

### Create a new file inside the directory on the desktop

access to desktop-

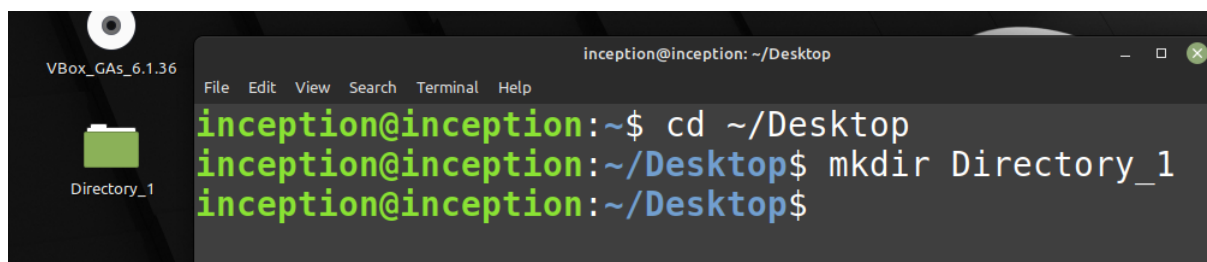
command line: `cd ~/Desktop`

```
inception@inception:/$ cd ~/Desktop
inception@inception:~/Desktop$
```

### Create a folder –

The basic command to make a new directory is "mkdir" (literally "make directory"). This makes the new folder in your currently active directory.

command line: `mkdir directory_name`



Check-

To check whether the directory is created or not.

command line: `ls`

```
inception@inception:~/Desktop$ ls
Directory_1
```

### To get access to the created directory-

To create a file in a directory, we need access to it.

command line: `cd directory_name`

```
inception@inception:~/Desktop$ cd Directory_1
inception@inception:~/Desktop/Directory_1$
```

Create a file inside this directory-

### Using the "Touch" Command –

This command is used for the following purposes-

1. The "touch" command is used to create an empty file in Linux.
2. The "touch" command is used to create multiple empty files in Linux.
3. Used to change all timestamps of file.
4. Used to update only the access time of the file, and modify the time of the file.

Timestamp –

A timestamp or time stamp is a **time registered to a file, log or notification that records when data is added, removed, modified, or transmitted.**

There are three main types of timestamp viz –

1. Access time- it is the last time when the file was access
2. Modify time – it is the last time when a file has been modified.
3. Change time - it is the last time when file metadata has been modified.

**command line:** touch file\_1

```
inception@inception:~/Desktop/Directory_1$ touch file_1
```

To check all timestamps of a file –

**command line:** stat file\_name

```
File: file_1
Size: 0          Blocks: 0          IO Block: 4096   regular empty file
Device: 803h/2051d Inode: 2758877    Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 1000/inception)  Gid: ( 1000/inception)
Access: 2022-08-29 13:20:24.726014555 +0100
Modify: 2022-08-29 13:20:24.726014555 +0100
Change: 2022-08-29 13:20:24.726014555 +0100
Birth: 2022-08-29 13:20:24.726014555 +0100
inception@inception:~/Desktop/Directory_1$
```

To change only access timestamp –

**command line:** touch -a file\_name

```
inception@inception:~/Desktop/Directory_1$ touch -a file_1
inception@inception:~/Desktop/Directory_1$ stat file_1
File: file_1
Size: 0          Blocks: 0          IO Block: 4096   regular empty file
Device: 803h/2051d Inode: 2758877    Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 1000/inception)  Gid: ( 1000/inception)
Access: 2022-08-29 13:34:24.767734862 +0100
Modify: 2022-08-29 13:27:53.710846397 +0100
Change: 2022-08-29 13:34:24.767734862 +0100
Birth: 2022-08-29 13:20:24.726014555 +0100
```

