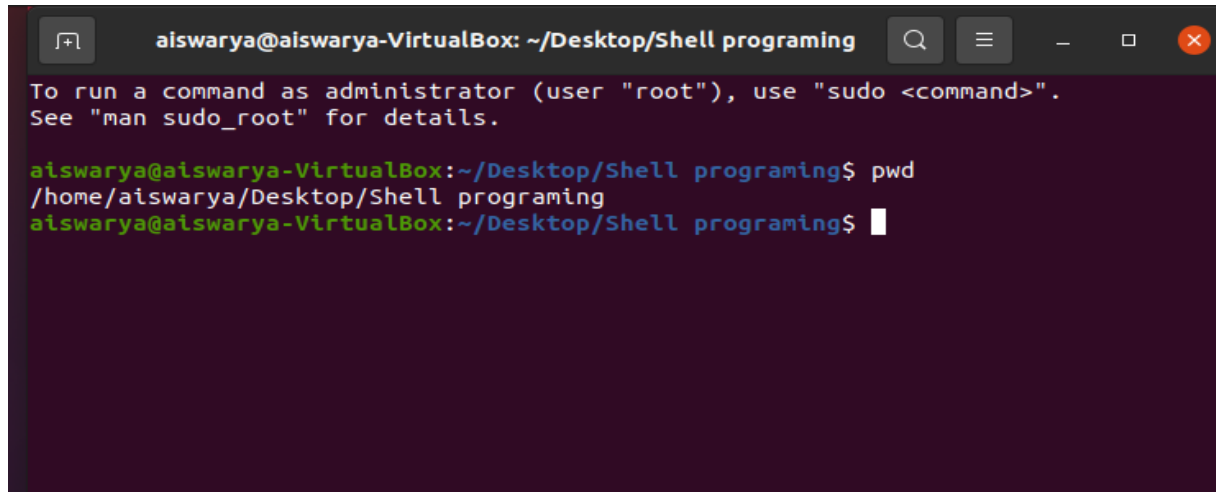


# Linux Commands

## 1. pwd

Use the pwd command to find out the path of the current working directory (folder) you're in. The command will return an absolute (full) path, which is basically a path of all the directories that starts with a forward slash (/). An example of an absolute path is /home/username.

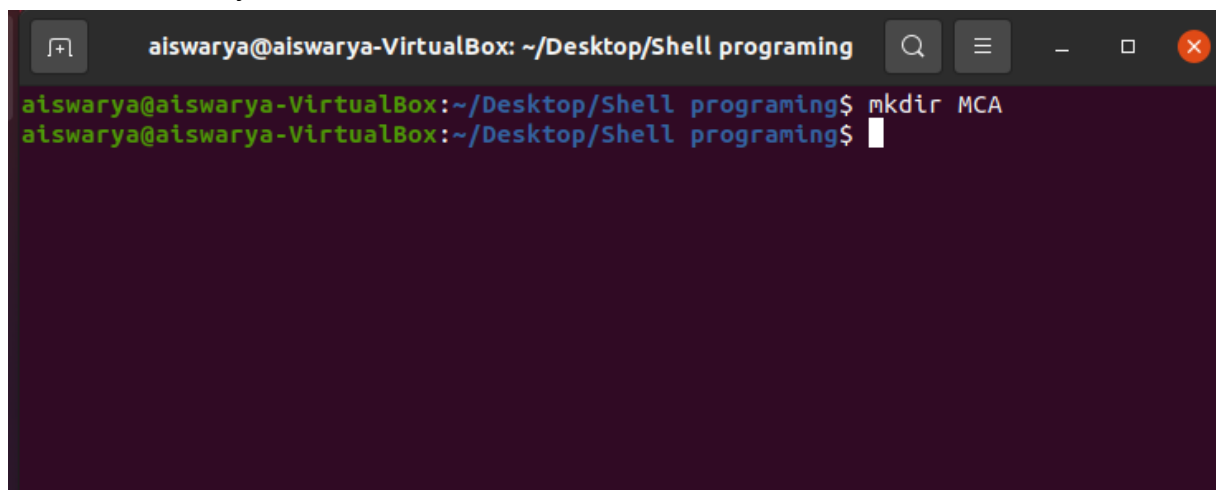
A terminal window titled 'aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing'. It shows a message about running commands as administrator. Then, the user enters 'pwd' and the output is '/home/aiswarya/Desktop/Shell programing'.

```
aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$ pwd
/home/aiswarya/Desktop/Shell programing
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$
```

