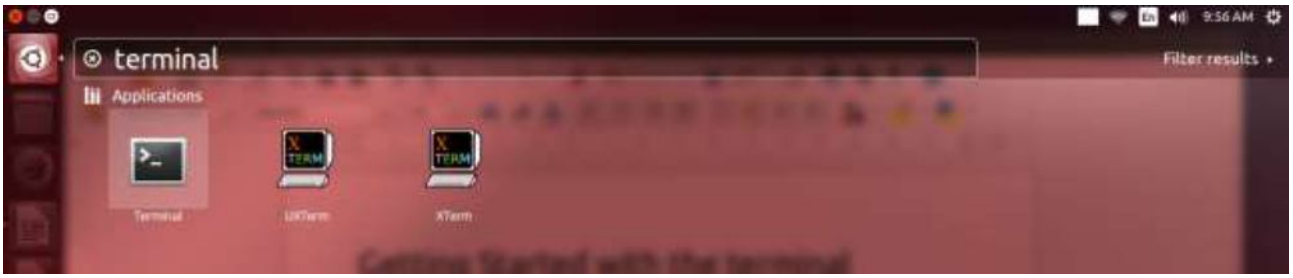
GETTING STARTED WITH THE TERMINAL

There are three easy ways to start the terminal.

i. Press **Ctrl + Alt + t**

ii. **Right Click** on any location and press **Open in Terminal**. The terminal will open showing the path of the same directory where you have clicked.

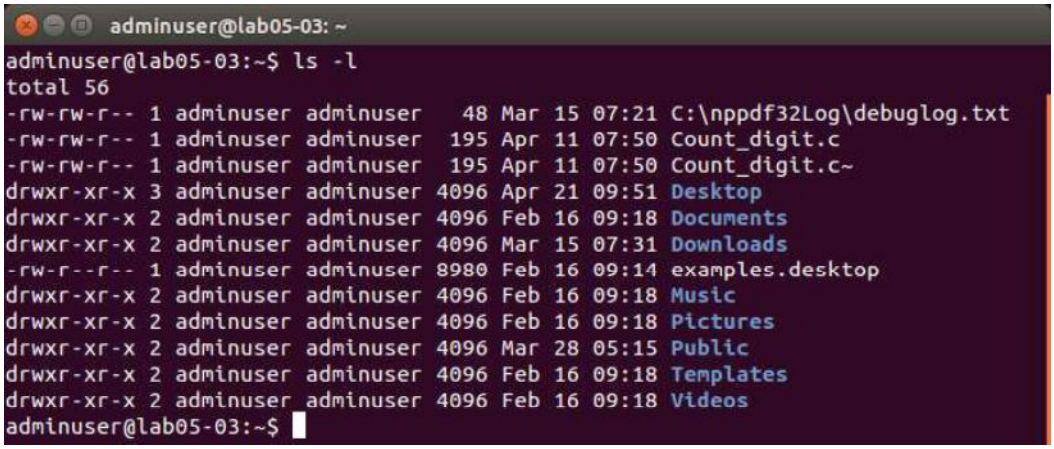
iii. Open the application drawer and type "Terminal". Select the terminal icon.



BASIC TERMINAL COMMANDS

1. ls [option] : This will list all the directories and files in the current directory.
Some options are:
ls -a : This will also list the files and directories starting with '**.**' (dot)
ls -l : This will show the long listing of all the directories and file. Long listing includes all the details and permission for each and every files and directories.

***Use cd <directory name> command to go to another directory.**



What the permissions actually means?

There are 9 characters for permission.
The first 3 characters are for the current user.
The next 3 characters are for group users.
The last 3 characters are for the other users.

There are three possible permissions: **r** (readable), **w** (writable), **x** (Executable)

If you look the above file, it has the permission as : -rw-rw-r--
This indicates that the file is readable and writable for the current user.
Same thing is for group users and the file is only readable for the other users.

2. chmod [options]

chmod is used to change the permissions of a file / directory.

There are two ways to change the permissions of a file / directory.

i.
If You look at the bit pattern the permission is like ___-___-___
0 is for inactive, 1 is for active.
The order of granting permission is rwx.