To change only modify timestamp-

```
inception@inception:~/Desktop/Directory_1$ touch -m file_1
inception@inception:~/Desktop/Directory_1$ stat file_1
  File: file_1
  Size: 0          Blocks: 0          IO Block: 4096   regular empty file
Device: 803h/2051d Inode: 2758877       Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 1000/inception)   Gid: ( 1000/inception)
Access: 2022-08-29 13:34:24.767734862 +0100
Modify: 2022-08-29 13:37:40.361139067 +0100
Change: 2022-08-29 13:37:40.361139067 +0100
 Birth: 2022-08-29 13:20:24.726014555 +0100
inception@inception:~/Desktop/Directory_1$
```

### Using the “cat” command –

Cat(concatenate) command is very frequently used in Linux. It reads data from the file and gives its content as output. It helps us to create, view, and concatenate files.

We can't edit the file once we create it.

The main purpose of using “cat” is as under-

1. To create a file. We can write the contents in it. It is not edited once we created it with this command. use “ctrl+d” to exit with this command.
2. concatenate the file – to add more than one file into a single file.
3. Copy file – to copy the context of x to y.
4. Tac – to view the content in the file from bottom to top.

**command line:** cat > file\_1 .....create file

write the contents in it.

Ctrl + d .....exit from file.

```
inception@inception:~/Desktop/Directory_1$ cat > file_2
"Don't ever let somebody tell you, you can't do something,not even me.Alright? you dream, you gott protect it.
inception@inception:~/Desktop/Directory_1$
```

**To view –**

**command line:** cat file\_name

```
inception@inception:~/Desktop/Directory_1$ cat file_2
"Don't ever let somebody tell you, you can't do something,not even me.Alright? you dream, you gott protect it.
```

**Create one more file –**

```
inception@inception:~/Desktop/Directory_1$ cat > file_3
"I HAVE TO KEEP BREATHING.AND TOMORROW THE SUN WILL RISE, AND WHO KNOWS WHAT THE TIDE WILL BRING IN."
```

Check all files in the directory-

```
inception@inception:~/Desktop/Directory_1$ ls
file_2  file_3
```

Add something in file\_2-

```
inception@inception:~/Desktop/Directory_1$ cat >>file_2
people can't do something themselves, they wanna tell you, you can't do it. if you want something, go get it."
```

Check-

```
inception@inception:~/Desktop/Directory_1$ cat file_2
"Don't ever let somebody tell you, you can't do something,not even me.Alright? you dream, you gott protect it.
people can't do something themselves, they wanna tell you, you can't do it. if you want something, go get it."
```

Concatenate all files with the new file name file\_4-

**command line:** cat file\_2 file\_3 > file\_4

```
inception@inception:~/Desktop/Directory_1$ cat file_2 file_3 > file_4
inception@inception:~/Desktop/Directory_1$
```

**Check files in the directory –**

```
inception@inception:~/Desktop/Directory_1$ ls
file_2  file_3  file_4
```

**Check Concatenated file –**

```
inception@inception:~/Desktop/Directory_1$ cat file_4
"Don't ever let somebody tell you, you can't do something,not even me.Alright? you dream, you gott protect it.
people can't do something themselves, they wanna tell you, you can't do it. if you want something, go get it.""I HAVE TO KEEP BREATHING.
AND TOMORROW THE SUN WILL RISE, AND WHO KNOWS WHAT THE TIDE WILL BRING IN."
```

**Using tac option-**

**command line:** tac file\_4

```
inception@inception:~/Desktop/Directory_1$ tac file_4
people can't do something themselves, they wanna tell you, you can't do it. if you want something, go get it.""I HAVE TO KEEP BREATHING.
AND TOMORROW THE SUN WILL RISE, AND WHO KNOWS WHAT THE TIDE WILL BRING IN."
"Don't ever let somebody tell you, you can't do something,not even me.Alright? you dream, you gott protect it.
```

