

Lab-report no : 02

Name of the lab report: Basic Command of Linux Operating System

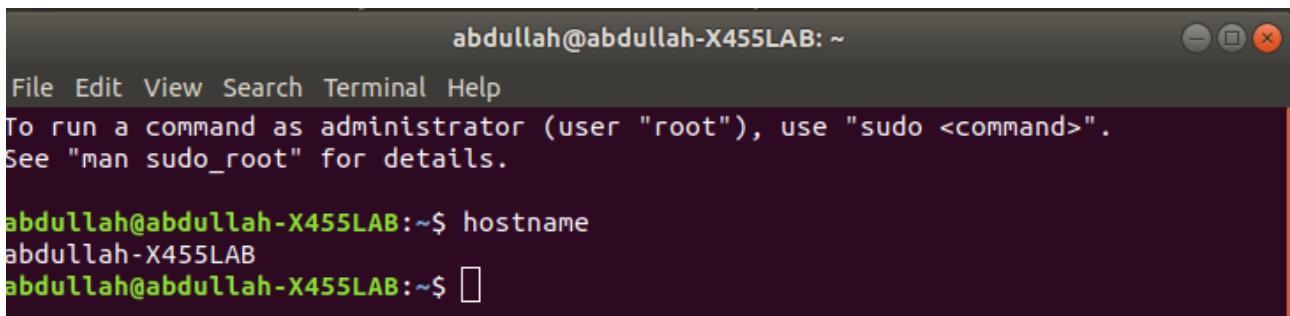
Objectives:

- 1.What is Linux command?
- 2.Write 15 commands in Linux operating system.
- 3.Describe the operation of Linux basic command.(Screenshot)

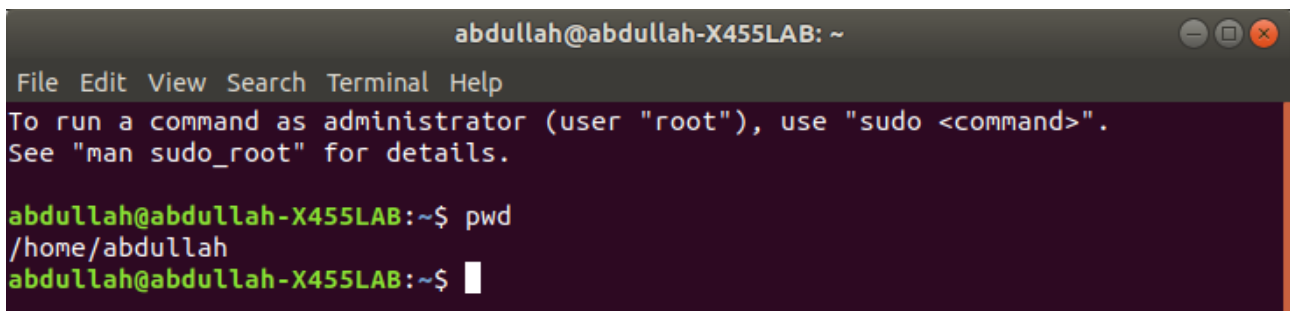
Linux command:

Linux is a Unix-Like operating system. All the Linux/Unix commands are run in the terminal provided by the Linux system. This terminal is just like command prompt of Windows OS. Linux/Unix commands are *case-sensitive*.

1. **hostname** command: the hostname commands shows the system host name.

A screenshot of a Linux terminal window. The title bar reads 'abdullah@abdullah-X455LAB: ~'. The menu bar includes 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The terminal text shows a message: 'To run a command as administrator (user "root"), use "sudo <command>". See "man sudo_root" for details.' Below this, the command 'hostname' is entered at the prompt 'abdullah@abdullah-X455LAB:~\$'. The output is 'abdullah-X455LAB', followed by a new prompt line 'abdullah@abdullah-X455LAB:~\$' with a cursor.

2. **pwd** command: It shows the directory you're currently in.

