



Mawlana Bhashani Science and Technology University

Lab-Report

Report No: 02

Course code: ICT-3108

Course title: Operating System Lab

Date of Performance:10-09-20

Date of Submission:14-09-20

Submitted by

Name: Md.Abdullah Al Mamun
ID:IT-18040
3th year 1nd semester
Session: 2017-2018
Dept. of ICT
MBSTU.

Submitted To

Nazrul Islam
Assistant Professor
Dept. of ICT
MBSTU.

Lab Report No : 02

Lab-Report Name : Basic Command of Linux Operating System.

Theory

What is Linux command?

The Linux command is a utility of the Linux operating system. All basic and advanced tasks

can be done by executing commands. The commands are executed on the Linux terminal.

The terminal is a command-line interface to interact with the system, which is similar to the

command prompt in the Windows OS. Commands in Linux are case-sensitive.

Linux provides a powerful command-line interface compared to other operating systems such as Windows and MacOS. We can do basic work and advanced work through its terminal. We can do some basic tasks such as creating a file, deleting a file, moving a file,

and more. In addition, we can also perform advanced tasks such as administrative tasks (including package installation, user management), networking tasks (ssh connection), security tasks, and many more.

Linux terminal is a user-friendly terminal as it provides various support options. To open the

Linux terminal, press "CTRL + ALT + T" keys together, and execute a command by pressing the 'ENTER' key.

Write 15 commands in Linux operating system.

1. pwd Command

The pwd command is used to display the location of the current working directory.

Syntax:

pwd

2. mkdir Command

The mkdir command is used to create a new directory under any directory.

Syntax:mkdir <directory name>

3. rmdir Command

The rmdir command is used to delete a directory.

Syntax:

rmdir<directoryname>

4. ls Command

The ls command is used to display a list of content of a directory.

Syntax:

ls

5. cd Command

The cd command is used to change the current directory.

Syntax:

cd<directoryname>

6. touch Command

The touch command is used to create empty files. We can create multiple empty files by executing it once.

Syntax:

touch <file name>

touch<file1><file2>...

7. cat Command

The cat command is a multi-purpose utility in the Linux system. It can be used to create a

file, display content of the file, copy the content of one file to another file, and

more.Syntax:cat [OPTION]...[FILE]..

To create a file, execute it as follows:

cat><file name>

// Enter file content

Press "CTRL+ D" keys to save the file. To display the content of the file, execute it as follows:

cat<filename>

8. rm Command

The rm command is used to remove a file.

Syntax:

`rm <file name>`

9. cp Command

The cp command is used to copy a file or directory.

Syntax:

To copy in the same directory:

`cp<existing file name> <new file name>`

To copy in a different directory:

10. mv Command

The mv command is used to move a file or a directory from one location to another location.

Syntax:

`mv<filename><directorypath>`

11. rename Command

The rename command is used to rename files. It is useful for renaming a large group of files. Syntax: `rename 's/old-name/new-name/' files`

For example, to convert all the text files into pdf files, execute the below command:

`rename 's/\.txt$/\.pdf/' *.txt`

12. head Command

The head command is used to display the content of a file. It displays the first 10 lines of a file.

Syntax:

`head<filename>`

13. sort Command

The sort command is used to sort files in alphabetical order.

Syntax:

`sort <filename>`

14. date Command

The date command is used to display date, time, time zone, and more.

Syntax:

`date`

15.cal Command

The `cal` command is used to display the current month's calendar with the current date highlighted.

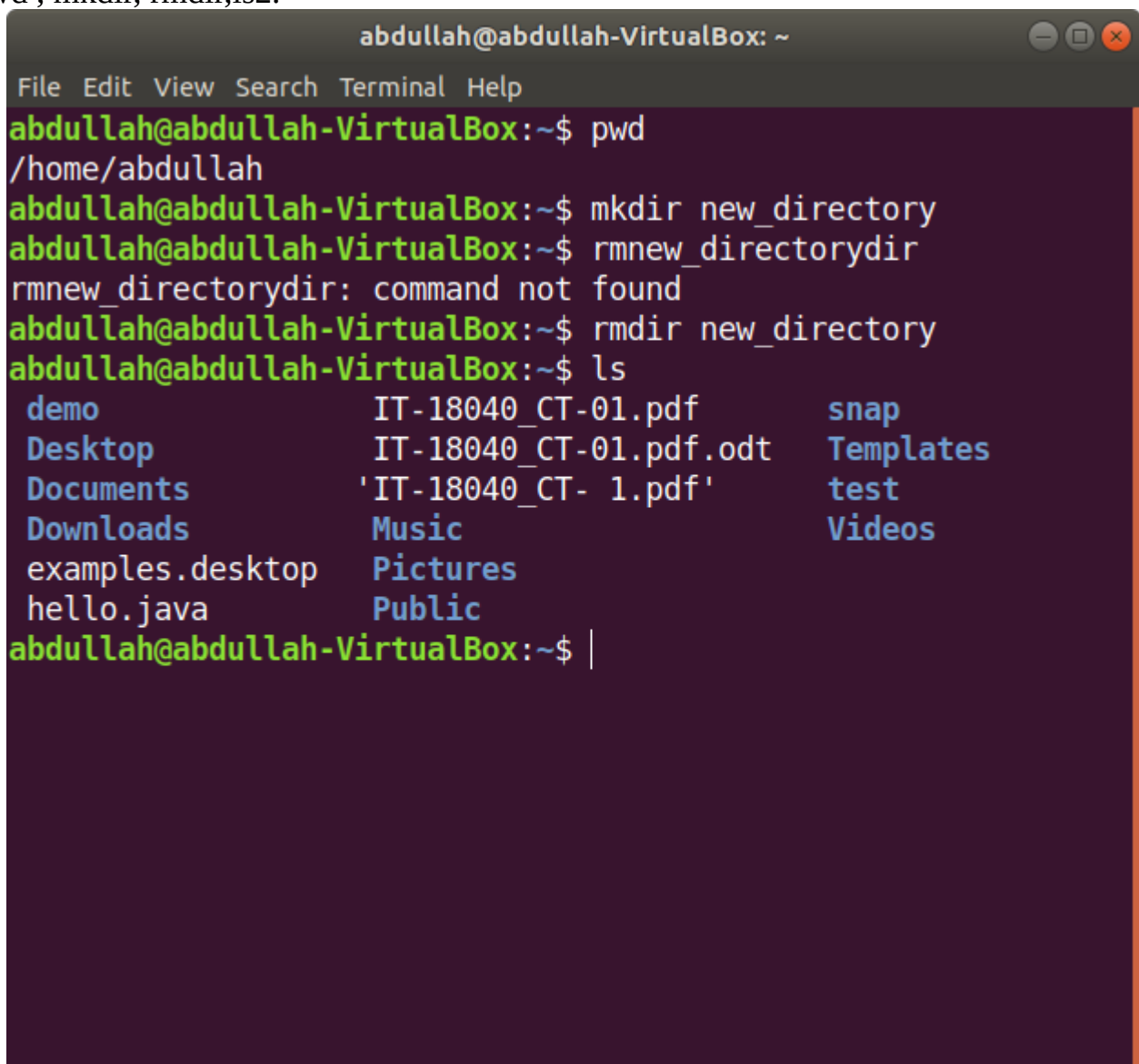
Syntax:

`cal`

Describe the operation of Linux basic command.(Screenshot)

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`pwd` , `mkdir` , `rmdir` , `ls`.



```
abdullah@abdullah-VirtualBox: ~  
File Edit View Search Terminal Help  
abdullah@abdullah-VirtualBox:~$ pwd  
/home/abdullah  
abdullah@abdullah-VirtualBox:~$ mkdir new_directory  
abdullah@abdullah-VirtualBox:~$ rmnew_directorydir  
rmnew_directorydir: command not found  
abdullah@abdullah-VirtualBox:~$ rmdir new_directory  
abdullah@abdullah-VirtualBox:~$ ls  
demo                IT-18040_CT-01.pdf      snap  
Desktop              IT-18040_CT-01.pdf.odt  Templates  
Documents            'IT-18040_CT- 1.pdf'    test  
Downloads            Music                    Videos  
examples.desktop    Pictures  
hello.java           Public  
abdullah@abdullah-VirtualBox:~$ |
```

cd, Touch,ls,cat3.

```
abdullah@abdullah-VirtualBox: ~/Desktop
File Edit View Search Terminal Help
abdullah@abdullah-VirtualBox:~$ rmnew_directorydir
rmnew_directorydir: command not found
abdullah@abdullah-VirtualBox:~$ rmdir new_directory
abdullah@abdullah-VirtualBox:~$ ls
demo                IT-18040_CT-01.pdf      snap
Desktop             IT-18040_CT-01.pdf.odt  Templates
Documents           'IT-18040_CT- 1.pdf'   test
Downloads           Music                   Videos
examples.desktop    Pictures
hello.java          Public
abdullah@abdullah-VirtualBox:~$ cd Desktop
abdullah@abdullah-VirtualBox:~/Desktop$ touch Demo.txt
abdullah@abdullah-VirtualBox:~/Desktop$ touch Demo1.txt
abdullah@abdullah-VirtualBox:~/Desktop$ ls
abdullah                'Exam Question'
abdullah_IT_18040_CT_3.pdf  lab_3.odt
Abdullah_IT-18040_lab-3.odt lab_report
Demo1.txt                mamun
Demo.txt                  operatiingSystem
abdullah@abdullah-VirtualBox:~/Desktop$ cat > test.txt
This is a test file .
```

Cd, Mv4.

```
abdullah@abdullah-VirtualBox: ~/Desktop
File Edit View Search Terminal Help
abdullah@abdullah-VirtualBox:~/Desktop$ mkdir test1.txt
abdullah@abdullah-VirtualBox:~/Desktop$ mkdir test2.txt
abdullah@abdullah-VirtualBox:~/Desktop$ ls
abdullah                lab_report
abdullah_IT_18040_CT_3.pdf  mamun
Abdullah_IT-18040_lab-3.odt  operatiingSystem
Demo1.txt                 test1.txt
'Exam Question'           test2.txt
lab_3.odt                 test.txt
abdullah@abdullah-VirtualBox:~/Desktop$ touch demo3.txt
abdullah@abdullah-VirtualBox:~/Desktop$ touch demo4.txt
abdullah@abdullah-VirtualBox:~/Desktop$ touch demo5.txt
abdullah@abdullah-VirtualBox:~/Desktop$ ls
abdullah                lab_3.odt
abdullah_IT_18040_CT_3.pdf  lab_report
Abdullah_IT-18040_lab-3.odt  mamun
Demo1.txt                 operatiingSystem
demo3.txt                 test1.txt
demo4.txt                 test2.txt
demo5.txt                 test.txt
'Exam Question'
abdullah@abdullah-VirtualBox:~/Desktop$ cp demo4.txt demo5.txt
abdullah@abdullah-VirtualBox:~/Desktop$ mv demo3.txt Directory
abdullah@abdullah-VirtualBox:~/Desktop$
```

head, tail, tac, more, less5.

```
abduallah@abduallah-VirtualBox: ~/Desktop
File Edit View Search Terminal Help
abduallah@abduallah-VirtualBox:~/Desktop$ cd Desktop
bash: cd: Desktop: No such file or directory
abduallah@abduallah-VirtualBox:~/Desktop$ ls
abduallah          demo5.txt          mamun
abduallah_IT_18040_CT_3.pdf  Directory          operatingSystem
Abduallah_IT-18040_lab-3.odt 'Exam Question'    test1.txt
Demo1.txt          lab_3.odt          test2.txt
demo4.txt          lab_report         test.txt
abduallah@abduallah-VirtualBox:~/Desktop$ head demo4.txt
abduallah@abduallah-VirtualBox:~/Desktop$ tail demo4.txt
abduallah@abduallah-VirtualBox:~/Desktop$ tac demo4.txt
abduallah@abduallah-VirtualBox:~/Desktop$ more Downloads
more: stat of Downloads failed: No such file or directory
abduallah@abduallah-VirtualBox:~/Desktop$ more lab_report

*** lab_report: directory ***

abduallah@abduallah-VirtualBox:~/Desktop$ less lab_report
lab_report is a directory
abduallah@abduallah-VirtualBox:~/Desktop$ |
```

Sort, Date6.


```
abdullah@abdullah-VirtualBox: ~/Desktop
File Edit View Search Terminal Help
abdullah@abdullah-VirtualBox:~/Desktop$ sort Demo1.txt
my name is abdullah
abdullah@abdullah-VirtualBox:~/Desktop$ date
Fri Sep 11 16:32:39 +06 2020
abdullah@abdullah-VirtualBox:~/Desktop$
```

Cal

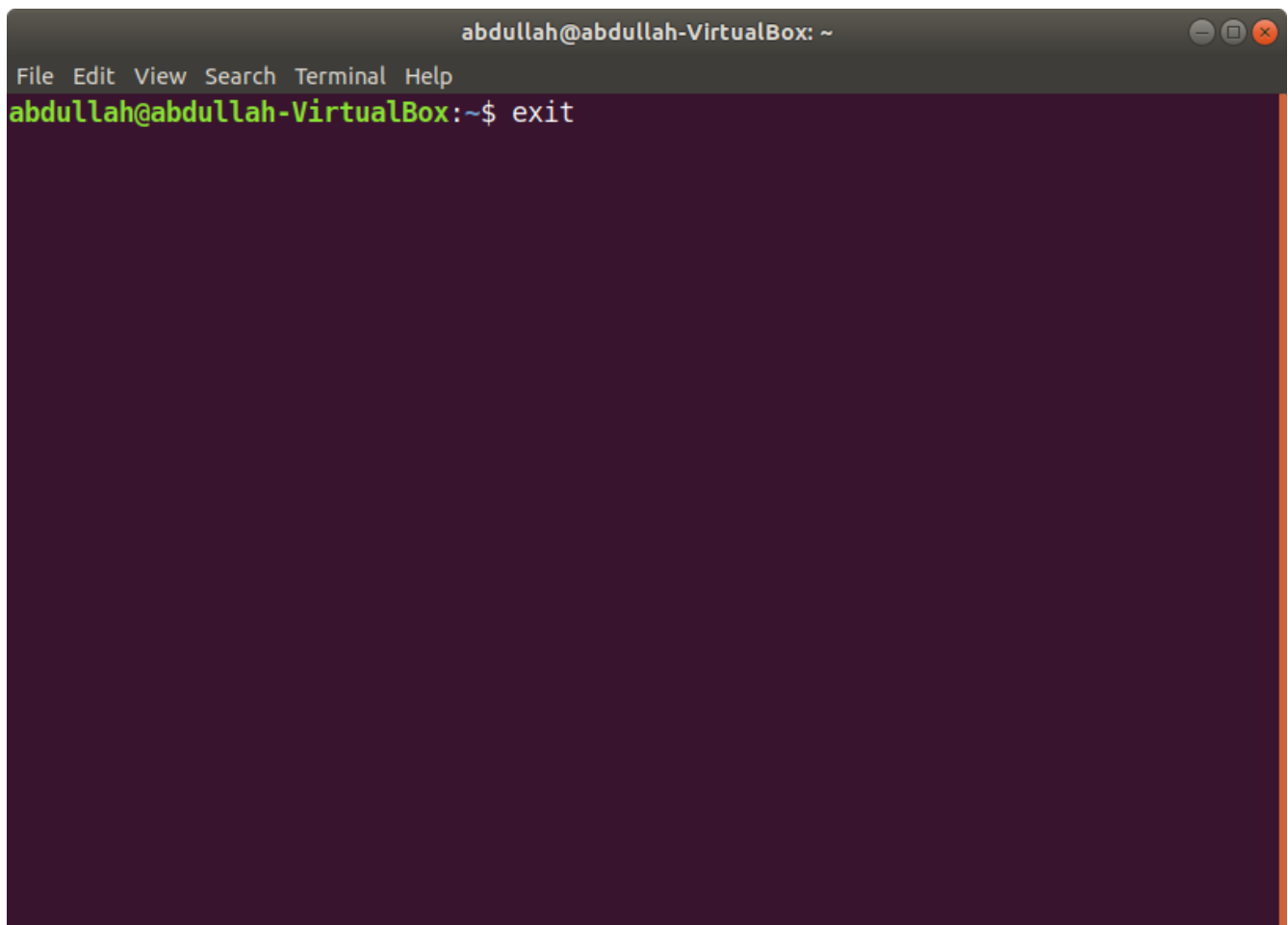
```
abdullah@abdullah-VirtualBox: ~/Desktop
File Edit View Search Terminal Help
abdullah@abdullah-VirtualBox:~/Desktop$ cal
    September 2020
Su Mo Tu We Th Fr Sa
                1  2  3  4  5
 6  7  8  9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28 29 30

abdullah@abdullah-VirtualBox:~/Desktop$
```

sleep 4

```
abdullah@abdullah-VirtualBox: ~/Desktop
File Edit View Search Terminal Help
abdullah@abdullah-VirtualBox:~/Desktop$ sleep 4
abdullah@abdullah-VirtualBox:~/Desktop$
```

Exit



```
abdullah@abdullah-VirtualBox: ~
File Edit View Search Terminal Help
abdullah@abdullah-VirtualBox:~$ exit
```

Discussion:

Before we go on to the list of commands, you need to open the command line first. The Linux command line is a text interface to your computer. Often referred to as the shell, terminal, console, prompt or various other names, it can give the appearance of being complex and confusing to use.