## Vi editor –

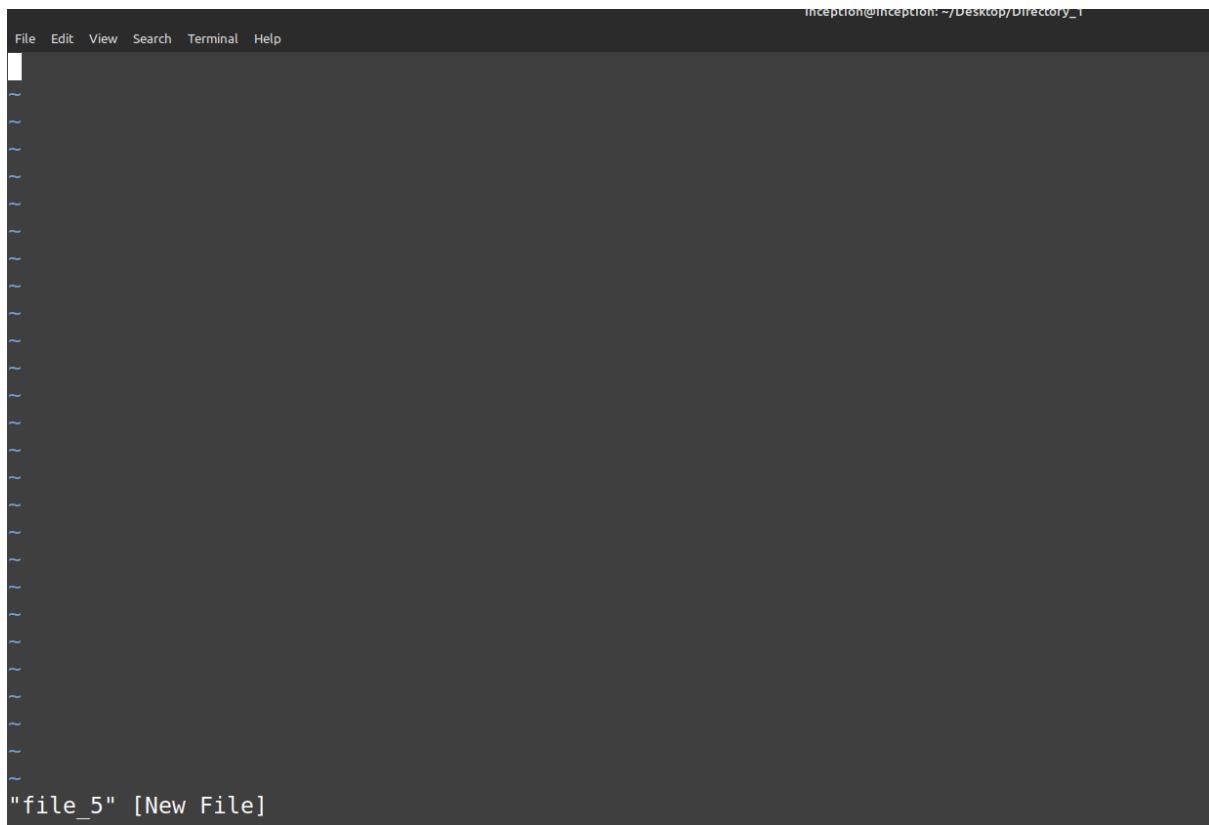
It is a programmer text editor.

It can be used to edit all kinds of plain text. It is especially used for editing programs mainly used for UNIX programs.

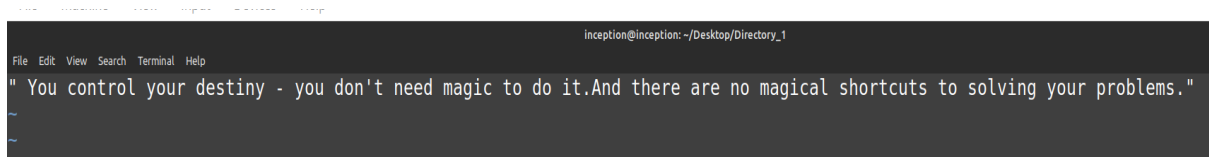
It may be complex for navigation but more powerful than nano, it is standard in every Linux.

