 0
6 5 4 3 2 1 0
7 6 5 4 3 2 1 0
8 7 6 5 4 3 2 1 0
9 8 7 6 5 4 3 2 1 0
```

```
#!/bin/sh
```

```
a=0
```

```
while [ "$a" -lt 10 ]
```

```
do
```

```
  b="$a"
```

```
  while [ "$b" -ge 0 ]
```

```
  do
```

```
    echo -n "$b"
```

```
    b=$((b-1))
```

```
  done
```

```
  echo
```

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a = 'exp \$a + 1'  
done.