## mkdir

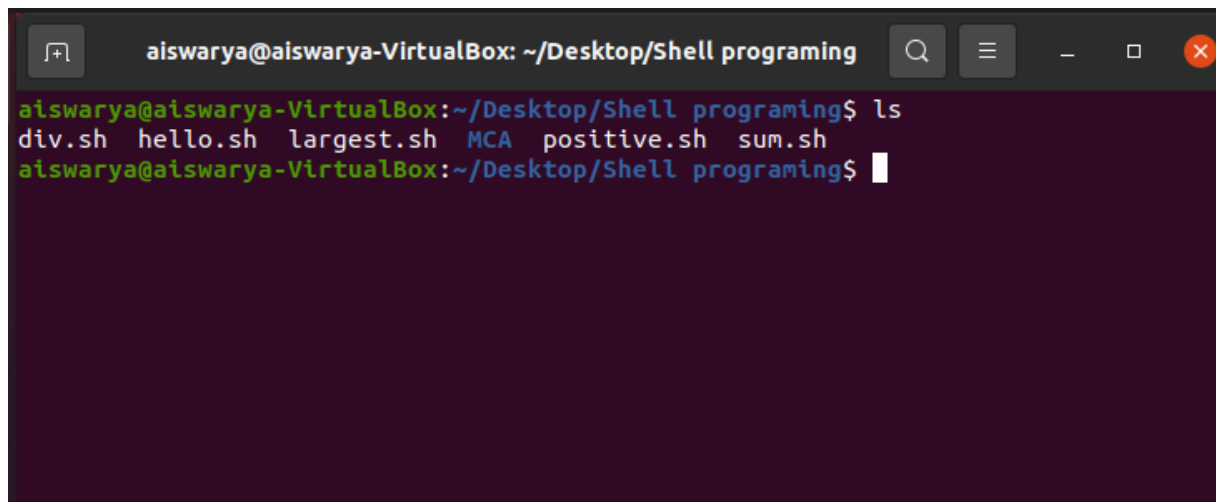
Use the mkdir command to make a new directory — if you type mkdir MCA it will create a directory called MCA.

A terminal window titled 'aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing'. The user enters 'mkdir MCA' and the prompt returns without any output, indicating the directory was created successfully.

```
aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$ mkdir MCA
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$
```

## ls

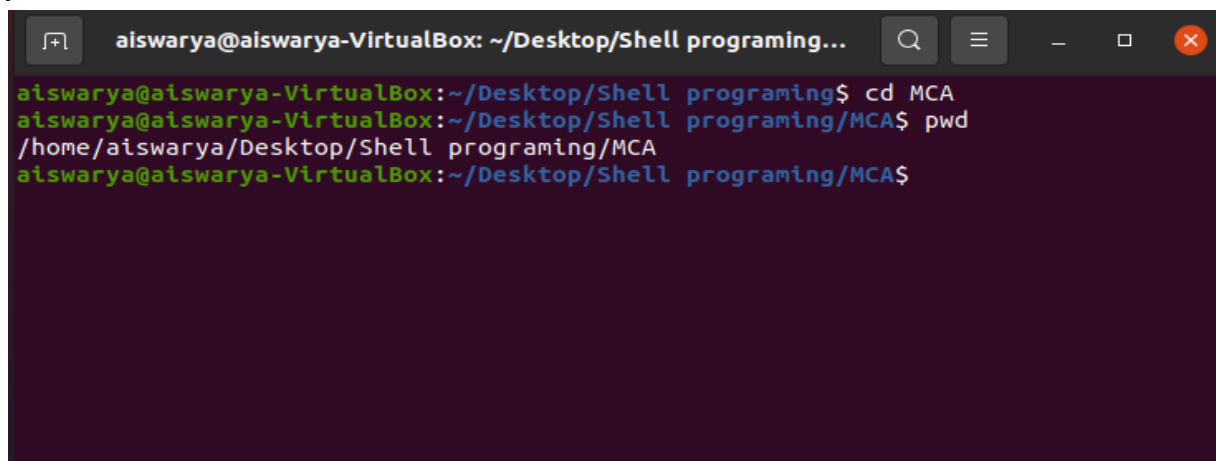
The ls command is used to view the contents of a directory. By default, this command will display the contents of your current working directory. If you want to see the content of other directories, type ls and then the directory's path.