### To create file –

**command line: vi filename**



**Press “I” and it will access you for editing the file you can write the text here**



**Press “Esc” to quit from editing option.**

**To save we have to write “:wq + enter”**

```
File Edit View Search Terminal Help
" You control your destiny - you don't need magic to do it.And there are no magical shortcuts to solving your problems."

:wq
```

The screen will look like

```
inception@inception:~/Desktop/Directory_1$ vi file_5
inception@inception:~/Desktop/Directory_1$
```

Check-

```
inception@inception:~/Desktop/Directory_1$ ls
file_1 file_2 file_3 file_4 file_5
inception@inception:~/Desktop/Directory_1$ cat file_5
" You control your destiny - you don't need magic to do it.And there are no magical shortcuts to solving your pr
oblems."
inception@inception:~/Desktop/Directory_1$
```

We can edit this with the same method.

Few command lines –

: w → to save,

: wq or :x ----→ to save and quit

: q ---→ only quit

: q! --→ force quit, no save.

### 'Echo' command-

This command is used to create as well as edit the file.

command line: echo " message" > file\_name .....to create

command line: echo " message" >> file\_name .....to edit

```
inception@inception:~/Desktop/my_dic$ ls
dic_b my_file
inception@inception:~/Desktop/my_dic$ echo "this file is created with echo command">test_echo
inception@inception:~/Desktop/my_dic$ ls
dic_b my_file test_echo
inception@inception:~/Desktop/my_dic$ echo " This is editing">>test_echo
```

### Check-

```
inception@inception:~/Desktop/my_dic$ cat test_echo
this file is created with echo command
This is editing
inception@inception:~/Desktop/my_dic$
```

To delete all contained inside the file i.e., to make the file empty.

```
inception@inception:~/Desktop/my_dic$ echo > test_echo
inception@inception:~/Desktop/my_dic$ cat test_echo

inception@inception:~/Desktop/my_dic$ ls
dic_b my_file test_echo
inception@inception:~/Desktop/my_dic$
```

