

Networking & System Administration Lab

Assignment-1

1. Basic Linux Commands Explain Linux commands pwd, history, man, ls, cd, mkdir, rmdir, touch, rm, cat with Examples

Pwd

The pwd command is used to find out the path of the current working directory (folder) you're in. The command will return an absolute (full) path, which is basically a path of all the directories that starts with a forward slash (/).

```
ashish@ashish-VirtualBox:~$ pwd
/home/ashish
```

History

History command is particularly useful if you want to review the commands you have entered before.

```
ashish@ashish-VirtualBox:~$ history
 1  cd
 2  cd..
 3  ls
 4  cd Desktop
 5  cd
 6  exit
 7  pwd
 8  history
 9  cd
10  clear
11  history
12  clear
13  pwd
14  history
```

Man

Man command in Linux is used to display the user manual of any command that we can run on the terminal. It provides a detailed view of the command.

```
ashish@ashish-VirtualBox:~/Desktop$ man touch
```

```
TOUCH(1)                                User Commands                                TOUCH(1)

NAME
    touch - change file timestamps

SYNOPSIS
    touch [OPTION]... FILE...

DESCRIPTION
    Update the access and modification times of each FILE to the current
    time.

    A FILE argument that does not exist is created empty, unless -c or -h
    is supplied.

    A FILE argument string of - is handled specially and causes touch to
    change the times of the file associated with standard output.

    Mandatory arguments to long options are mandatory for short options
    too.

    -a      change only the access time

    -c, --no-create
            do not create any files

    -d, --date=STRING
            parse STRING and use it instead of current time
Manual page touch(1) line 1 (press h for help or q to quit)
```

Cd

Linux cd command is used to change the current working directory (i.e., in which the current user is working). The "cd" stands for 'change directory'.

Ls

The ls command is used to view the contents of a directory. By default, this command will display the contents of your current working directory.

```
ashish@ashish-VirtualBox:~/Documents/cn_lab$ cd lab
ashish@ashish-VirtualBox:~/Documents/cn_lab/lab$ ls
lab1
```

Mkdir

mkdir command in Linux allows the user to create directories

```
ashish@ashish-VirtualBox:~/Documents$ mkdir cn_lab
ashish@ashish-VirtualBox:~/Documents$ ls
cn_lab
```

Rmdir

rmdir command is used to 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.

```
ashish@ashish-VirtualBox:~/Documents/cn_lab/lab$ rmdir lab1
ashish@ashish-VirtualBox:~/Documents/cn_lab/lab$ ls
```

Touch

The touch command allows you to create a blank new file through the Linux command line.

```
ashish@ashish-VirtualBox:~$ touch index.html
```



index.html

Rm

The rm command is used to delete directories and the contents within them. If you only want to delete the directory

```
ashish@ashish-VirtualBox:~$ rm index.html
```

Cat

cat (short for concatenate) is one of the most frequently used commands in Linux. It is used to list the contents of a file on the standard output stdout .

```
ashish@ashish-VirtualBox:~/Documents/cn_lab$ cat l2
ashish
hello
```

cat > filename creates a new file

```
ashish@ashish-VirtualBox:~/Documents/cn_lab$ cat >l3
good
cn lab
^C
```

cat filename1 filename2>filename3 joins two files (1 and 2) and stores the output of them in a new file (3)

```
ashish@ashish-VirtualBox:~/Documents/cn_lab$ cat l2 l3 >l4
ashish@ashish-VirtualBox:~/Documents/cn_lab$ cat l4
ashish
hello
good
cn lab
happy
```

to convert a file to upper or lower case use

```
ashish@ashish-VirtualBox:~/Documents/cn_lab$ cat l4 |tr a-z A-Z >output.txt
ashish@ashish-VirtualBox:~/Documents/cn_lab$ ls output.txt
output.txt
ashish@ashish-VirtualBox:~/Documents/cn_lab$ cat output.txt
ASHISH
HELLO
GOOD
CN LAB
HAPPY
```