Linux Basic Command

What are Commands

A command is an instruction given to our computer by us to do whatever we want. In Mac OS, and Linux it is called terminal, whereas, in windows it is called command prompt. Commands are always case sensitive.

- **Built-in shell commands:** They are part of a shell. Each shell has some built in commands.
- **External/Linux commands:** Each external command is a separate executable program written in C or other programming languages.

Linux Directory Commands

Directory Command	Description
pwd	The pwd command stands for (print working directory). It displays the current working location or directory of the user. It displays the whole working path starting with /. It is a built-in command.
ls	The ls command is used to show the list of a folder. It will list out all the files in the directed folder.
cd	The cd command stands for (change directory). It is used to change to the directory you want to work from the present directory.
mkdir	With mkdir command you can create your own directory.
rmdir	The rmdir command is used to remove a directory from your system.

Linux File Commands

Command	Description
file	Determines file type.

touch	Used to create a file.
rm	To remove a file.
cp	To copy a file.
mv	To rename or to move a file.
rename	To rename file.

Linux Create File

Linux file system considers everything as a file in Linux; whether it is text file images, partitions, compiled programs, directories, or hardware devices. If it is not a file, then it must be a process. To manage the data, it forms a tree structure.

Linux

files are case sensitive, so **test.txt** and **Test.txt** will be considered as two different files. There are multiple ways to create a file in Linux. Some conventional methods are as follows:

- using cat command
- using touch command
- using redirect '>' symbol
- using echo command
- using printf command
- using a different text editor like vim, nano, vi

Apart from all of the above methods, we can also create a file from the desktop file manager. Let's understand the above methods in detail:

Linux file command

file command is used to determine the file type. It does not care about the extension used for file. It simply uses file command and tell us the file type. It has several options.

file 1.png

Linux File Command Options

Option	Function
file -s	Used for special files.
file *	Used to list types of all the files.
file /directory name/*	Used to list types of all the files from mentioned directory.
file [range]*	It will list out all the files starting from the alphabet present within the given range.

Linux Man Command

The "man" is a short term for manual page. In unix like operating systems such as linux, man is an interface to view the system's reference manual.

A user can request to display a man page by simply typing man followed by a space and then argument. Here its argument can be a command, utility or function. A manual page associated with each of these arguments is displayed.

If you will provide a section number in the command, then man will be directed to look into that section number of the manual and that section page will be displayed. And if not, then by default it will display the first page and you have to go through the entire sections in a pre-defined manner.

We'll read about section number in this tutorial.

man ls

Linux File Contents Command

There are many commands which help to look at the contents of a file. Now we'll look at some of the commands like head, tac, cat, less & more and strings.

We'll discuss about the following file contents given in the table:

Commands	Function
head	It displays the beginning of a file.
tail	It displays the last last part of a file.
cat	This command is versatile and multi worker.
tac	Opposite of cat.
more	Command line diaplays contents in pager form that is either in more format.
less	Command line diaplays contents in pager form that is either in less format.

Linux Edit file

Linux file system allows us to operate various operations on files like **create, edit, rename, remove**. We can edit files by different Linux editors like **vim, nano, Emacs, Gedit, Gvim**, and more.

How to edit files in Linux

Let's understand how to edit files on a Linux server over different text editors.

- **Edit files with VI editor**

The **VI** editor is the most widely used text editor in Linux based systems. The Vi editor has various modes like **normal mode, insert mode, command mode, line mode,** and more. Each mode allows us to operate its specific operations.

It is most widely used because of its modality. Most of the tools have just one mode; they take input and performs commanded operation, but Vi has several modes.

When we start Vi, it opens with normal mode, which is basically a command mode. In this mode, whatever we type is considered as a command, not as input.

Sometimes Vi seems like a typical editor, but when you are used to it, it will feel you like one of the powerful editing tools.

Before editing files, let's understand how to switch a mode in Vi editor:

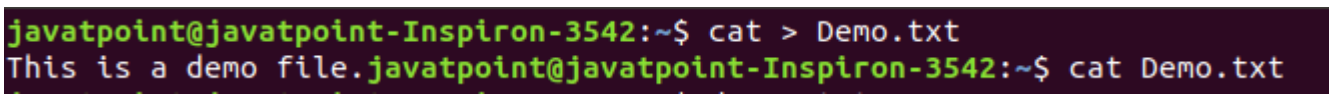
- Press the **ESC key** for **normal mode**.
- Press **i Key** for **insert mode.**
- Press **:q! keys** to exit from the editor without saving a file.
- Press **:wq! Keys** to save the updated file and exit from the editor.
- Press **:w test.txt** to save the file as test.txt

Now, let's understand how to edit a file using the Vi editor.