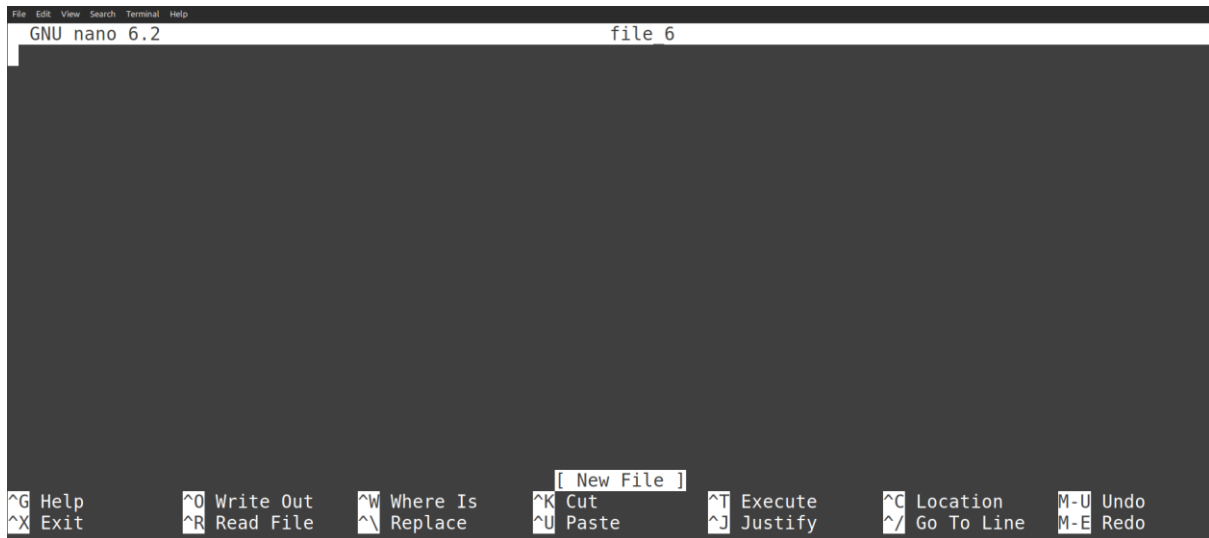


## Nano command –

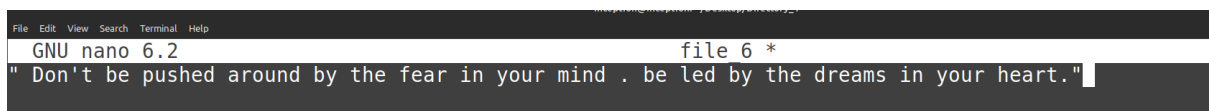
GNU nano is a popular command-line text editor that is included in most Linux distributions. The interface is comparable to GUI-based text editors, which makes nano a popular choice

To create a new file-

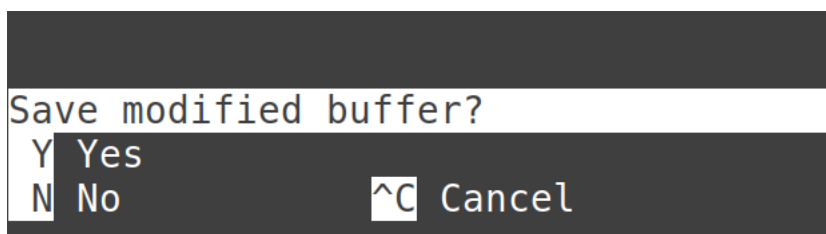
**command line: nano filename**



We see the above screen. We can write here .

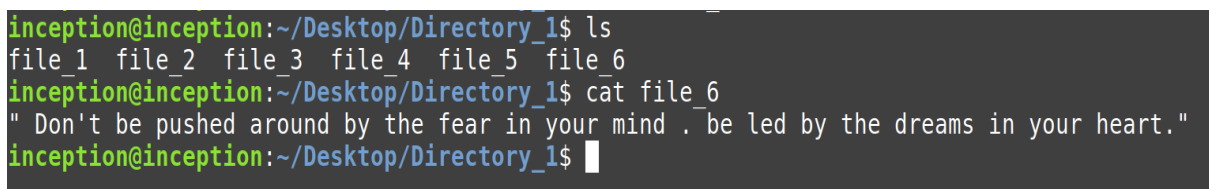


Now press “ ctrl + x “ to exit from the editor.



It will ask you for saving the file. With the above options, we can choose it by entering the proper value. Press “ enter” to quit from the nano editor.

Check-



**To update the file created by the “nano” command-**

Open the file again

**command line: nano filename**

After that to save overwriting press “ ctrl+o” after that press “ ctrl + x “ to exit from the editor.

