

National Textile University

Department of Computer Science

Subject:
Operating System
Submitted to:
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Submitted by:
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Reg. number:
23-NTU-CS-FL-1132
Semester: 5 th - A

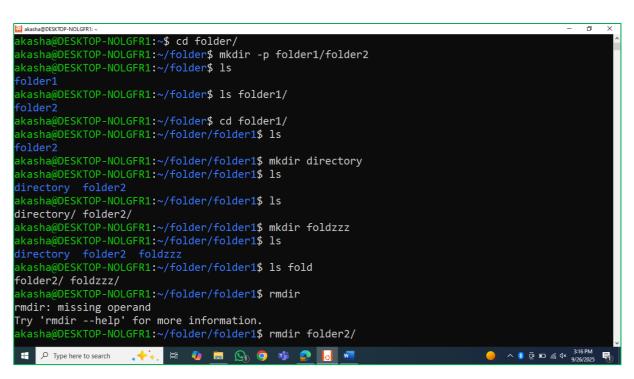
LAB_02

Topic: Learning Linux Basic Commands:

Part_01: Making and removing folders(directories) & files:

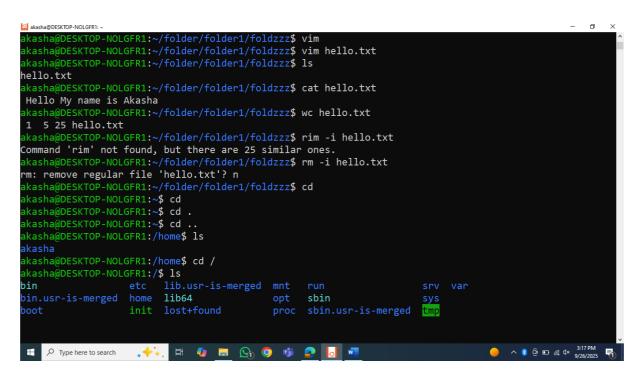
- i. **Pwd** (tells current path)
- ii. Ls (shows the list of files in a directory)
- iii. Touch file.txt (create new empty file)
- iv. Echo "content" > file name (create file with data if doesn't exist)
- v. Cat file name (display file's data)

```
kasha@DESKTOP-NOLGFR1:~$ pwd
/home/akasha
akasha@DESKTOP-NOLGFR1:~$ ls
Operating-System-1132
akasha@DESKTOP-NOLGFR1:~$ touch file.txt
akasha@DESKTOP-NOLGFR1:~$ ls
Operating-System-1132 file.txt
akasha@DESKTOP-NOLGFR1:~$ ls -l
total 4
drwxr-xr-x 7 akasha akasha 4096 Sep 26 14:09 Operating-System-1132
-rw-r--r-- 1 akasha akasha 0 Sep 26 14:31 file.txt
akasha@DESKTOP-NOLGFR1:~$ echo "hello"
hello
akasha@DESKTOP-NOLGFR1:~$ echo
akasha@DESKTOP-NOLGFR1:~$ echo "hello" > hello.txt
akasha@DESKTOP-NOLGFR1:~$ ls
Operating-System-1132 file.txt hello.txt
akasha@DESKTOP-NOLGFR1:~$ cat hello.txt
hello
akasha@DESKTOP-NOLGFR1:~$ mkdir folder
akasha@DESKTOP-NOLGFR1:~$ ls
Operating-System-1132 file.txt folder hello.txt
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- vi. Mkdir folder name (create new folder)
- vii. Rmdir folder name/ (remove the folder)
- viii. Cd folder name/ (navigate to the typed folder)
- ix. Vim file_name (text editor like notepad)
- x. Rm -i/-f folder name (-I for confirmation -f for forcefully deletion)

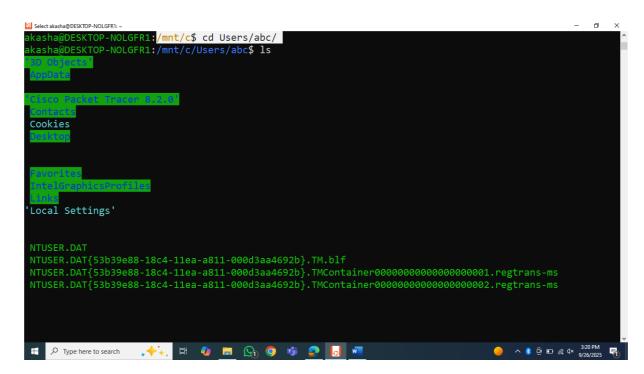
```
akasha@DESKTOP-NOLGFR1:~/folder/folder1$ rmdir folder2/
akasha@DESKTOP-NOLGFR1:~/folder/folder1$ ls
directory foldzzz
akasha@DESKTOP-NOLGFR1:~/folder/folder1$ rm -r directory/
akasha@DESKTOP-NOLGFR1:~/folder/folder1$ cd
akasha@DESKTOP-NOLGFR1:~$ mkdir RecycleBin
akasha@DESKTOP-NOLGFR1:~$ cd folder/
akasha@DESKTOP-NOLGFR1:~/folder$ ls
folder1
akasha@DESKTOP-NOLGFR1:~/folder$ cd folder1/
akasha@DESKTOP-NOLGFR1:~/folder/folder1$ ls
akasha@DESKTOP-NOLGFR1:~/folder/folder1$ cd foldzzz/
akasha@DESKTOP-NOLGFR1:~/folder/folder1/foldzzz$ ls
akasha@DESKTOP-NOLGFR1:~/folder/folder1/foldzzz$ vim hello.txt
akasha@DESKTOP-NOLGFR1:~/folder/folder1/foldzzz$ ls
hello.txt