A screenshot of a Linux terminal window. The title bar reads 'abdullah@abdullah-X455LAB: ~'. The menu bar includes 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The terminal text shows a message: 'To run a command as administrator (user "root"), use "sudo <command>". See "man sudo_root" for details.' Below this, the command 'pwd' is entered at the prompt 'abdullah@abdullah-X455LAB:~\$'. The output is '/home/abdullah', followed by a new prompt line 'abdullah@abdullah-X455LAB:~\$' with a cursor.

3. **ls** command: It shows the contents of a particular directory – both files and directories.

```
abdullah@abdullah-X455LAB: ~
File Edit View Search Terminal Help
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

abdullah@abdullah-X455LAB:~$ ls
Desktop      Downloads    Music        Public       Videos
Documents    examples.desktop  Pictures     Templates
abdullah@abdullah-X455LAB:~$
```

4. **whoami** command: It is basically the concatenation of the strings “who”, “am”, “i”. It displays the username of the current user when this command is invoked.

```
abdullah@abdullah-X455LAB: ~
File Edit View Search Terminal Help
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

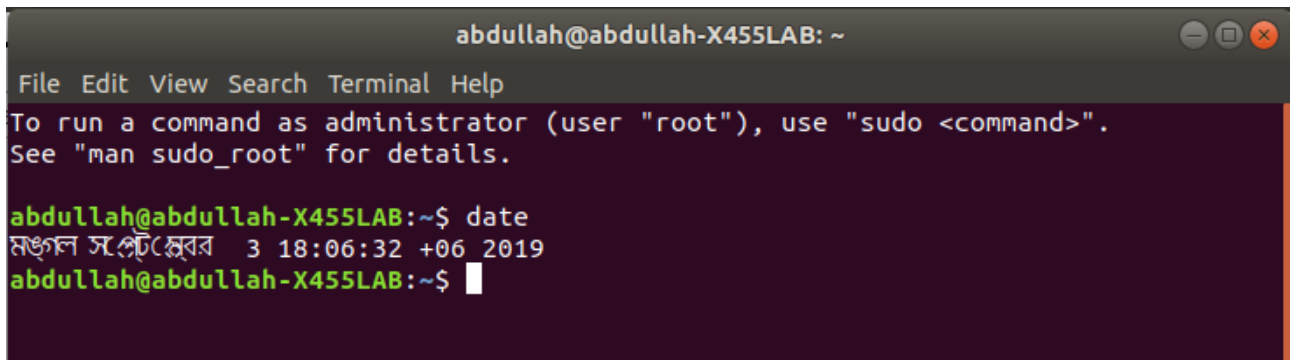
abdullah@abdullah-X455LAB:~$ whoami
abdullah
abdullah@abdullah-X455LAB:~$
```

5. **cal** command: Displays the calendar of the current month.

```
abdullah@abdullah-X455LAB: ~
File Edit View Search Terminal Help
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

abdullah@abdullah-X455LAB:~$ cal
সেপ্টেম্বর ২০১৯
রব সোম বু বৃ শুক্র বৃ শুক্র শুক্র শন
 ১ ২ ৩ ৪ ৫ ৬ ৭
 ৮ ৯ ১০ ১১ ১২ ১৩ ১৪
১৫ ১৬ ১৭ ১৮ ১৯ ২০ ২১
২২ ২৩ ২৪ ২৫ ২৬ ২৭ ২৮
২৯ ৩০
abdullah@abdullah-X455LAB:~$
```

6. **date** command: Displays current time and date.

