# Linux

Linux is an operating system's kernel. You might have heard of UNIX. Well, Linux is a UNIX clone. But it was actually created by Linus Torvalds from Scratch. Linux is free and open-source, that means that you can simply change anything in Linux and redistribute it in your own name! There are several Linux Distributions, commonly called “distros”.

* Ubuntu Linux
* Red Hat Enterprise Linux
* Linux Mint
* Debian
* Fedora

## Linux Shell or “Terminal”

Shell is a program that receives commands from the user and gives it to the OS to process, and it shows the output. Linux's shell is its main part.

**1. ls**

To show all of the major directories filed under a given file system. For example, the command:

**ls /applications**

...will show the user all of the folders stored in the overall applications folder.

The ls command is used for viewing files, folders and directories.

**2. cd**

The cd command - change directory - will allow the user to change between file directories. As the name command name suggest, you would use the cd command to circulate between two different directories. For example, if you wanted to change from the home directory to the Arora directory, you would input the following command:

**cd/arora/applications**

As you might have noted, the path name listed lists in reverse order. Logically **cd/arora/applications** reads change to the arora directory which is stored in the applications directory. All Linux commands follow a logical path.

**3. mv**

The mv command - move - allows a user to move a file to another folder or directory. Just like dragging a file located on a PC desktop to a folder stored within the "Documents" folder, the mv command functions in the same manner. An example of the mv command is:

**mv/arora/applications/majorapps /arora/applications/minorapps**

**5. mkdir**

The mkdir - make directory - command allows the user to make a new directory. Just like making a new directory within a PC or Mac desktop environment, the mkdir command makes new directories in a Linux environment. An example of the mkdir command

**mkdir testdirectory**

The example command made the directory "testdirectory".

**6. rmdir**

The rmdir - remove directory - command allows the user to remove an existing command using the Linux CLI. An example of the rmdir command:

**rmdir testdirectory**

**7. touch**

The touch command - a.k.a. the make file command - allows users to make files using the Linux CLI. Just as the mkdir command makes directories, the touch command makes files. Just as you would make a .doc or a .txt using a PC desktop, the touch command makes empty files. An example of the touch command

**touch testfile.txt**