Suppose you want to grant a rwx permission to a file abc.c for current and group users and the other user wont get any permission.
So the character pattern would look like 111-111-000
Taking the octal value of every three bits we get 770

So in order to change the permission we simply write chmod 770 abc.c
Let us look2. chmod [options]
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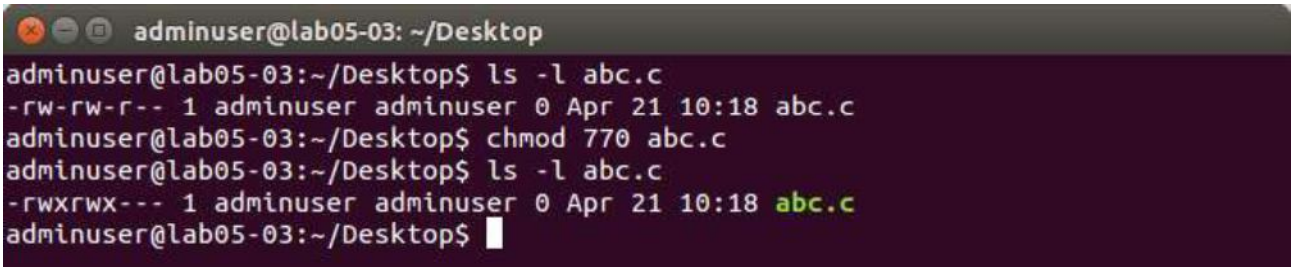
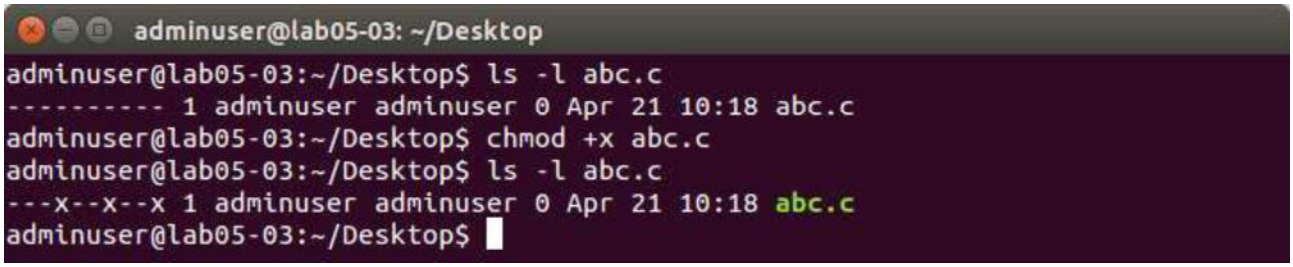


ii.
chmod +x abc.c
chmod +r abc.c
chmod +w abc.c
chmod +rx abc.c
And so on.

This will grant particular permission to all the users.



FIRST SHELL SCRIPT

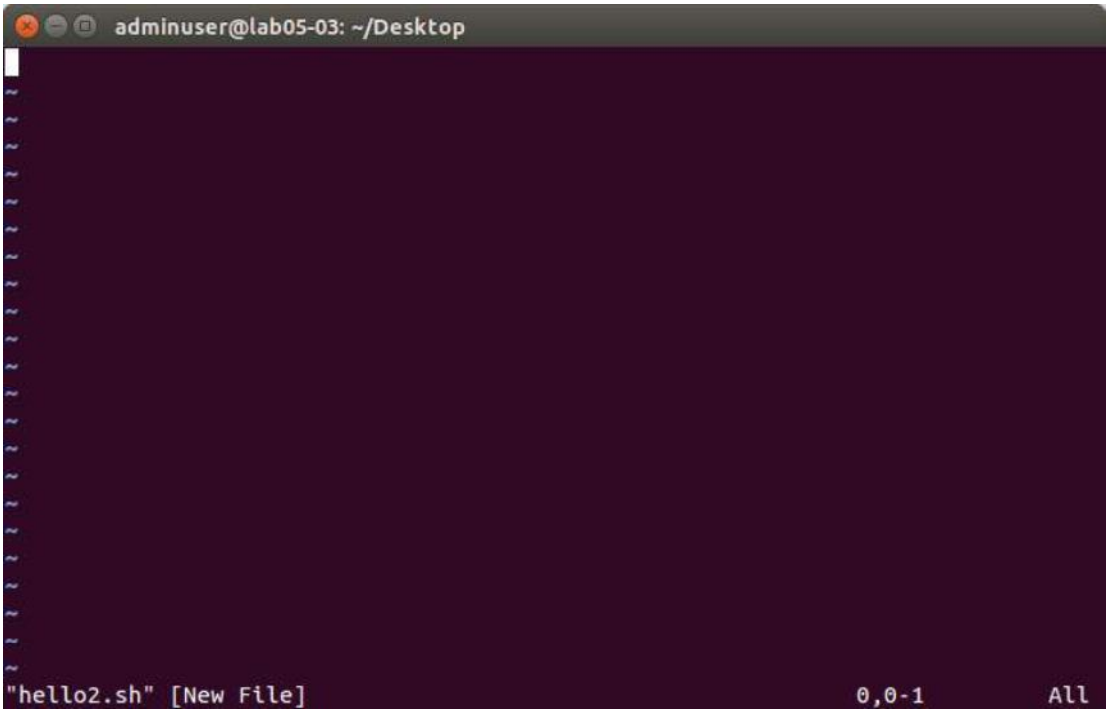
A shell script contains a combination of different system commands of unix.
To write a shell script, we can use any editor (vi , gedit).
Just open the terminal at a convinient location and type:

gedit <filename>.sh

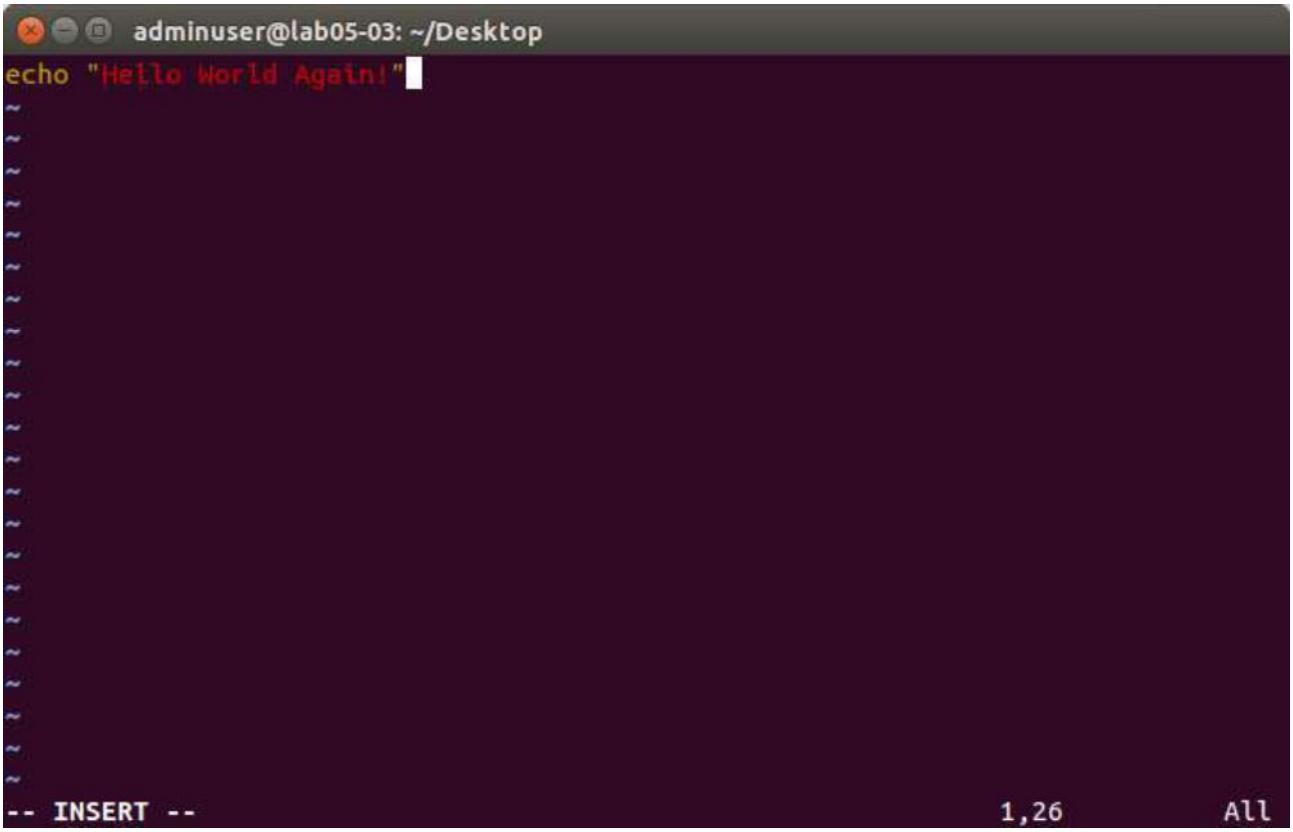
or

vi <filename>.sh

[It depends which editor you are using. It is recommended to use vi editor.]
Lets write a common hello world script.
In the terminal type vi hello2.sh