To edit a file, create a file first using the **cat** command:

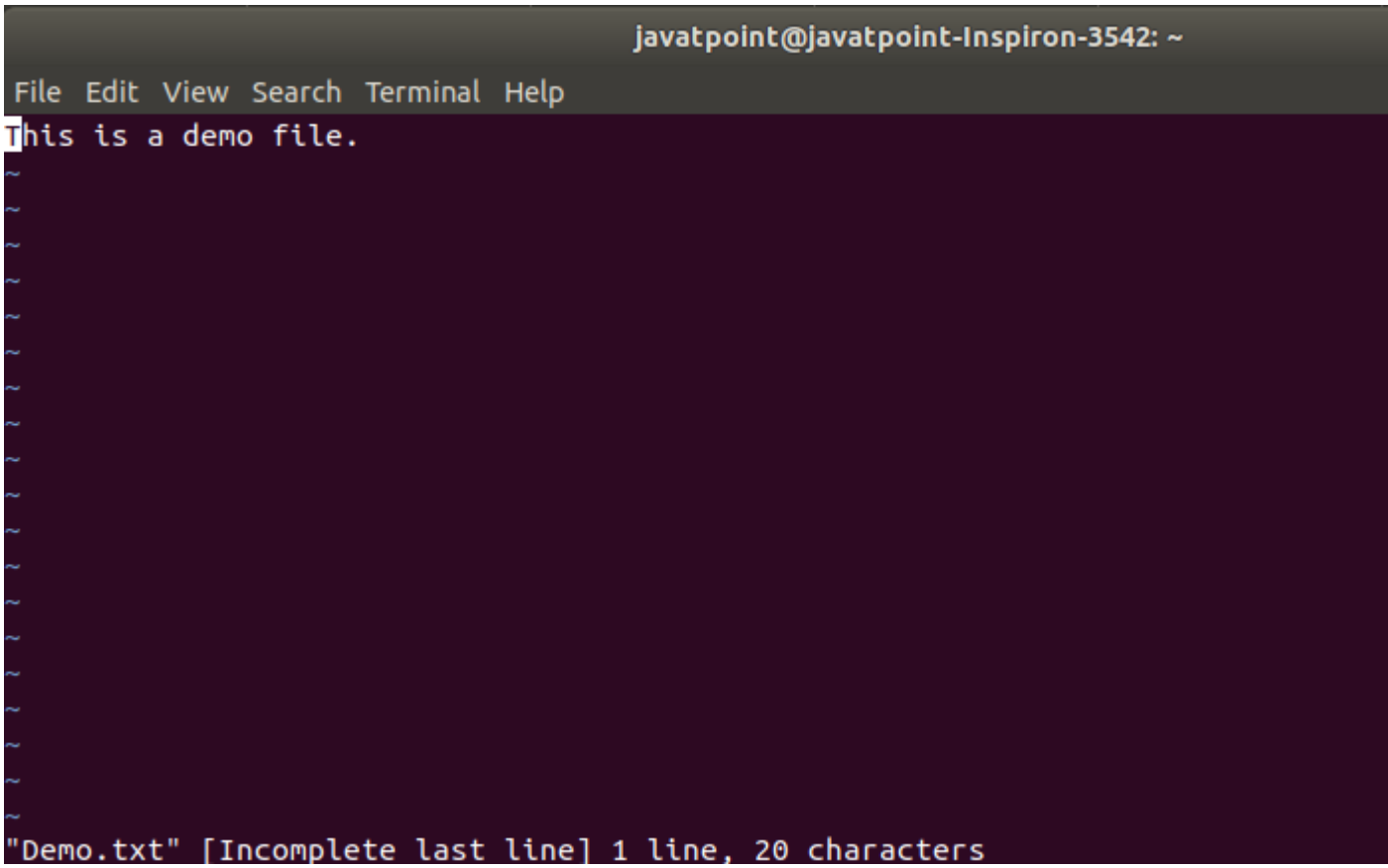
1. cat > Demo.txt

The above command allows to enter the content of the file on the terminal, enter the content of the file, then press **CTRL+D keys** to save the file. Consider the below snap of the terminal:



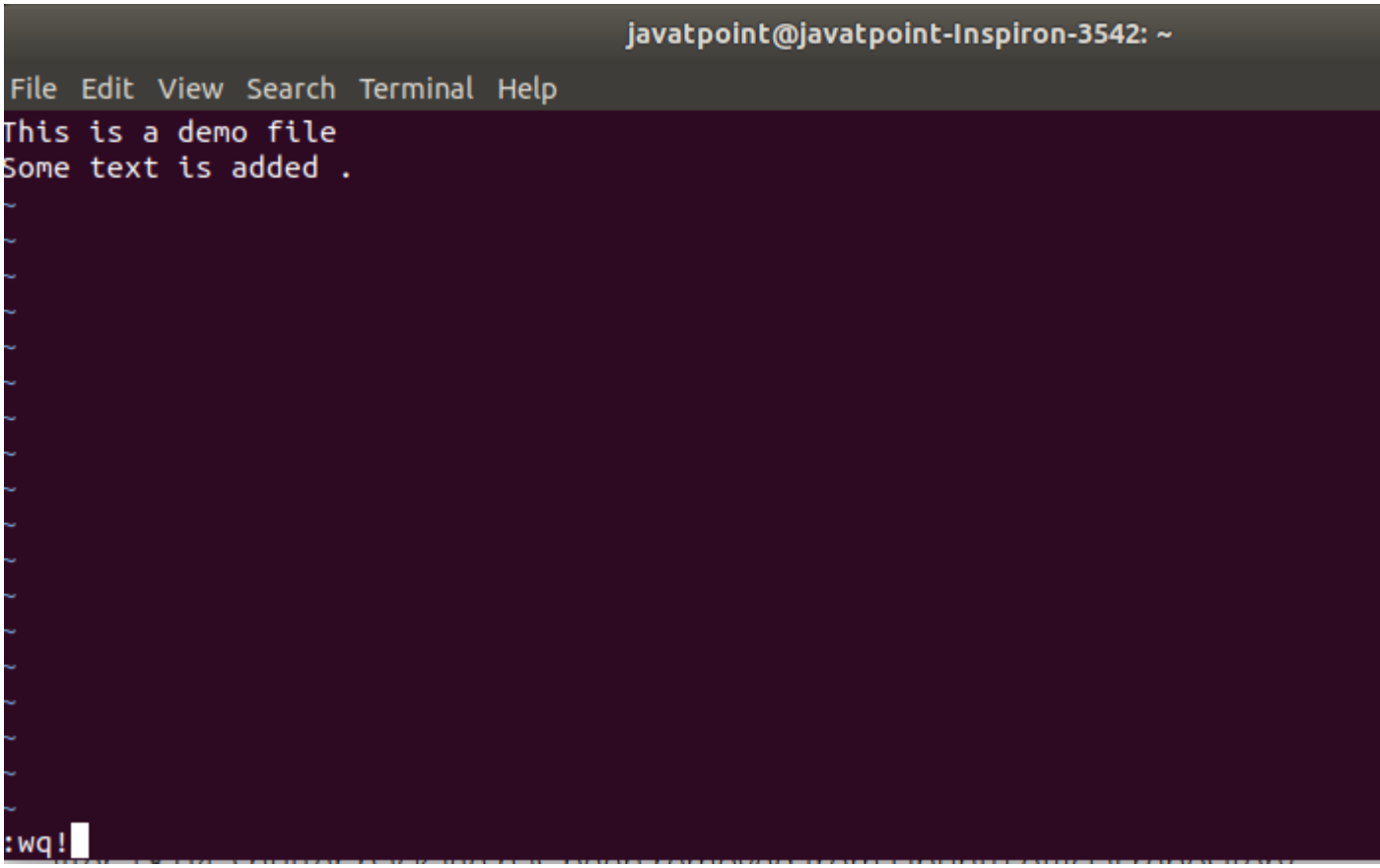
To edit this file, execute the below command to open with Vi editor:

1. vi Demo.txt



The above command will open the file with the Vi editor in the normal mode. Consider the below image of the editor:

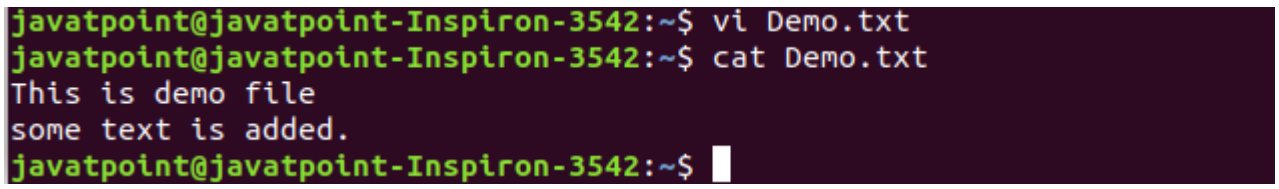
This file is open in normal mode, to switch it to insert mode press '**ESC' key** followed by **'i'** key. Place the cursor on your desired position and enter some text. To save the file and exit from the editor, press **the 'ESC'** key, followed by **:wq! Keys.** Consider the below image of the editor:



Now, we have successfully edited a file using the Vi editor. The editor will be closed after this and back to the command line. To see the file content, execute the cat command as follows:

1. cat Demo.txt

Consider the below snap of the terminal.