A terminal window titled 'aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing'. The prompt is 'aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing\$'. The command 'ls' has been entered, and the output is 'div.sh hello.sh largest.sh MCA positive.sh sum.sh'.

```
aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$ ls
div.sh hello.sh largest.sh MCA positive.sh sum.sh
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$
```

## cd

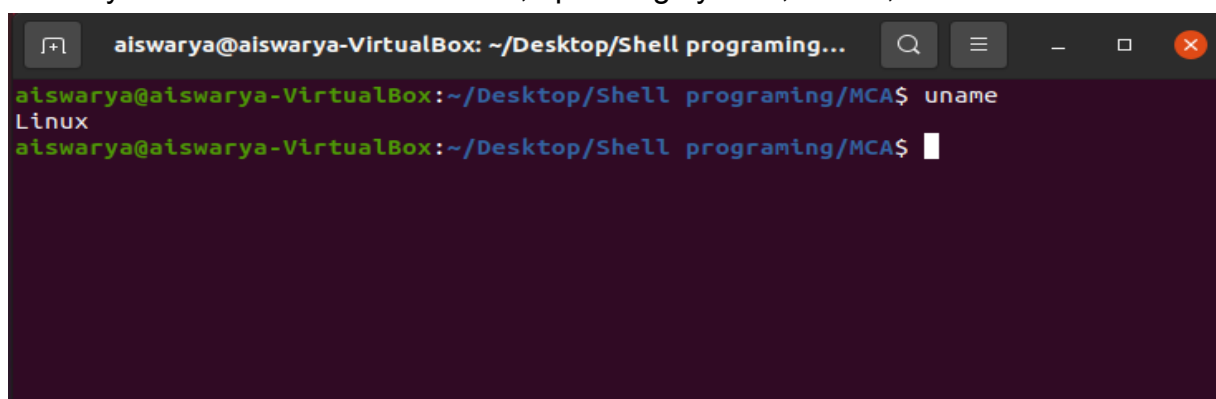
To navigate through the Linux files and directories, use the `cd`. It requires either the full path or the name of the directory, depending on the current working directory that you're in.

A terminal window titled 'aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing...'. The prompt is 'aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing\$'. The command 'cd MCA' has been entered, and the prompt changes to 'aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing/MCA\$'. Then the command 'pwd' is entered, and the output is '/home/aiswarya/Desktop/Shell programing/MCA'.

```
aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing...
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$ cd MCA
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing/MCA$ pwd
/home/aiswarya/Desktop/Shell programing/MCA
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing/MCA$
```

## uname

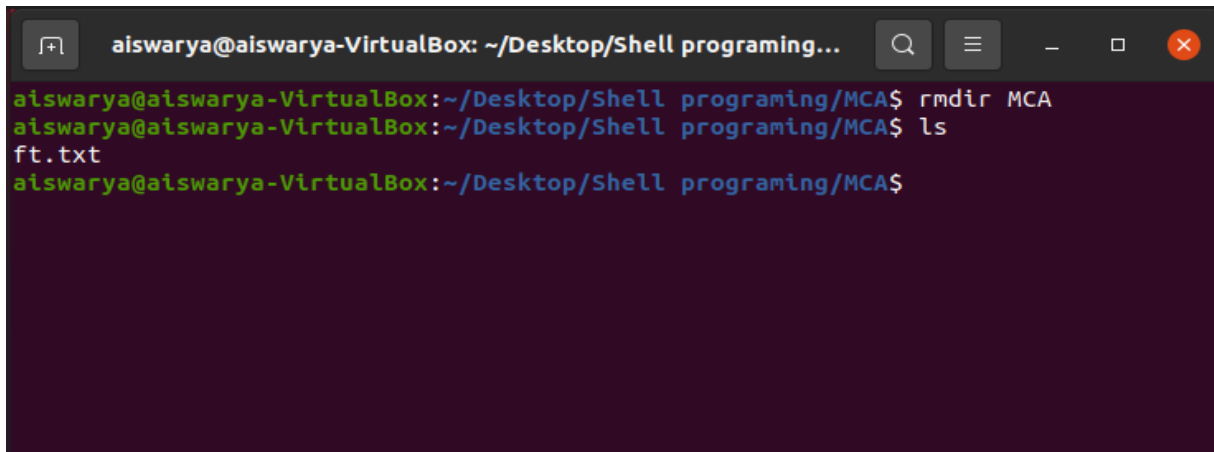
The `uname` command, short for Unix Name, will print detailed information about your Linux system like the machine name, operating system, kernel, and so on.

