



MAWLANA BHASHANI SCIENCE AND TECHNOLOGY UNIVERSITY

Santosh, Tangail-1902

LAB REPORT

Lab Report No : 02
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Submitted by,
Student Name : Tanvir Ahmed
Student ID : IT-18043
Session : 2017-18
3rd Year 1st semester
Dept. of ICT

Submitted to,
Nazrul Islam
Assistant Professor
Dept. of ICT,
MBSTU.

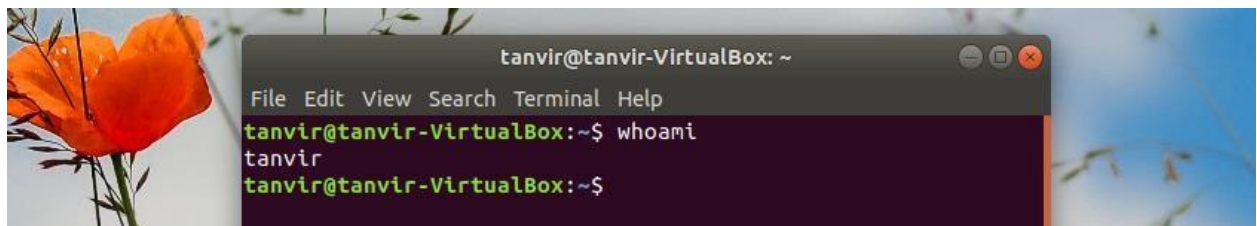
Experiment NO : 02

Experiment Name : Basic Command of Linux Operating System.

Introduction :

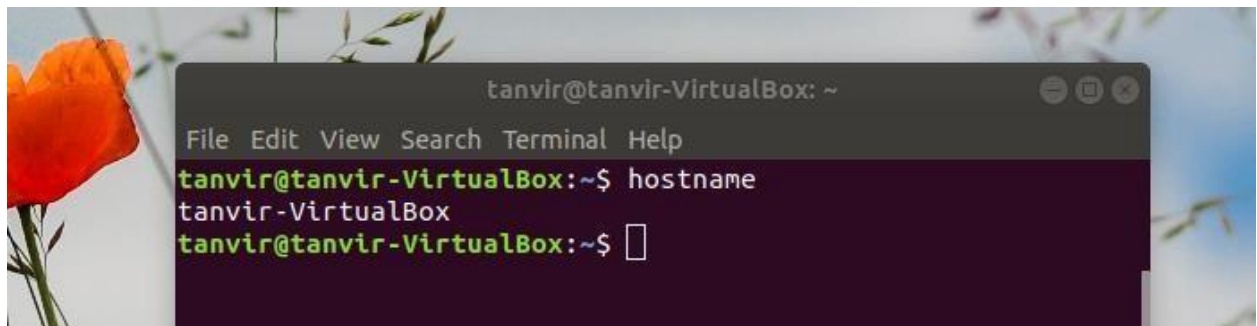
Basic Linux Commands

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

A terminal window titled 'tanvir@tanvir-VirtualBox: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). The prompt is 'tanvir@tanvir-VirtualBox:~\$'. The command 'whoami' has been entered and executed, resulting in the output 'tanvir' on the next line. The prompt is now 'tanvir@tanvir-VirtualBox:~\$'.

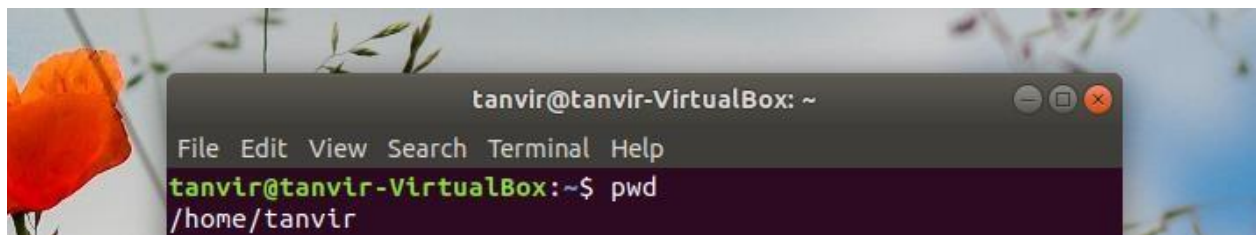
```
tanvir@tanvir-VirtualBox: ~  
File Edit View Search Terminal Help  
tanvir@tanvir-VirtualBox:~$ whoami  
tanvir  
tanvir@tanvir-VirtualBox:~$
```

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

A terminal window titled 'tanvir@tanvir-VirtualBox: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). The prompt is 'tanvir@tanvir-VirtualBox:~\$'. The command 'hostname' has been entered and executed, resulting in the output 'tanvir-VirtualBox' on the next line. The prompt is now 'tanvir@tanvir-VirtualBox:~\$' followed by a cursor.

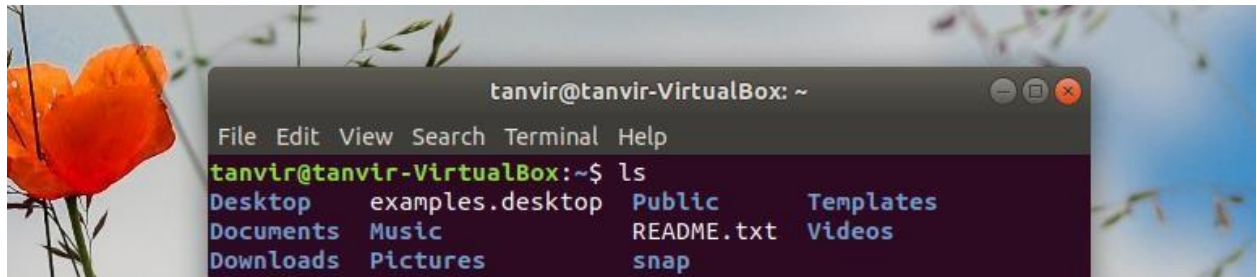
```
tanvir@tanvir-VirtualBox: ~  
File Edit View Search Terminal Help  
tanvir@tanvir-VirtualBox:~$ hostname  
tanvir-VirtualBox  
tanvir@tanvir-VirtualBox:~$
```

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 terminal window titled 'tanvir@tanvir-VirtualBox: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). The prompt is 'tanvir@tanvir-VirtualBox:~\$'. The command 'pwd' has been entered and executed, resulting in the output '/home/tanvir' on the next line. The prompt is now 'tanvir@tanvir-VirtualBox:~\$' followed by a cursor.

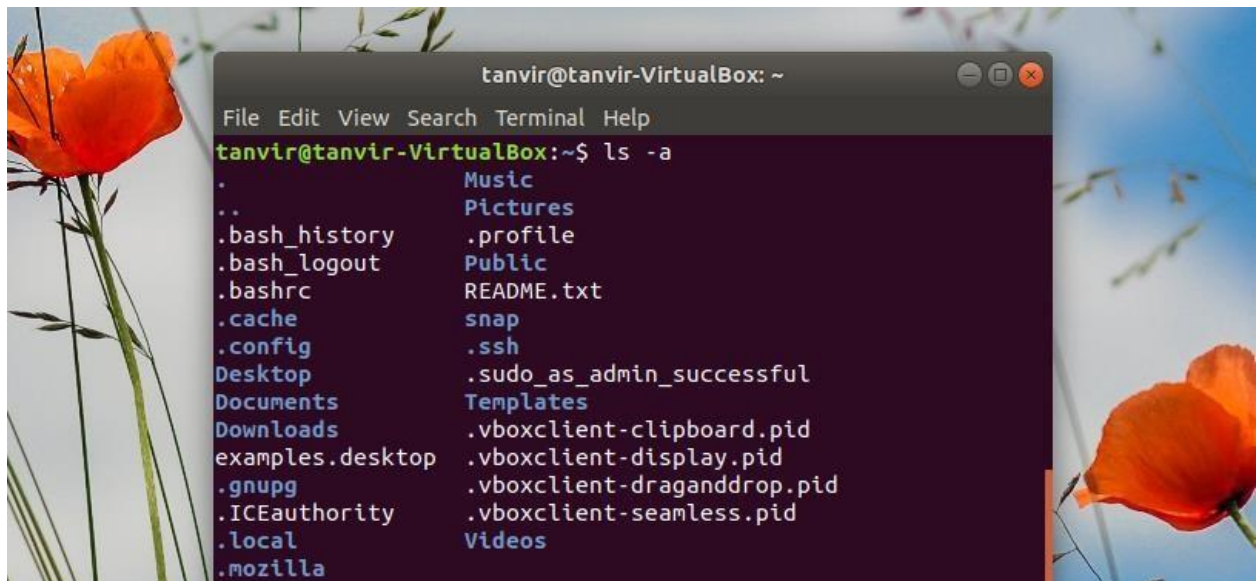
```
tanvir@tanvir-VirtualBox: ~  
File Edit View Search Terminal Help  
tanvir@tanvir-VirtualBox:~$ pwd  
/home/tanvir
```

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



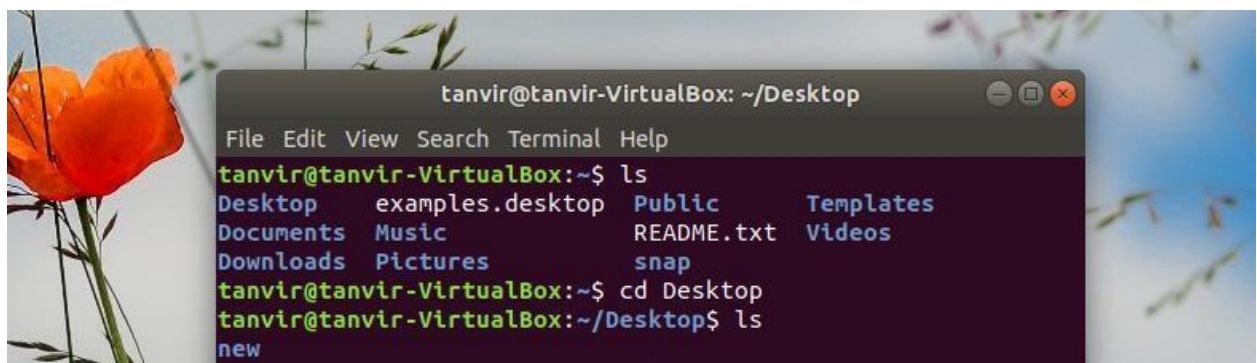
```
tanvir@tanvir-VirtualBox: ~  
File Edit View Search Terminal Help  
tanvir@tanvir-VirtualBox:~$ ls  
Desktop      examples.desktop  Public      Templates  
Documents    Music             README.txt  Videos  
Downloads    Pictures          snap
```

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



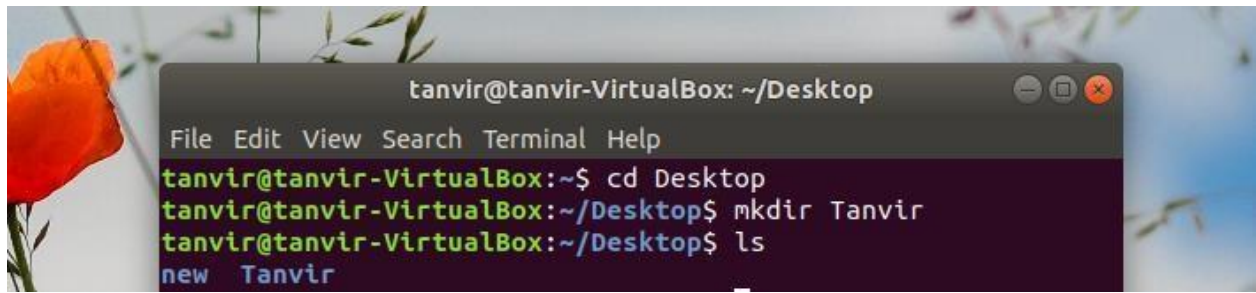
```
tanvir@tanvir-VirtualBox: ~  
File Edit View Search Terminal Help  
tanvir@tanvir-VirtualBox:~$ ls -a  
.  
..  
.bash_history  
.bash_logout  
.bashrc  
.cache  
.config  
Desktop  
Documents  
Downloads  
examples.desktop  
.gnupg  
.ICEauthority  
.local  
.mozilla  
Music  
Pictures  
.profile  
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 .



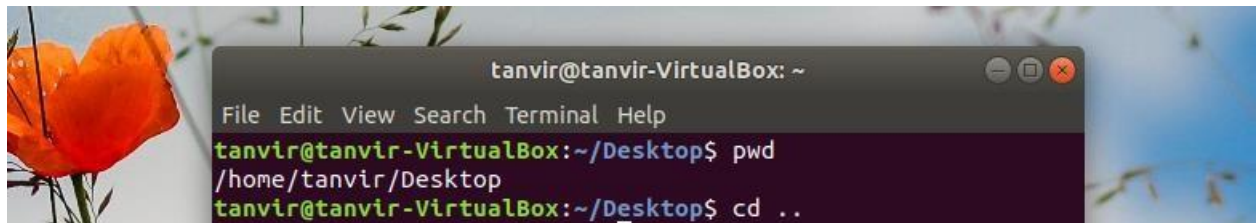
```
tanvir@tanvir-VirtualBox: ~/Desktop  
File Edit View Search Terminal Help  
tanvir@tanvir-VirtualBox:~$ ls  
Desktop      examples.desktop  Public      Templates  
Documents    Music             README.txt  Videos  
Downloads    Pictures          snap  
tanvir@tanvir-VirtualBox:~$ cd Desktop  
tanvir@tanvir-VirtualBox:~/Desktop$ 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 of the terminal is dark purple. The user has executed the following commands: 'cd Desktop', 'mkdir Tanvir', and 'ls'. The output of 'ls' is 'new Tanvir'.

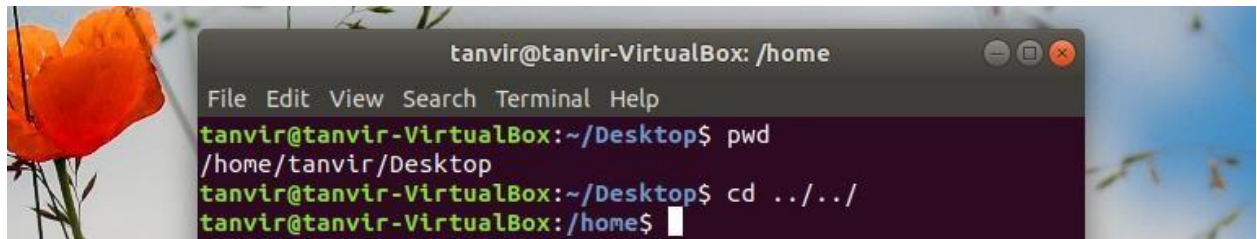
```
tanvir@tanvir-VirtualBox: ~/Desktop
File Edit View Search Terminal Help
tanvir@tanvir-VirtualBox:~$ cd Desktop
tanvir@tanvir-VirtualBox:~/Desktop$ mkdir Tanvir
tanvir@tanvir-VirtualBox:~/Desktop$ ls
new Tanvir
```

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 is dark purple. The user has executed 'pwd' and 'cd ..'. The output of 'pwd' is '/home/tanvir/Desktop'.

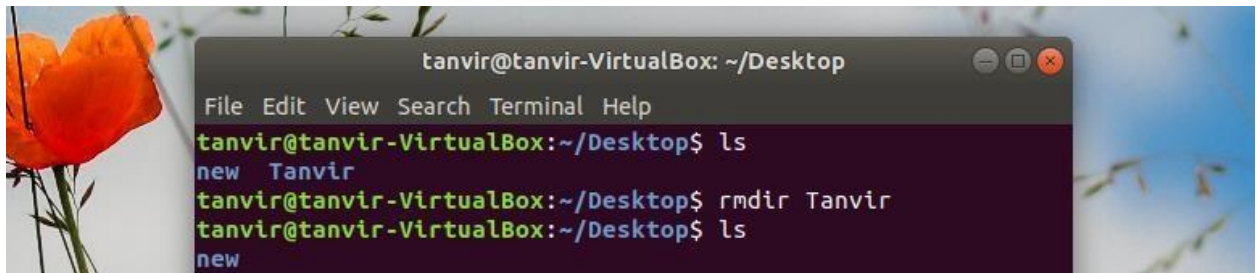
```
tanvir@tanvir-VirtualBox: ~
File Edit View Search Terminal Help
tanvir@tanvir-VirtualBox:~/Desktop$ pwd
/home/tanvir/Desktop
tanvir@tanvir-VirtualBox:~/Desktop$ cd ..
```

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 is dark purple. The user has executed 'pwd' and 'cd ../../'. The output of 'pwd' is '/home/tanvir/Desktop'.

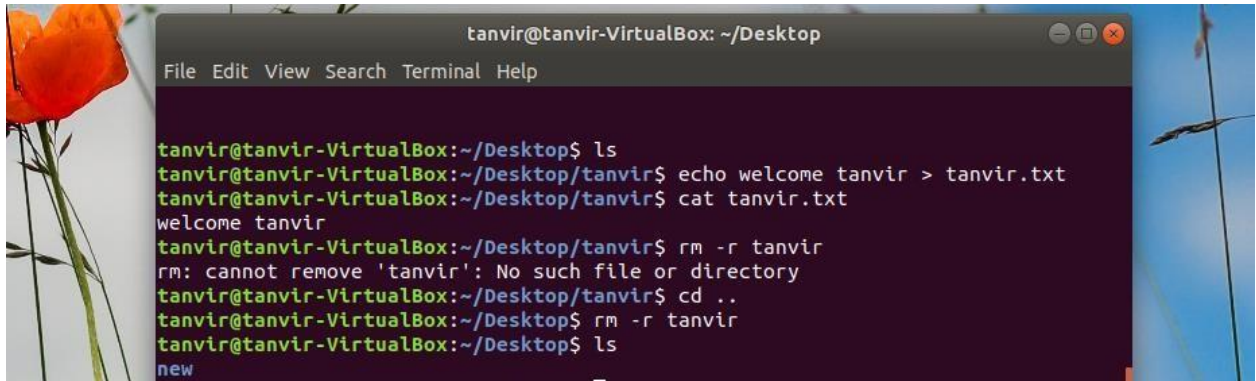
```
tanvir@tanvir-VirtualBox: /home
File Edit View Search Terminal Help
tanvir@tanvir-VirtualBox:~/Desktop$ pwd
/home/tanvir/Desktop
tanvir@tanvir-VirtualBox:~/Desktop$ cd ../../
tanvir@tanvir-VirtualBox:/home$
```

10) **rmdir**: remove a directory.

A terminal window titled 'tanvir@tanvir-VirtualBox: ~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the following commands and output:

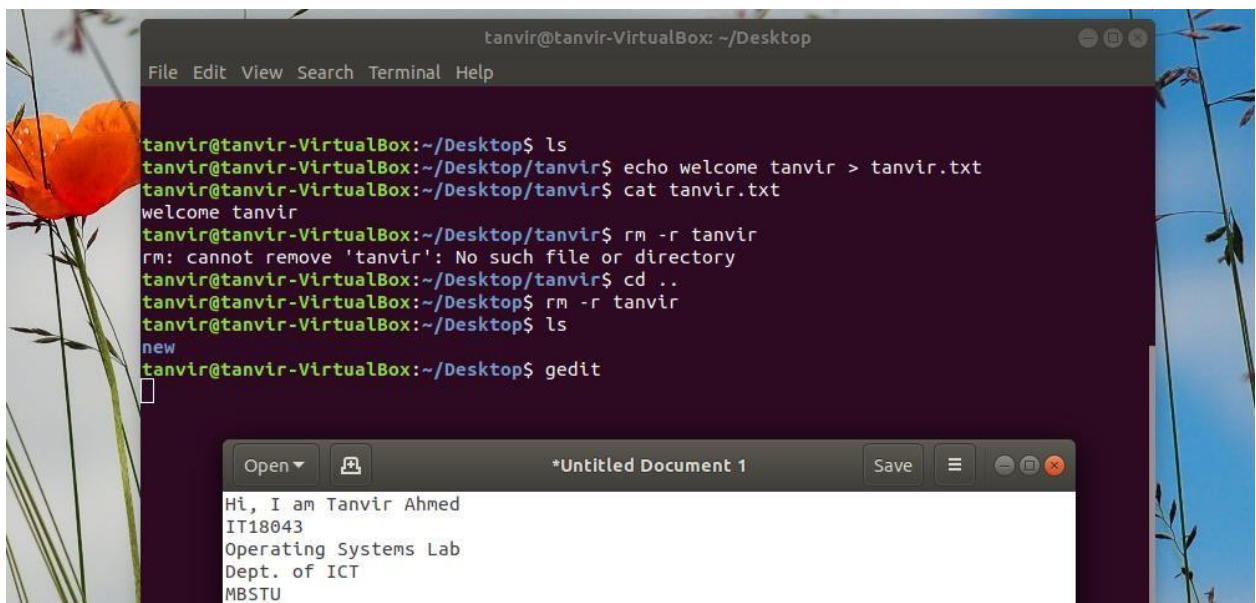
```
tanvir@tanvir-VirtualBox:~/Desktop$ ls
new Tanvir
tanvir@tanvir-VirtualBox:~/Desktop$ rmdir Tanvir
tanvir@tanvir-VirtualBox:~/Desktop$ ls
new
```

11) 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 terminal shows the following commands and output:

```
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
```

12) gedit : Working with text editors: \$ gedit ---> its an editor

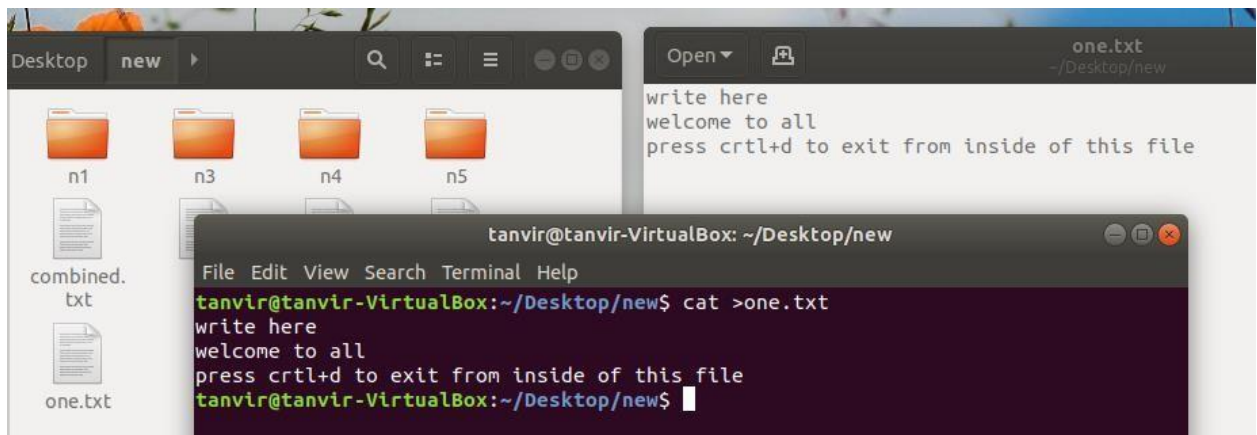
A terminal window titled 'tanvir@tanvir-VirtualBox: ~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the following commands and output:

```
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
tanvir@tanvir-VirtualBox:~/Desktop$ gedit
```

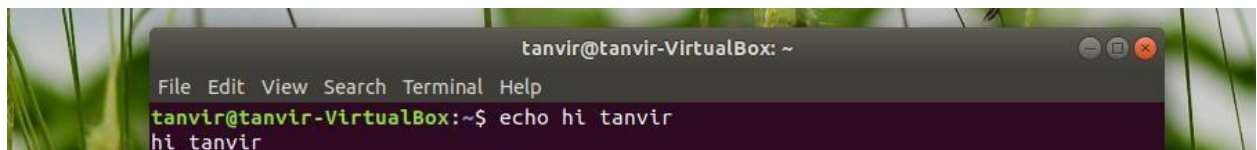
Below the terminal window, a gedit editor window titled '*Untitled Document 1' is open, showing the following text:

```
Hi, I am Tanvir Ahmed
IT18043
Operating Systems Lab
Dept. of ICT
MBSTU
```

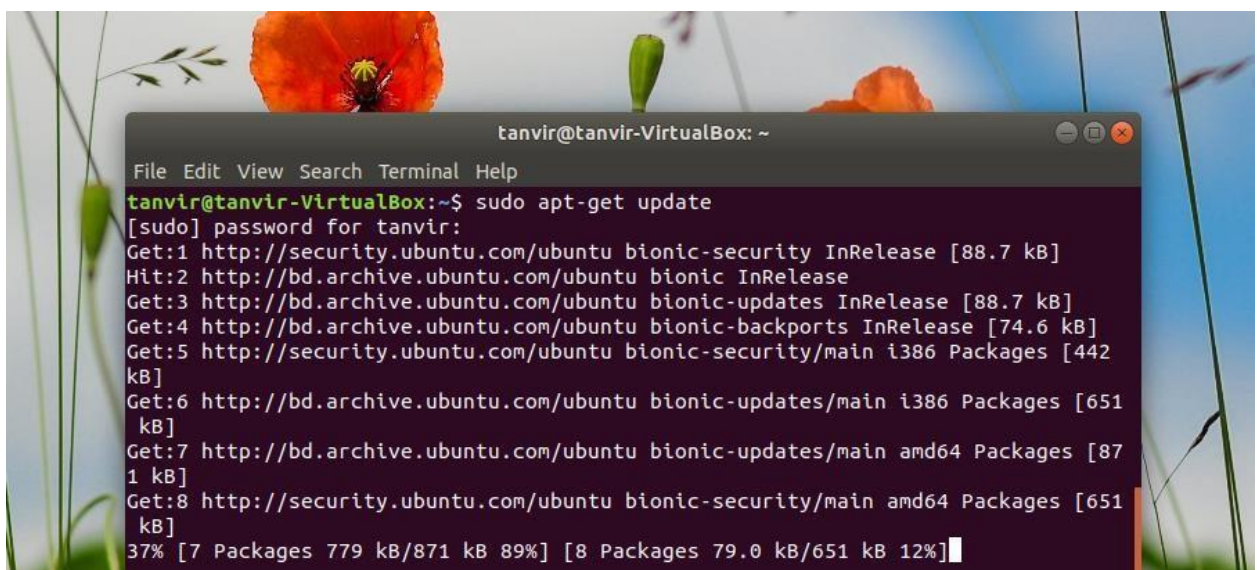
13) cat: creates new file.



14) echo: show something on the terminal.



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



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.