- **Edit files with a nano text editor**

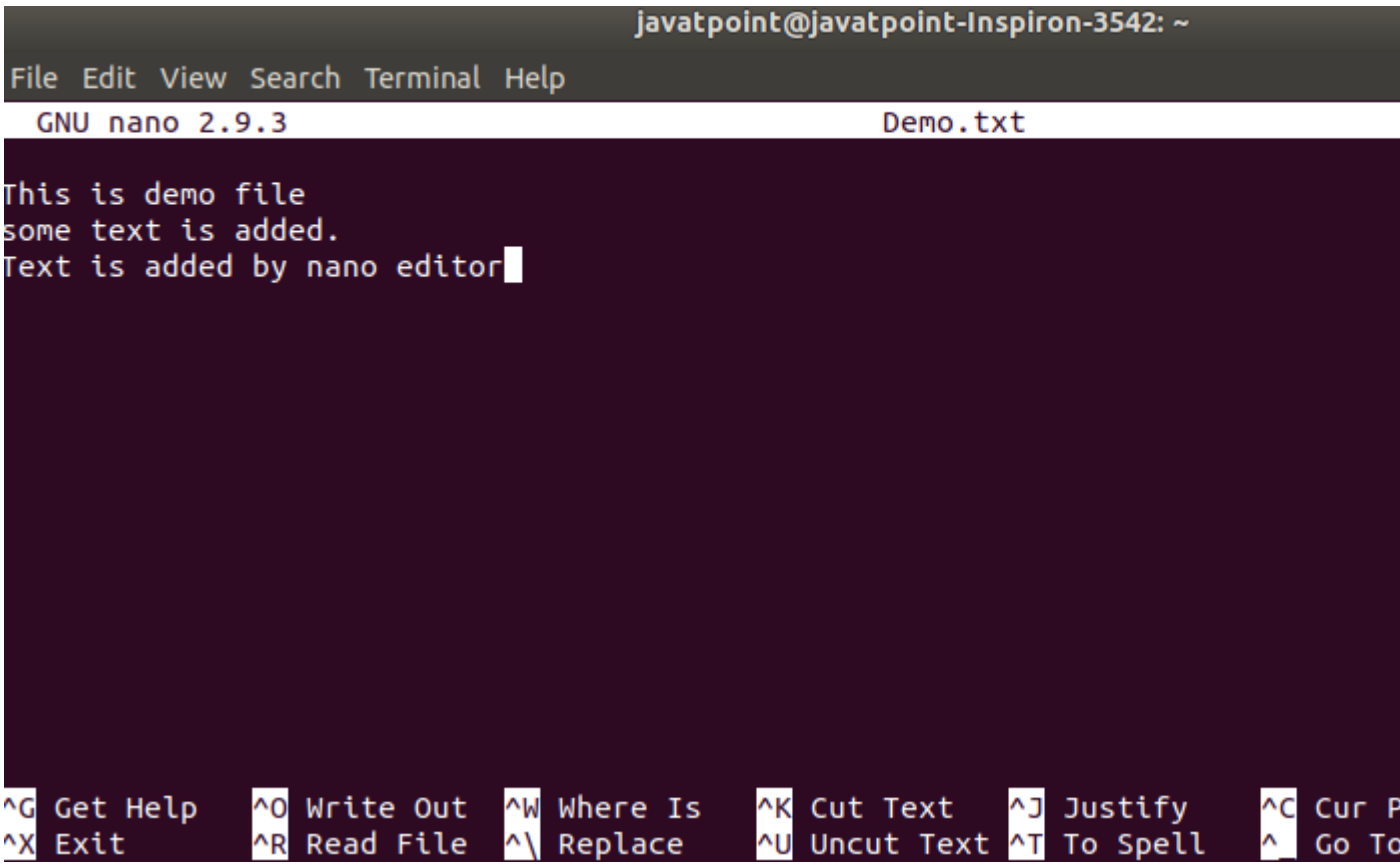
Nano is also one of the most used editors in Linux based systems. It is a straightforward and influential editor of Linux. It is a built-in editor for the Linux distributions. We do not need to have any prior knowledge about the nano editor before using it. In nano, no primary command is used to operate on the file. All the

basic operations are displayed on the bottom of the editor. We can trigger them with a **CTRL** key, for example, to save the file press **CTRL+O** keys, to exit from the editor press **CTRL+X** key.

To edit a file with the nano editor, open the file from the directory where it is stored with the following command:

1. nano Demo.txt

The above command will open the Demo.txt file with nano editor. To edit the file, move the cursor and enter the desired text and press the **CTRL+O** keys to save the file. Consider the below image of the nano text editor:



Press **CTRL+X** keys to exit from the editor. The changes you made on the file have been saved successfully. To verify the changes, execute the cat command as follows: