



MAWLANA BHASHANI SCIENCE AND TECHNOLOGY UNIVERSITY

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LAB REPORT

Lab Report No : 02
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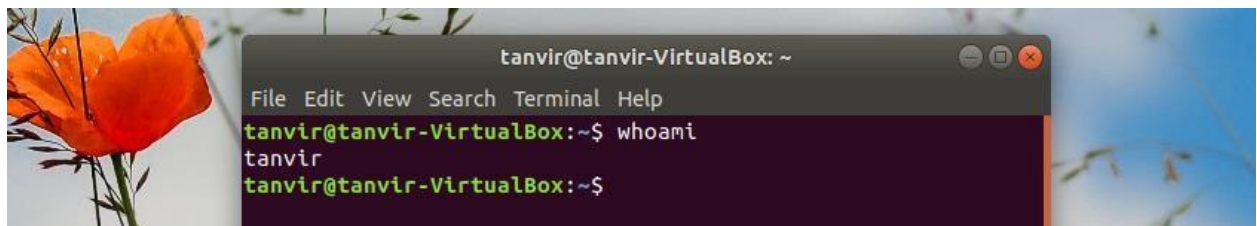
Experiment NO : 02

Experiment Name : Basic Command of Linux Operating System.

Introduction :

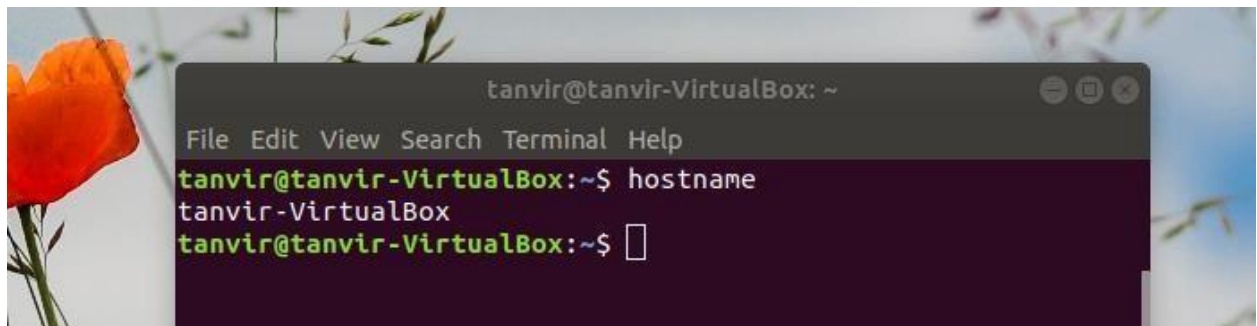
Basic Linux Commands

1) **whoami** : This command prints the username associated with the current effective user ID.

A screenshot of a terminal window titled 'tanvir@tanvir-VirtualBox: ~'. The window has a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The terminal shows the command 'tanvir@tanvir-VirtualBox:~\$ whoami' being entered, followed by the output 'tanvir' on the next line. The prompt 'tanvir@tanvir-VirtualBox:~\$' is visible at the bottom.

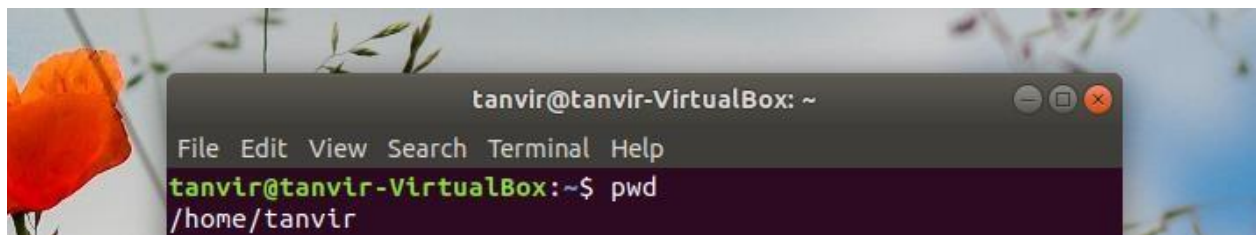
```
tanvir@tanvir-VirtualBox: ~  
File Edit View Search Terminal Help  
tanvir@tanvir-VirtualBox:~$ whoami  
tanvir  
tanvir@tanvir-VirtualBox:~$
```

2) **hostname** : The **hostname** command shows or sets the system hostname.

A screenshot of a terminal window titled 'tanvir@tanvir-VirtualBox: ~'. The window has a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The terminal shows the command 'tanvir@tanvir-VirtualBox:~\$ hostname' being entered, followed by the output 'tanvir-VirtualBox' on the next line. The prompt 'tanvir@tanvir-VirtualBox:~\$' is visible at the bottom.

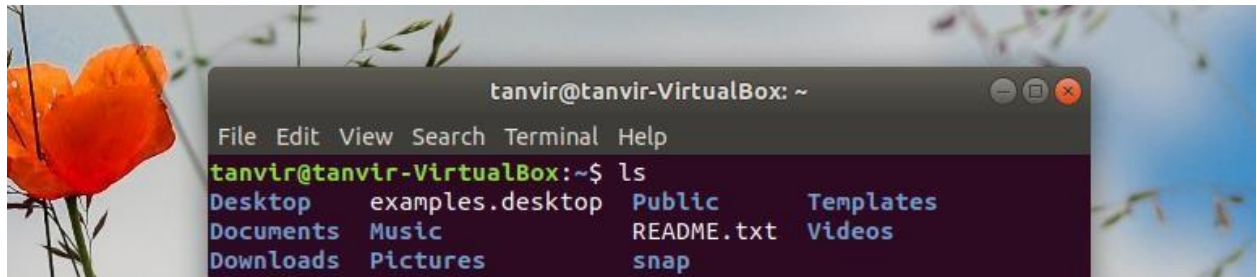
```
tanvir@tanvir-VirtualBox: ~  
File Edit View Search Terminal Help  
tanvir@tanvir-VirtualBox:~$ hostname  
tanvir-VirtualBox  
tanvir@tanvir-VirtualBox:~$
```

3) **pwd**: hort for **print working directory**, **pwd** is a Linux, Unix, and FTP command to print the directory you're currently working in when at the command line.

A screenshot of a terminal window titled 'tanvir@tanvir-VirtualBox: ~'. The window has a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The terminal shows the command 'tanvir@tanvir-VirtualBox:~\$ pwd' being entered, followed by the output '/home/tanvir' on the next line. The prompt 'tanvir@tanvir-VirtualBox:~\$' is visible at the bottom.

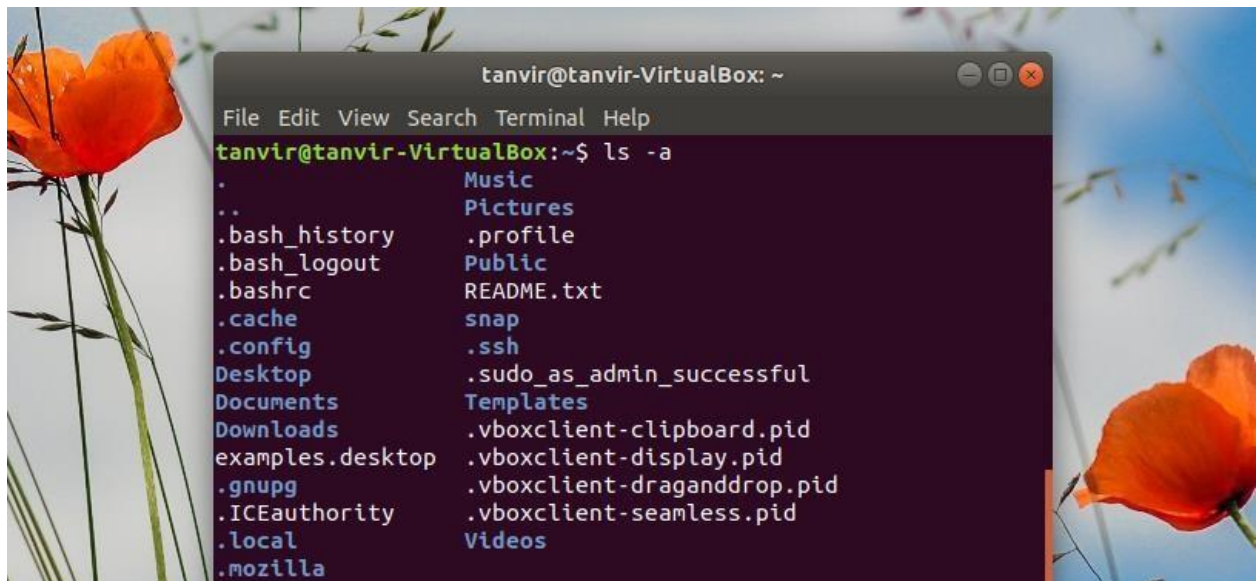
```
tanvir@tanvir-VirtualBox: ~  
File Edit View Search Terminal Help  
tanvir@tanvir-VirtualBox:~$ pwd  
/home/tanvir
```

4) **ls** : ls lists the files in the current working folder.



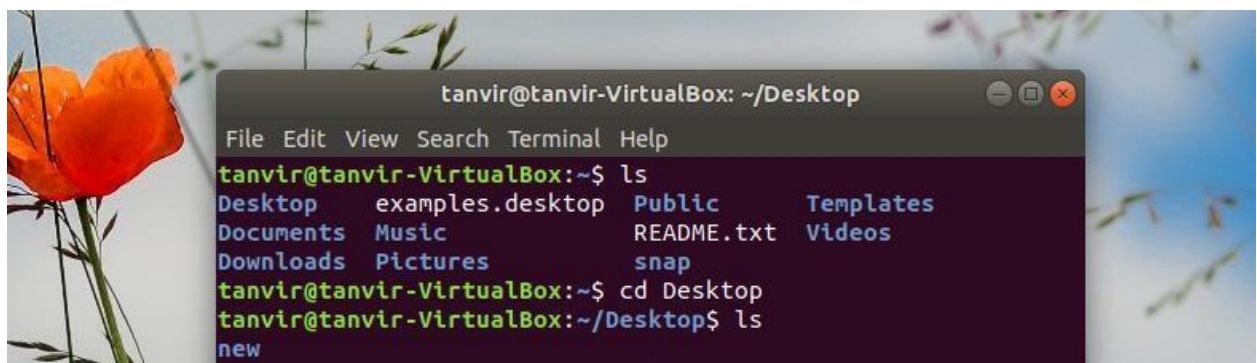
```
tanvir@tanvir-VirtualBox: ~  
File Edit View Search Terminal Help  
tanvir@tanvir-VirtualBox:~$ ls  
Desktop      examples.desktop  Public      Templates  
Documents    Music             README.txt  Videos  
Downloads    Pictures          snap
```

5) **ls -a**: list all files including hidden file starting with '.'



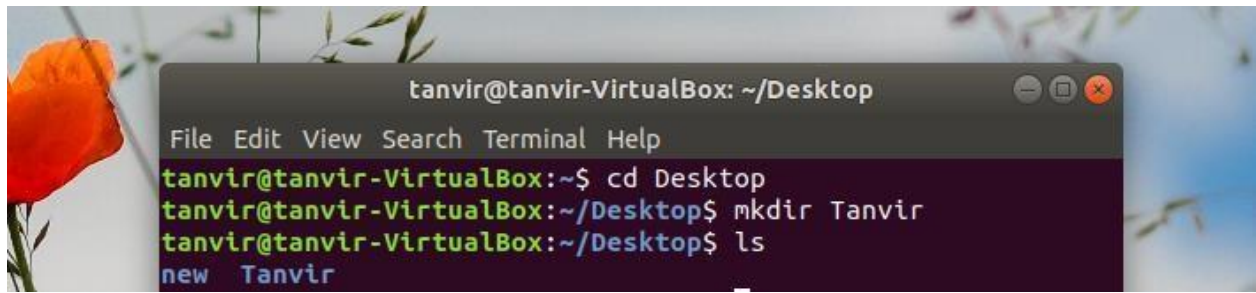
```
tanvir@tanvir-VirtualBox: ~  
File Edit View Search Terminal Help  
tanvir@tanvir-VirtualBox:~$ ls -a  
.  
..  
.bash_history  
.bash_logout  
.bashrc  
.cache  
.config  
Desktop  
Documents  
Downloads  
examples.desktop  
.gnupg  
.ICEauthority  
.local  
.mozilla  
Music  
Pictures  
.profile  
Public  
README.txt  
snap  
.ssh  
.sudo_as_admin_successful  
Templates  
.vboxclient-clipboard.pid  
.vboxclient-display.pid  
.vboxclient-draganddrop.pid  
.vboxclient-seamless.pid  
Videos
```

6) **cd**: The **cd** command, which stands for "change directory", changes the shell's current working directory .



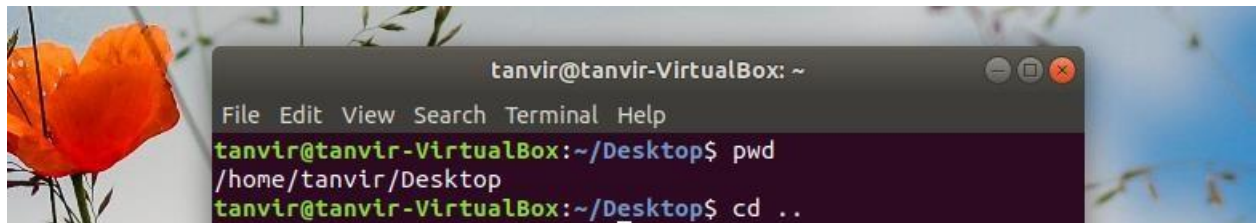
```
tanvir@tanvir-VirtualBox: ~/Desktop  
File Edit View Search Terminal Help  
tanvir@tanvir-VirtualBox:~$ ls  
Desktop      examples.desktop  Public      Templates  
Documents    Music             README.txt  Videos  
Downloads    Pictures          snap  
tanvir@tanvir-VirtualBox:~$ cd Desktop  
tanvir@tanvir-VirtualBox:~/Desktop$ ls  
new
```

7) **mkdir**: The **mkdir** command creates new directories in your file system.

A terminal window titled 'tanvir@tanvir-VirtualBox: ~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The background shows orange flowers. The terminal output is as follows:

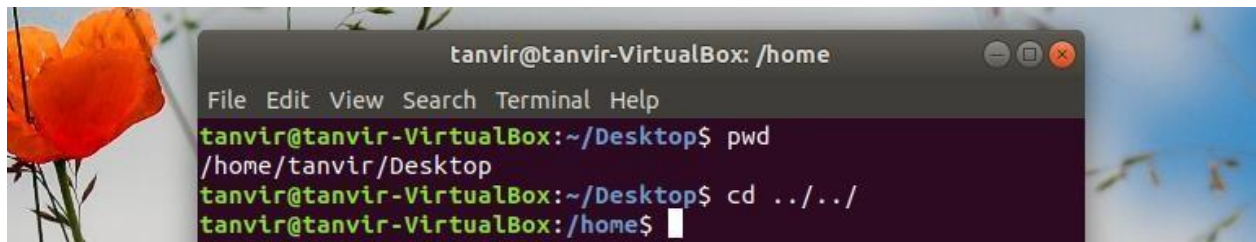
```
tanvir@tanvir-VirtualBox:~$ cd Desktop
tanvir@tanvir-VirtualBox:~/Desktop$ mkdir Tanvir
tanvir@tanvir-VirtualBox:~/Desktop$ ls
new Tanvir
```

8) **cd ..**: Move one directories up.

A terminal window titled 'tanvir@tanvir-VirtualBox: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). The background shows orange flowers. The terminal output is as follows:

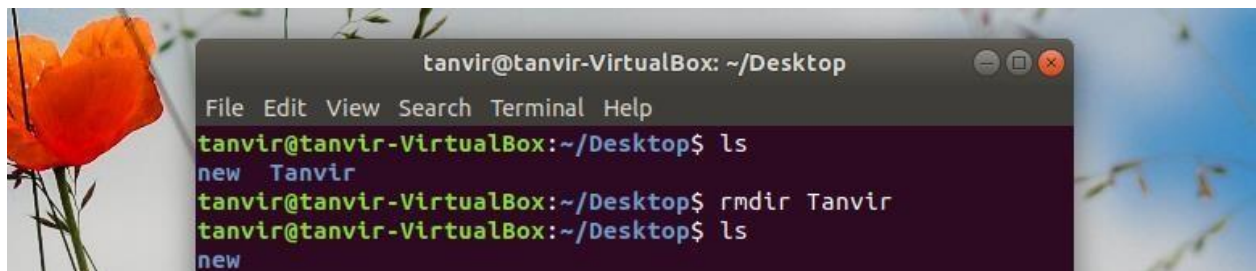
```
tanvir@tanvir-VirtualBox:~/Desktop$ pwd
/home/tanvir/Desktop
tanvir@tanvir-VirtualBox:~/Desktop$ cd ..
```

9) **cd ../../**: Move two directories up.

A terminal window titled 'tanvir@tanvir-VirtualBox: /home' with a menu bar (File, Edit, View, Search, Terminal, Help). The background shows orange flowers. The terminal output is as follows:

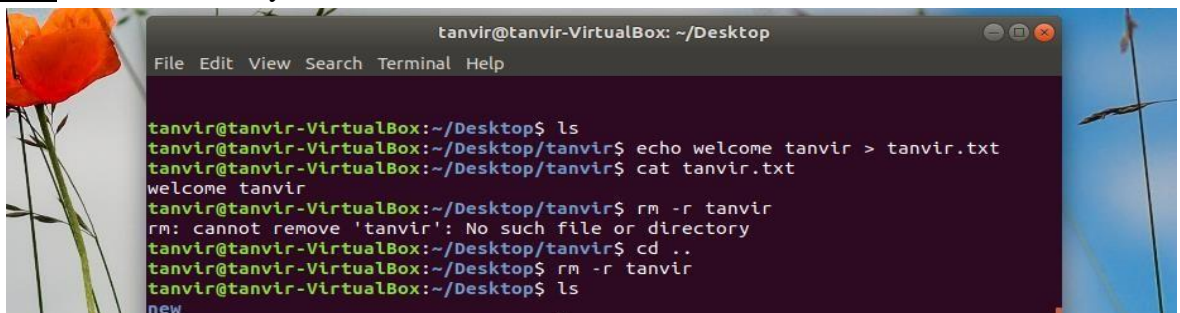
```
tanvir@tanvir-VirtualBox:~/Desktop$ pwd
/home/tanvir/Desktop
tanvir@tanvir-VirtualBox:~/Desktop$ cd ../../
tanvir@tanvir-VirtualBox:/home$
```

rmdir: remove a directory.

A terminal window titled 'tanvir@tanvir-VirtualBox: ~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The background shows orange flowers. The terminal output is as follows:

```
tanvir@tanvir-VirtualBox:~/Desktop$ ls
new Tanvir
tanvir@tanvir-VirtualBox:~/Desktop$ rmdir Tanvir
tanvir@tanvir-VirtualBox:~/Desktop$ ls
new
```

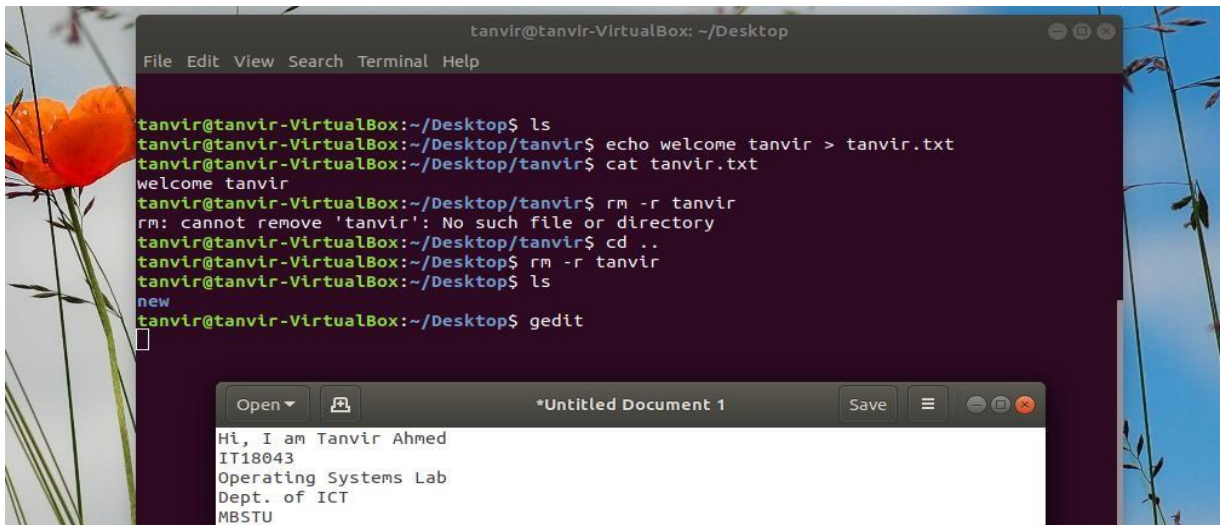
10) **rm -r**: remove directory with its content.

A terminal window titled 'tanvir@tanvir-VirtualBox: ~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The background shows orange flowers. The terminal output is as follows:

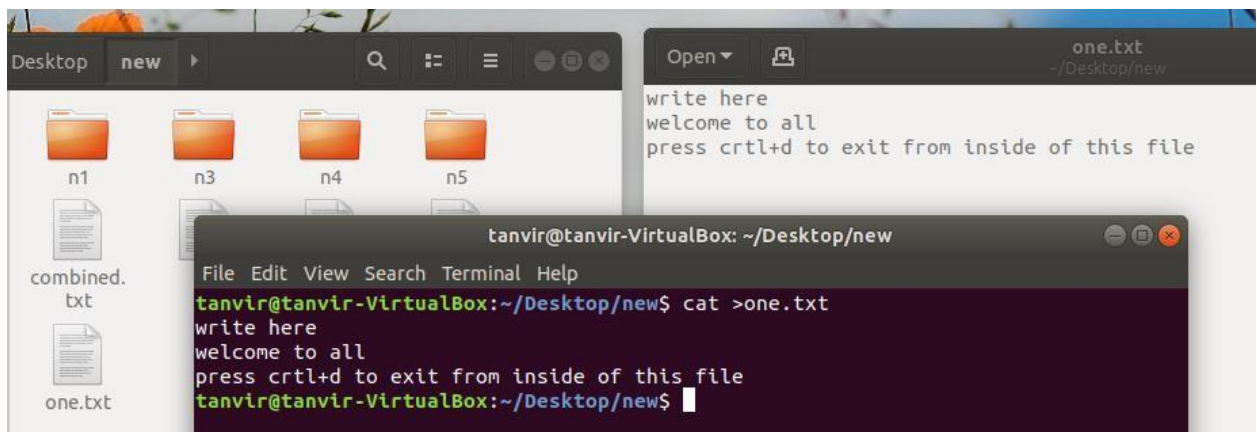
```
tanvir@tanvir-VirtualBox:~/Desktop$ ls
tanvir@tanvir-VirtualBox:~/Desktop/tanvir$ echo welcome tanvir > tanvir.txt
tanvir@tanvir-VirtualBox:~/Desktop/tanvir$ cat tanvir.txt
welcome tanvir
tanvir@tanvir-VirtualBox:~/Desktop/tanvir$ rm -r tanvir
rm: cannot remove 'tanvir': No such file or directory
tanvir@tanvir-VirtualBox:~/Desktop/tanvir$ cd ..
tanvir@tanvir-VirtualBox:~/Desktop$ rm -r tanvir
tanvir@tanvir-VirtualBox:~/Desktop$ ls
new
```


11) gedit : Working with text editors:

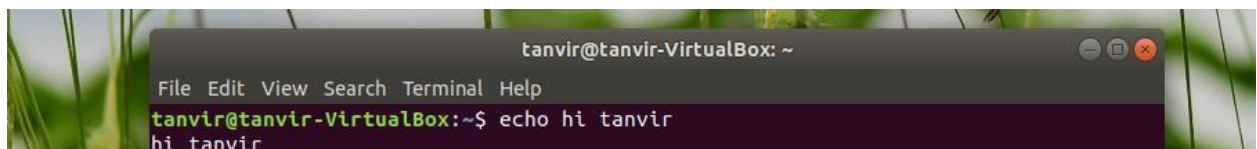
\$ gedit ---> its an editor



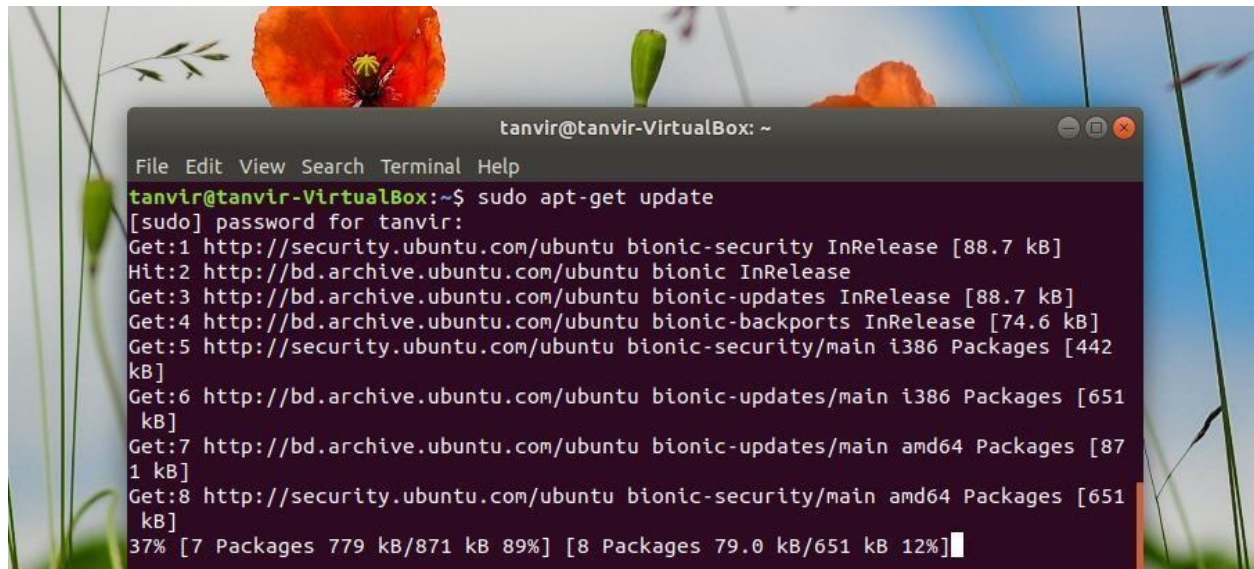
12) cat: creates new file.



echo: show something on the terminal.



13) sudo: sudo (Super User DO) command in Linux is generally used as a prefix of some command that only superuser are allowed to run.

A screenshot of a terminal window titled 'tanvir@tanvir-VirtualBox: ~'. The terminal shows the command 'sudo apt-get update' being executed. It prompts for a password, which is entered as 'tanvir'. The output shows the progress of updating the package lists from various sources, including security updates and main repositories for Ubuntu Bionic. The progress bar at the bottom indicates that 7 packages (779 kB) are 89% downloaded and 8 packages (79.0 kB) are 12% downloaded.

```
tanvir@tanvir-VirtualBox: ~  
File Edit View Search Terminal Help  
tanvir@tanvir-VirtualBox:~$ sudo apt-get update  
[sudo] password for tanvir:  
Get:1 http://security.ubuntu.com/ubuntu bionic-security InRelease [88.7 kB]  
Hit:2 http://bd.archive.ubuntu.com/ubuntu bionic InRelease  
Get:3 http://bd.archive.ubuntu.com/ubuntu bionic-updates InRelease [88.7 kB]  
Get:4 http://bd.archive.ubuntu.com/ubuntu bionic-backports InRelease [74.6 kB]  
Get:5 http://security.ubuntu.com/ubuntu bionic-security/main i386 Packages [442 kB]  
Get:6 http://bd.archive.ubuntu.com/ubuntu bionic-updates/main i386 Packages [651 kB]  
Get:7 http://bd.archive.ubuntu.com/ubuntu bionic-updates/main amd64 Packages [871 kB]  
Get:8 http://security.ubuntu.com/ubuntu bionic-security/main amd64 Packages [651 kB]  
37% [7 Packages 779 kB/871 kB 89%] [8 Packages 79.0 kB/651 kB 12%]
```

Conclusion : Linux is a very well organized operating system. That's why it has so many features.

Linux is very user friendly . To stay with Linux there are some basic commands we need to know .They all are discussed in this experiment.

In this lab experiment I learned how to deal with directories, how to create files ,delete files , list all items of any directory, locate any directory , see who is the user ,when and who created the file and many other things .

This lab experiment was not so hard because it was all about basic level commands. But it was a good start up for getting into linux. I had to study about those commands documentations . At the first time of using these commands they were confusing to me but they became easier when I tried them again and again. These commands works on many moods by simply adding parameter for the mood we want to use . So these parameters enriched those commands usability .

There are many commands of linux that we have not learned yet . But I hope in the next sessions we can learn most of them. After linux CLI we should also learn to deal with windows CLI shortly . Windows is GUI based so there CLI is not very popular.