Press INSERT key to go to Insert Mode where you can enter characters.
After going to the INSERT mode, type your code:

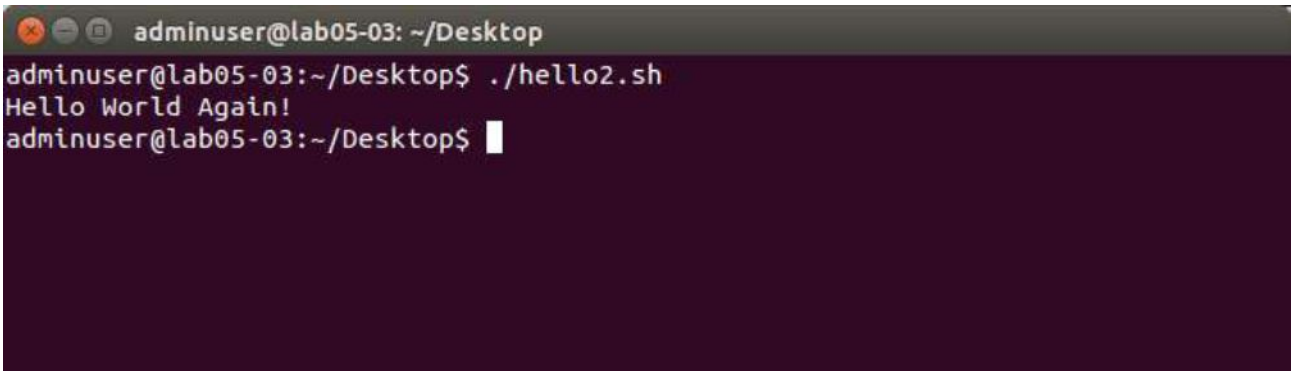


***echo command is used to display output on the screen**

To save and exit from the editor, press the following keys:
Esc + **:** (Colon) + **w** + **q**

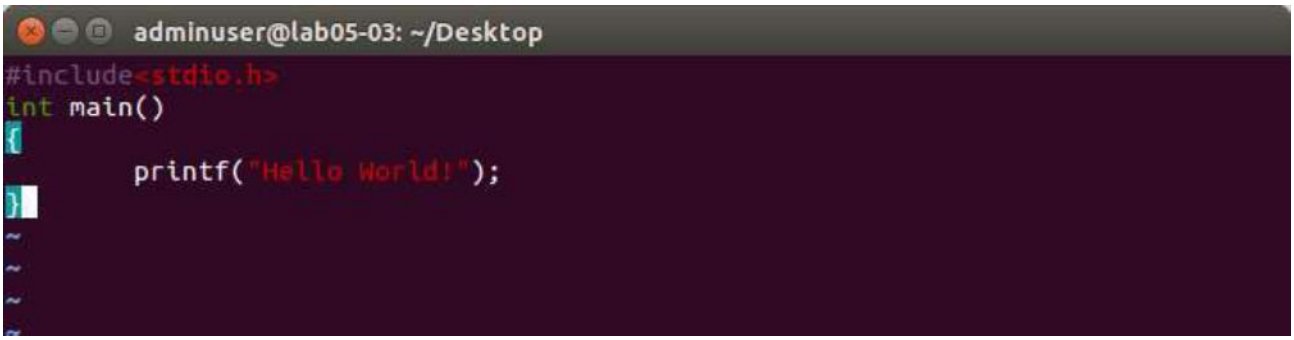
Then press Enter.
The file would get saved and the editor will close.

Make the file's permission as Executable and Run the file.
To Run the file, type ./<filename>.sh



For the hello2.sh file:

Lets compare our code with a similar C code.



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