akasha@DESKTOP-NOLGFR1:~/folder/folder1/foldzzz$ cat hello.txt
Hello my name is Akasha
akasha@DESKTOP-NOLGFR1:~/folder/folder1/foldzzz$ wc hello.txt
1 5 24 hello.txt
akasha@DESKTOP-NOLGFR1:~/folder/folder1/foldzzz$ rm hello.txt
akasha@DESKTOP-NOLGFR1:~/folder/folder1/foldzzz$ vim
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- xi. Mnt (used to access Windows drives)
- xii. Cd Users/abc/ (absolute path access)

```
    akasha@DESKTOP-NOLGFR1: ~
    akasha@DESKTOP-NOLGFR1:/$ cd

                                                                                                                           П
 akasha@DESKTOP-NOLGFR1:~$ ls
 Operating-System-1132 RecycleBin file.txt folder hello.txt
 akasha@DESKTOP-NOLGFR1:~$ cd /
akasha@DESKTOP-NOLGFR1:/$ ls
                        etc lib.usr-is-merged mnt
bin.usr-is-merged home lib64
boot init lost+found
dev lib media
                                                                   sbin
                                                                  sbin.usr-is-merged
                                                          root snap
 akasha@DESKTOP-NOLGFR1:/$ cd mnt/
 akasha@DESKTOP-NOLGFR1:/mnt$ ls
wsl wslg
akasha@DESKTOP-NOLGFR1:/mnt$ cd c
akasha@DESKTOP-NOLGFR1:/mnt/c$ ls
ls: cannot access 'hiberfil.sys': Permission denied
ls: cannot access 'swapfile.sys': Permission denied
 $WINRE BACKUP PARTITION.MARKER'
                                             'Program Files'
                                                                                     hiberfil.sys
 $WinREAgent'
 'Documents and Settings'
                                              Recovery
                                                                                      swapfile.sys
 akasha@DESKTOP-NOLGFR1:/mnt/c$ cd Users/abc/
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```



Cd .ssh (ssh file for ssh keys)

```
NetHood
PrintHood
Recent
SendTo
Start Menu'
Templates
kasha@DESKTOP-NOLGFR1:/mnt/c/Users/abc$ cd Downloads/
kasha@DESKTOP-NOLGFR1:/mnt/c/Users/abc/Downloads$ ls
                                      TeamsSetupx64_s_8DC4442ABDE592A-1-0_c_w_.exe
Ubuntu_Terminal_CheatSheet.pdf
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                                                                        ● ^ ⑧ ⓒ ☞ @ 4× 3:20 PM
Type here to search
Select akasha@DESKTOP-NOLGFR1:
 OfficeSetup.exe
kasha@DESKTOP-NOLGFR1:/mnt/c/Users/abc/Downloads$ cd
kasha@DESKTOP-NOLGFR1:~$ cd /
```