A terminal window titled 'aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing...'. The prompt is 'aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing/MCA\$'. The command 'uname' has been entered, and the output is 'Linux'.

```
aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing...
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing/MCA$ uname
Linux
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing/MCA$
```

## rmdir

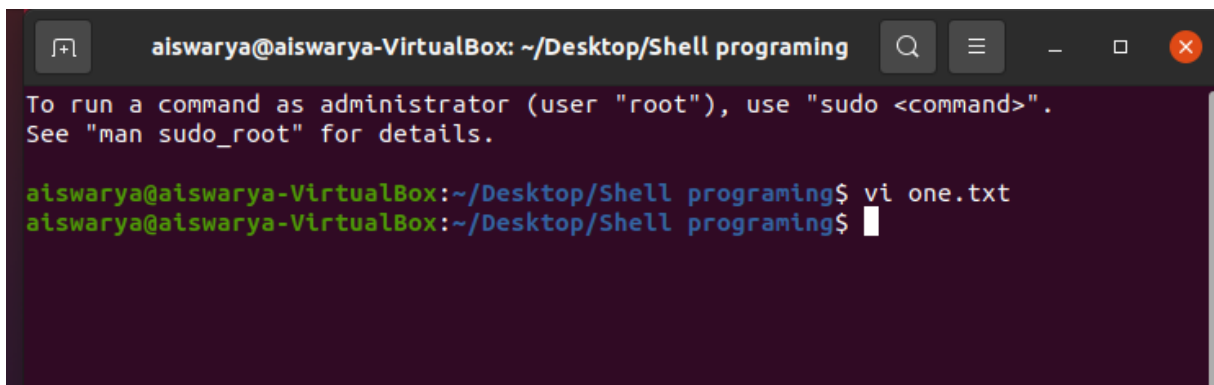
If you need to delete a directory, use the rmdir command. However, rmdir only allows you to delete empty directories.



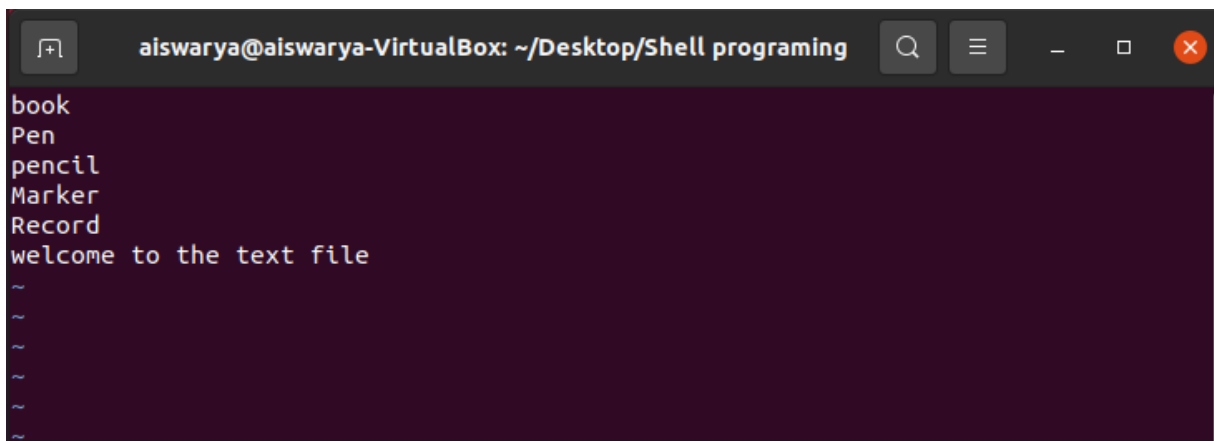
```
aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing...  
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing/MCA$ rmdir MCA  
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing/MCA$ ls  
ft.txt  
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing/MCA$
```