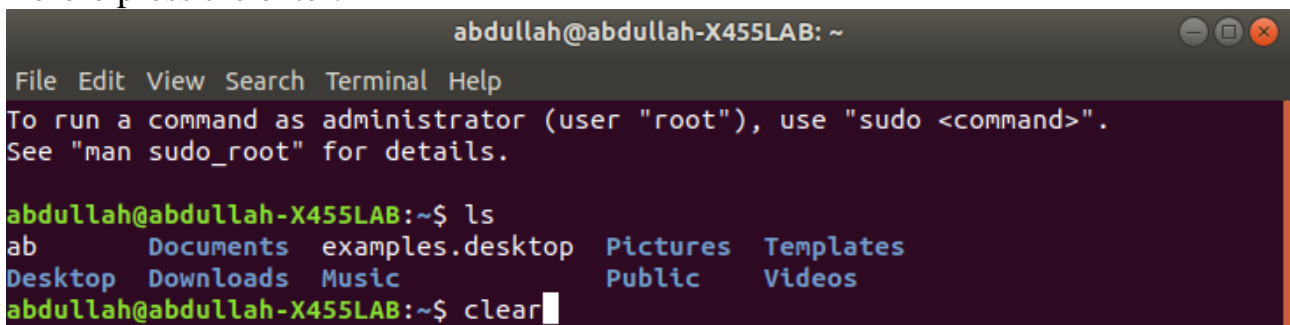
A terminal window titled 'abdullah@abdullah-X455LAB: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). It contains a message: 'To run a command as administrator (user "root"), use "sudo <command>". See "man sudo_root" for details.' Below this, the command 'date' has been executed, showing the output: 'মঙ্গল সপ্তেম্বর 3 18:06:32 +06 2019'. The prompt is now 'abdullah@abdullah-X455LAB:~\$' with a cursor.

```
abdullah@abdullah-X455LAB: ~
File Edit View Search Terminal Help
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

abdullah@abdullah-X455LAB:~$ date
মঙ্গল সপ্তেম্বর 3 18:06:32 +06 2019
abdullah@abdullah-X455LAB:~$
```

7. **clear** command: this command clear the screen.

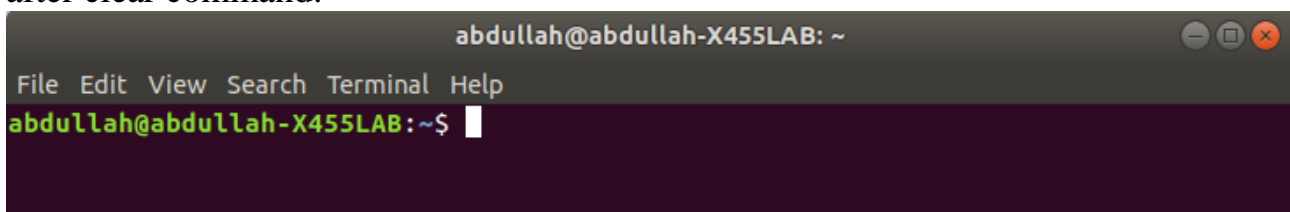
Before press the enter:

A terminal window titled 'abdullah@abdullah-X455LAB: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). It contains the same message as the previous screenshot. Below this, the command 'ls' has been executed, showing the output: 'ab Desktop Downloads Music Pictures Public Templates Videos'. The prompt is now 'abdullah@abdullah-X455LAB:~\$' with a cursor, and the word 'clear' is being typed.

```
abdullah@abdullah-X455LAB: ~
File Edit View Search Terminal Help
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

abdullah@abdullah-X455LAB:~$ ls
ab      Documents  examples.desktop  Pictures  Templates
Desktop Downloads  Music             Public    Videos
abdullah@abdullah-X455LAB:~$ clear
```

after clear command:

A terminal window titled 'abdullah@abdullah-X455LAB: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). It contains the same message as the previous screenshots. The prompt is now 'abdullah@abdullah-X455LAB:~\$' with a cursor, and the screen is clear of previous output.

```
abdullah@abdullah-X455LAB: ~
File Edit View Search Terminal Help
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

abdullah@abdullah-X455LAB:~$
```

8. **cd** command: Change to directory . Here after changing directory I go to Documents directory.