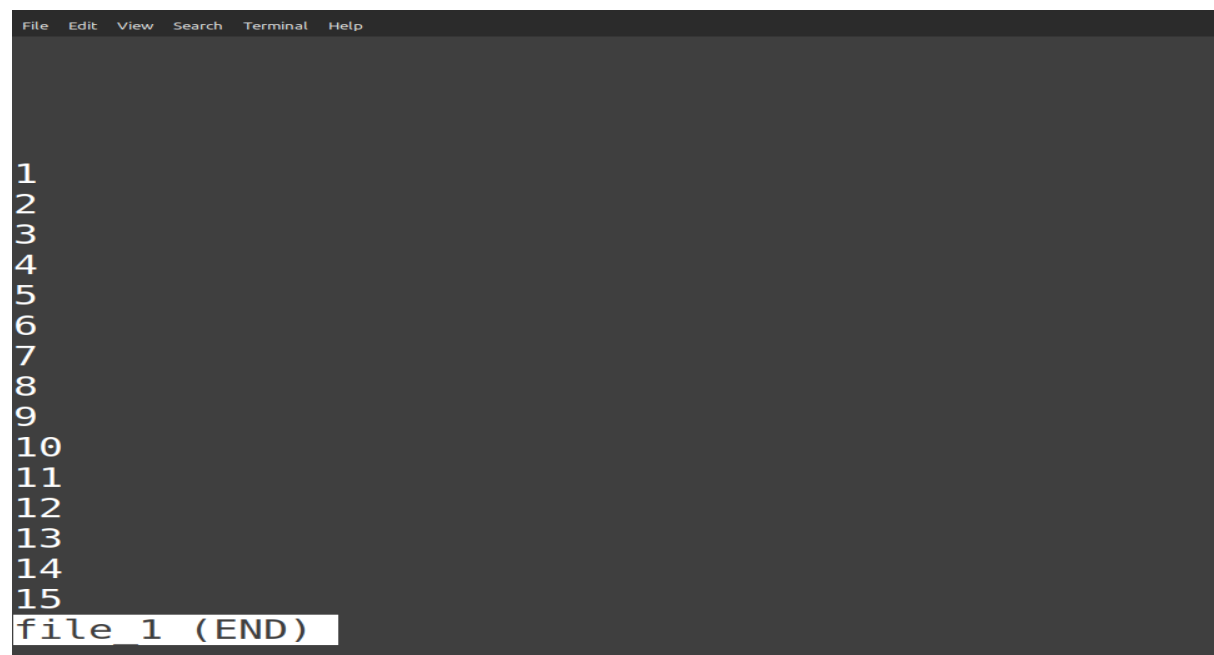
**Check –**

```
inception@inception:~/Desktop/Directory_1$ ls
file_1 file_2 file_3 file_4 file_5 file_6
inception@inception:~/Desktop/Directory_1$ cat file_6
" Don't be pushed around by the fear in your mind , be led by the dreams in your heart."this is updating the file again.
inception@inception:~/Desktop/Directory_1$
```

**To view the content in a file-**

**To view, all the contained in the file**

**command line: less filename**



```
File Edit View Search Terminal Help

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
file 1 (END)
```

**To quiet from the current screen press “q”**

To view the first ten lines from the file

command line: head filename

```
inception@inception:~/Desktop/my_dic$ head file_1
1
2
3
4
5
6
7
8
9
10
inception@inception:~/Desktop/my_dic$
```

To view the last ten lines from the file

command line: tail filename

```
inception@inception:~/Desktop/my_dic$ tail file_1
6
7
8
9
10
11
12
13
14
15
inception@inception:~/Desktop/my_dic$
```

To delete the file-

command line: rm -rv filename

```
inception@inception:~/Desktop/my_dic$ rm -rf file_1
inception@inception:~/Desktop/my_dic$ ls
dic_b
inception@inception:~/Desktop/my_dic$
```

### To arrange the content in a file in alphabetical order-

In order to arrange the content in alphabetical order, we use the “sort” command.

Command line – sort file\_name

```
inception@inception:~/Desktop/my_dic$ cat > my_file
my
group
python
call
apple
game
play
sleep
yoga
inception@inception:~/Desktop/my_dic$ sort my_file
apple
call
game
group
my
play
python
sleep
yoga
inception@inception:~/Desktop/my_dic$
```

### To find any particular object-

In the windows operating system, we used “ctrl + F” to search objects in our file. For the same reason, we use the “grep” command in Linux.

Command line – grep searching\_object file\_path

```
inception@inception:~/Desktop/my_dic$ sort my_file
apple
call
game
group
my
play
python
sleep
yoga
inception@inception:~/Desktop/my_dic$ grep play my_file
play
inception@inception:~/Desktop/my_dic$
```