## vi

To get a text document



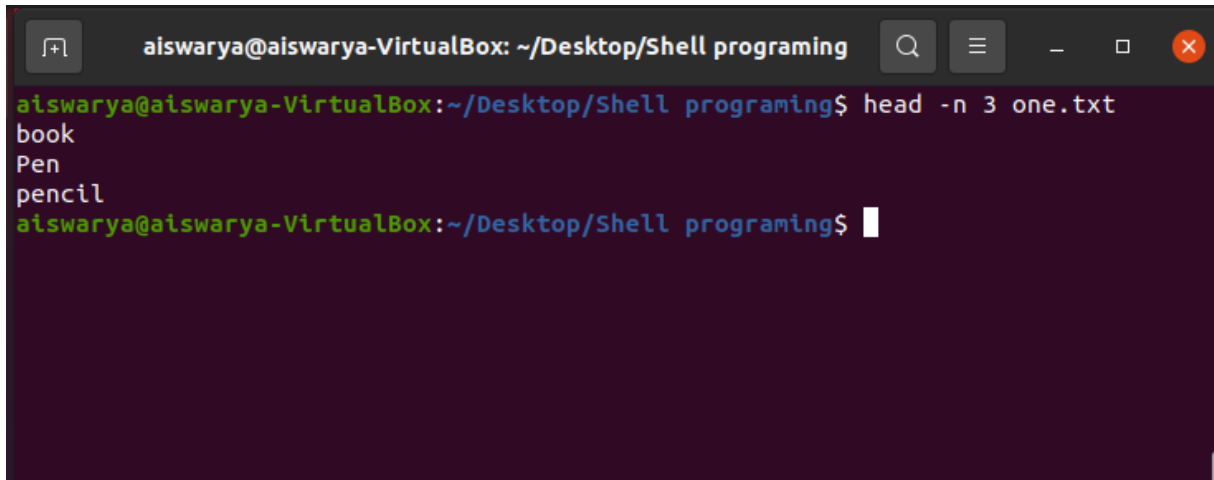
```
aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing  
To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo_root" for details.  
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$ vi one.txt  
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$
```



```
aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing  
book  
Pen  
pencil  
Marker  
Record  
welcome to the text file  
~  
~  
~  
~  
~
```

## head

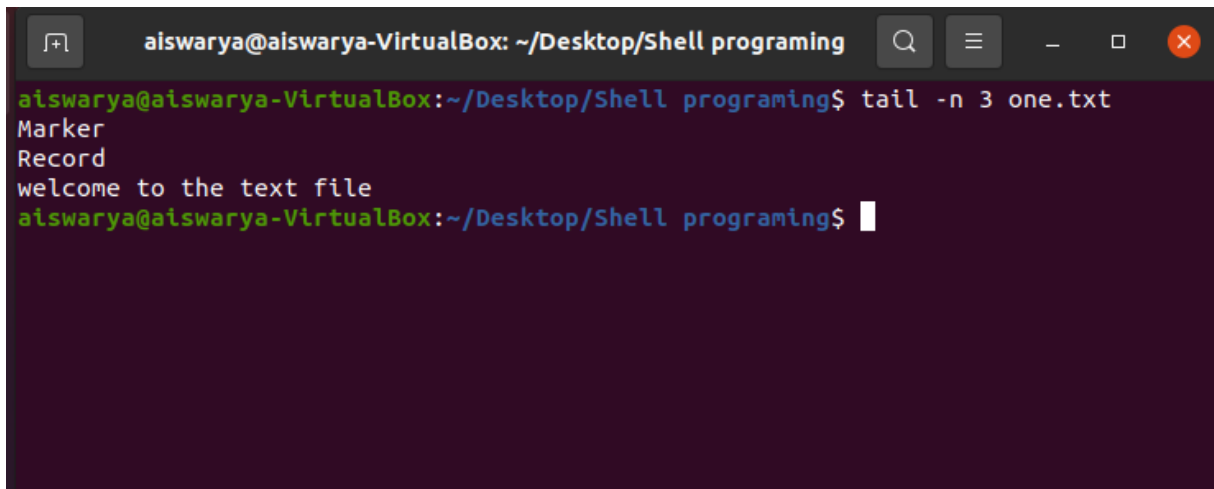
The head command is used to view the first lines of any text file. By default, it will show the first ten lines, but you can change this number to your liking. For example, if you only want to show the first three lines, type `head -n 3 filename.ext`.