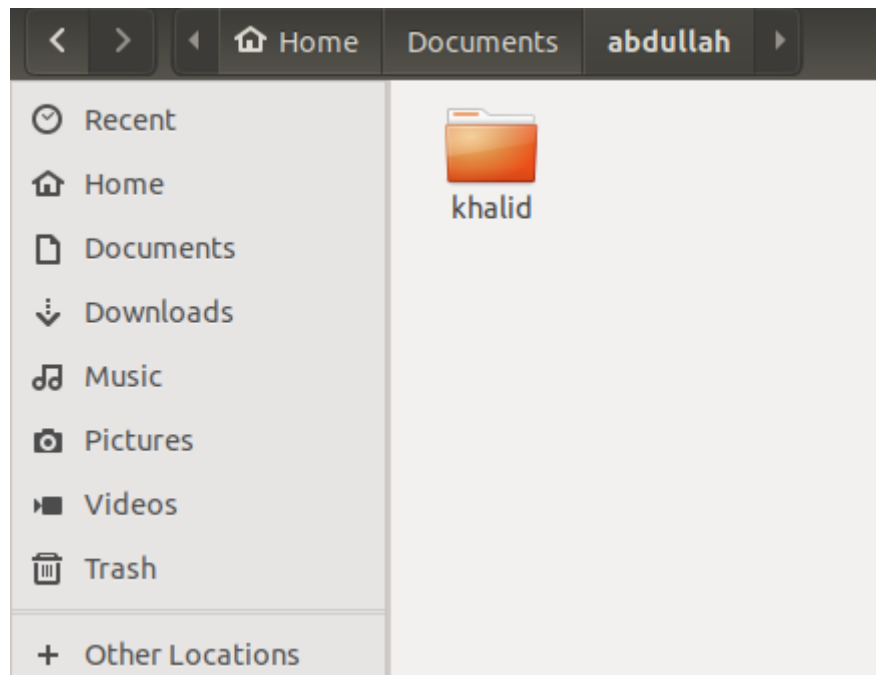
```
abdullah@abdullah-X455LAB: ~/Documents
File Edit View Search Terminal Help
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

abdullah@abdullah-X455LAB:~$ pwd
/home/abdullah
abdullah@abdullah-X455LAB:~$ ls
ab      Documents  examples.desktop  Pictures  Templates
Desktop Downloads  Music             Public    Videos
abdullah@abdullah-X455LAB:~$ cd Documents
abdullah@abdullah-X455LAB:~/Documents$ ls
lab-report -02.odt
Screenshot from 2019-09-03 17-36-41.png
Screenshot from 2019-09-03 17-40-12.png
Screenshot from 2019-09-03 17-45-13.png
Screenshot from 2019-09-03 17-46-23.png
Screenshot from 2019-09-03 17-56-50.png
Screenshot from 2019-09-03 18-06-54.png
Screenshot from 2019-09-03 18-10-26.png
Screenshot from 2019-09-03 18-10-48.png
abdullah@abdullah-X455LAB:~/Documents$ pwd
/home/abdullah/Documents
abdullah@abdullah-X455LAB:~/Documents$
```

9. **mkdir** command : mkdir command in Linux allows the user to create directories. Here I create the khalid directory.

```
abdullah@abdullah-X455LAB: ~/Documents/abdullah
File Edit View Search Terminal Help
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

abdullah@abdullah-X455LAB:~$ pwd
/home/abdullah
abdullah@abdullah-X455LAB:~$ cd Documents
abdullah@abdullah-X455LAB:~/Documents$ mkdir abdullah
abdullah@abdullah-X455LAB:~/Documents$ cd abdullah
abdullah@abdullah-X455LAB:~/Documents/abdullah$ ls
abdullah@abdullah-X455LAB:~/Documents/abdullah$ mkdir khalid
abdullah@abdullah-X455LAB:~/Documents/abdullah$ ls
khalid
abdullah@abdullah-X455LAB:~/Documents/abdullah$
```



10. **rmdir** command: rmdir command is used remove empty directories from the filesystem in Linux. The rmdir command removes each and every directory specified in the command line only if these directories are empty . Here I first create a directory hello and then I remove that file by using rmdir.

```
abdullah@abdullah-X455LAB: ~/Documents
File Edit View Search Terminal Help
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

abdullah@abdullah-X455LAB:~$ ls
Desktop  Downloads  Music  Public  Videos
Documents examples.desktop Pictures Templates
abdullah@abdullah-X455LAB:~$ cd Documents
abdullah@abdullah-X455LAB:~/Documents$ ls
abdullah lab-report -02.odt
abdullah@abdullah-X455LAB:~/Documents$ mkdir hello
abdullah@abdullah-X455LAB:~/Documents$ ls
abdullah hello lab-report -02.odt
abdullah@abdullah-X455LAB:~/Documents$ rmdir hello
abdullah@abdullah-X455LAB:~/Documents$ ls
abdullah lab-report -02.odt
abdullah@abdullah-X455LAB:~/Documents$
```

11.**touch** command: The touch command is used to create a file. It can be anything, from an empty txt file to an empty zip file. Here I create a new.text file using touch command.

```
abdullah@abdullah-X455LAB: ~/Documents
File Edit View Search Terminal Help
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

abdullah@abdullah-X455LAB:~$ ls
Desktop    Downloads      Music    Public    Videos
Documents  examples.desktop  Pictures  Templates
abdullah@abdullah-X455LAB:~$ cd Documents
abdullah@abdullah-X455LAB:~/Documents$ ls
abdullah  lab-report -02.odt  Screenshot from 2019-09-03 21-38-41.png
abdullah@abdullah-X455LAB:~/Documents$ touch new.text
abdullah@abdullah-X455LAB:~/Documents$ ls
abdullah  lab-report -02.odt  new.text  Screenshot from 2019-09-03 21-38-41.png
abdullah@abdullah-X455LAB:~/Documents$
```

12. **uname** command: `uname` is used to show the information about the system running. Using the command “**uname -a**” prints most of the information about the system. This prints the kernel release date, version, processor type, etc.

```
abdullah@abdullah-X455LAB: ~
File Edit View Search Terminal Help
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

abdullah@abdullah-X455LAB:~$ uname -a
Linux abdullah-X455LAB 4.13.0-16-generic #19-Ubuntu SMP Wed Oct 11 18:35:14 UTC
2017 x86_64 x86_64 x86_64 GNU/Linux
abdullah@abdullah-X455LAB:~$
```

13. **mv** command: the `mv` command is used to rename a file. Here i rename the **new.text** file into **hello.text** file.

```
abdullah@abdullah-X455LAB: ~/Documents
File Edit View Search Terminal Help
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

abdullah@abdullah-X455LAB:~$ ls
Desktop    Downloads      Music    Public    Videos
Documents  examples.desktop  Pictures  Templates
abdullah@abdullah-X455LAB:~$ cd Documents
abdullah@abdullah-X455LAB:~/Documents$ ls
abdullah  Screenshot from 2019-09-03 21-38-41.png
lab-report -02.odt  Screenshot from 2019-09-03 21-45-33.png
new.text   Screenshot from 2019-09-03 21-50-36.png
abdullah@abdullah-X455LAB:~/Documents$ mv new.text hello.text
abdullah@abdullah-X455LAB:~/Documents$ ls
abdullah  Screenshot from 2019-09-03 21-38-41.png
hello.text  Screenshot from 2019-09-03 21-45-33.png
lab-report -02.odt  Screenshot from 2019-09-03 21-50-36.png
abdullah@abdullah-X455LAB:~/Documents$
```

14. **locate** command: The **locate** command is used to locate a file in a Linux system, just like the search command in Windows. we can use this command when we don't know where a file is saved or the actual name of the file.

```
abdullah@abdullah-X455LAB: ~
File Edit View Search Terminal Help
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

abdullah@abdullah-X455LAB:~$ locate hello.txt
/usr/share/doc/syslinux-common/asciidoc/hello.txt
abdullah@abdullah-X455LAB:~$
```

15. **df** command:

This command is used to check disk space usage on a linux system. The most common usage is like below, used along with the **-h** flag.

```
abdullah@abdullah-X455LAB: ~
File Edit View Search Terminal Help
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

abdullah@abdullah-X455LAB:~$ df -h
Filesystem      Size  Used Avail Use% Mounted on
udev            1.9G   0    1.9G   0% /dev
tmpfs           385M  12M  374M   4% /run
/dev/sda11       28G   6.7G   20G  26% /
tmpfs           1.9G   32M   1.9G   2% /dev/shm
tmpfs           5.0M   4.0K   5.0M   1% /run/lock
tmpfs           1.9G   0    1.9G   0% /sys/fs/cgroup
/dev/sda3        96M   29M   68M  30% /boot/efi
tmpfs           385M   16K   385M   1% /run/user/121
tmpfs           385M   3.1M   382M   1% /run/user/1000
abdullah@abdullah-X455LAB:~$
```