A terminal window titled 'aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing'. The prompt is 'aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing\$'. The command 'head -n 3 one.txt' has been entered, and the output shows the first three lines of the file: 'book', 'Pen', and 'pencil'. The prompt is now 'aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing\$' with a cursor.

```
aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$ head -n 3 one.txt
book
Pen
pencil
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$
```

## tail

This one has a similar function to the head command, but instead of showing the first lines, the tail command will display the last ten lines of a text file. For example, `tail -n filename.ext`.

A terminal window titled 'aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing'. The prompt is 'aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing\$'. The command 'tail -n 3 one.txt' has been entered, and the output shows the last three lines of the file: 'Marker', 'Record', and 'welcome to the text file'. The prompt is now 'aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing\$' with a cursor.

```
aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$ tail -n 3 one.txt
Marker
Record
welcome to the text file
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$
```

## cat

cat (short for concatenate) is one of the most frequently used commands in Linux. It is used to list the contents of a file on the standard output stdout . To run this command, type cat followed by the file's name and its extension. For instance: `cat file.txt`.

```
aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$ cat one.txt
book
Pen
pencil
Marker
Record
welcome to the text file
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$
```

## WC

This command is used to find total word count of the file.

```
aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$ wc one.txt
 6 10 55 one.txt
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$
```

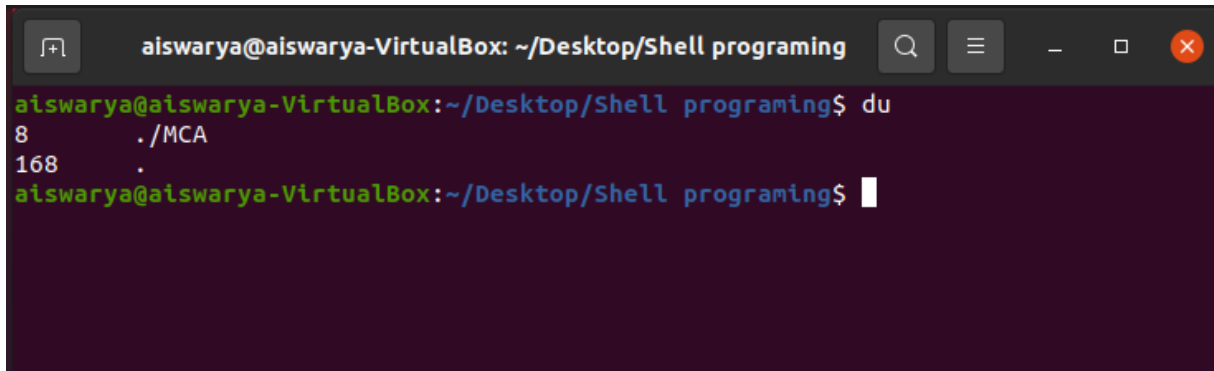
## df

Use df command to get a report on the system's disk space usage, shown in percentage and KBs. If you want to see the report in megabytes, type df -m.

```
aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$ df
Filesystem      1K-blocks    Used Available Use% Mounted on
udev            529604         0    529604   0% /dev
tmpfs           111756      1268    110488   2% /run
/dev/sda5       9736500 5774700  3447496  63% /
tmpfs           558776         0    558776   0% /dev/shm
tmpfs           5120         4        5116   1% /run/lock
tmpfs           558776         0    558776   0% /sys/fs/cgroup
/dev/loop0      224256      224256         0 100% /snap/gnome-3-34-1804/66
/dev/loop1      56832       56832         0 100% /snap/core18/1988
/dev/loop2      66432       66432         0 100% /snap/gtk-common-themes/1514
/dev/loop3      52352       52352         0 100% /snap/snap-store/518
/dev/loop4      31872       31872         0 100% /snap/snapd/11036
/dev/sda1       523248         4    523244   1% /boot/efi
tmpfs           111752        24    111728   1% /run/user/1000
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$
```

## du

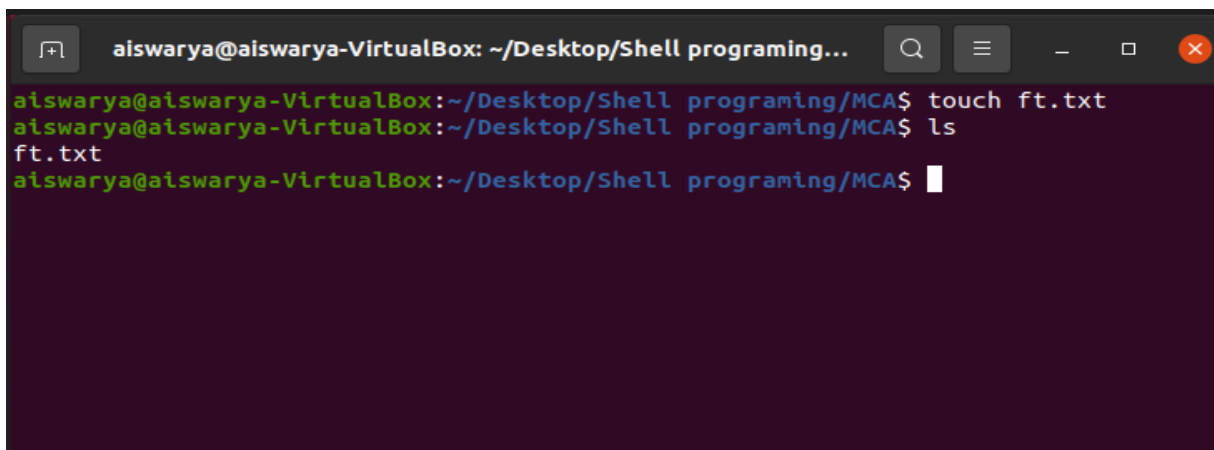
If you want to check how much space a file or a directory takes, the du (Disk Usage) command is the answer. However, the disk usage summary will show disk block numbers instead of the usual size format. If you want to see it in bytes, kilobytes, and megabytes, add the -h argument to the command line.

A terminal window titled 'aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing'. The prompt is 'aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing\$'. The command 'du' has been entered, and the output is displayed: '8 ./MCA' and '168 .' on separate lines. The cursor is at the end of the second line.

```
aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing$ du
8      ./MCA
168    .
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$
```

## touch

The touch command allows you to create a blank new file through the Linux command line.

A terminal window titled 'aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing...'. The prompt is 'aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing/MCA\$'. The command 'touch ft.txt' has been entered, followed by 'ls' on the next line. The output of 'ls' is 'ft.txt'. The cursor is at the end of the third line.

```
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing/MCA$ touch ft.txt
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing/MCA$ ls
ft.txt
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing/MCA$
```

## history

When you've been using Linux for a certain period of time, you'll quickly notice that you can run hundreds of commands every day. As such, running history command is particularly useful if you want to review the s you've entered before.

```
aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$ history
 1 vi hello.txt
 2 sh hello.sh
 3 vi hello.sh
 4 sh hello.sh
 5 C
 6 vi hello.sh
 7 sh hello.sh
 8 vi hello.sh
 9 sh hello.sh
10 vi hello.sh
11 sh hello.sh
12 vi hello.sh
13 sh hello.sh
14 vi sum.sh
15 sh sum.sh
16 vi div.sh
```

## ps

Ps command will display all current processes along with their process ids (PID) .  
Read manuals for various options.

```
aiswarya@aiswarya-VirtualBox: ~/Desktop/Shell programing
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$ ps
  PID TTY          TIME CMD
 3839 pts/0    00:00:00 bash
 3881 pts/0    00:00:00 ps
aiswarya@aiswarya-VirtualBox:~/Desktop/Shell programing$
```