```
kasha@DESKTOP-NOLGFR1:/$ ls
bin etc lib.usr-is-merged mnt
bin.usr-is-merged home lib64 opt
boot init lost+found proc
dev lib media root
                                                       opt sbin
proc sbin.usr-is-merged
root snap
akasha@DESKTOP-NOLGFR1:/$ cd home/
akasha@DESKTOP-NOLGFR1:/home$ ls
akasha@DESKTOP-NOLGFR1:/home$ cd akasha/
akasha@DESKTOP-NOLGFR1:~$ ls
Operating-System-1132 RecycleBin file.txt folder hello.txt
akasha@DESKTOP-NOLGFR1:~$ ls -a
                                .motd_shown
                                                                    .vscode-server
                                                                                                 hello.txt
                                 .profile
                                                                    Operating-System-1132
.bash_history .gitconfig .ssh Recycleb:
.bash_logout .landscape .sudo_as_admin_successful file.txt
.bashrc .lesshst .viminfo folder
akasha@DESKTOP-NOLGFR1:~$ cd .ssh
kasha@DESKTOP-NOLGFR1:~/.ssh$ ls
Operating-System-1132 id_ed25519
                                           id_ed25519.pub known_hosts known_hosts.old
akasha@DESKTOP-NOLGFR1:~/.ssh$ cd
kasha@DESKTOP-NOLGFR1:~$ ls -al
total 72
                                                                                                       O S O D M 4× 9/26/2025
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- xiv. Man Is (show the manual of the command)
- xv. Ls -help (show the help related to the command)
- xvi. Ls -al (long listing with hidden files)
- xvii. Ls -hl (human readable file size format)

```
SKTOP-NOLGFR1:~$ ls -al
   otal 72
 drwxr-x--- 10 akasha akasha 4096 Sep 26 14:47 .
drwxr-xr-x 3 root root 4096 Sep 18 22:15 ..
-rw------ 1 akasha akasha 2265 Sep 26 14:28 .bash_history
  rw-r--r-- 1 akasha akasha 220 Sep 18 22:15 .bash_logout
-rw-r--r-- 1 akasha akasha 3771 Sep 18 22:15 .bashrc
drwx----- 4 akasha akasha 4096 Sep 22 21:48 .cache
drwx----- 4 akasha akasha 4096 Sep 22 21:48 .cache
drwxr-xr-x 3 akasha akasha 4096 Sep 18 23:13 .dotnet
-rw-r---- 1 akasha akasha 4096 Sep 19 01:21 .gitconfig
drwxr-xr-x 2 akasha akasha 4096 Sep 19 00:10 .landscape
-rw------ 1 akasha akasha 20 Sep 22 21:19 .lesshst
-rw-rw-rr--- 1 akasha akasha 807 Sep 18 22:15 .profile
drwxr-xr-x 3 akasha akasha 4096 Sep 20 14:35 .ssh
-rw-rr---- 1 akasha akasha 4096 Sep 20 14:35 .ssh
-rw-r---- 1 akasha akasha 1193 Sep 26 14:47 .viminfo
drwxr-xr-x 5 akasha akasha 4096 Sep 18 22:16 .sudo_as_admin_success
-rw------ 1 akasha akasha 4096 Sep 18 23:12 .vscode-server
drwxr-xr-x 7 akasha akasha 4096 Sep 26 14:40 RecycleBin
-rw-r---- 1 akasha akasha 4096 Sep 26 14:40 RecycleBin
-rw-r---- 1 akasha akasha 4096 Sep 26 14:31 file.txt
drwxr-xr-x 3 akasha akasha 4096 Sep 26 14:31 file.txt
drwxr-xr-x 3 akasha akasha 6 Sep 26 14:33 hello.txt
akasha@DESKTOP-NOLGFR1:~$ 1s -h1
total 16K
                                                                         0 Sep 18 22:16 .sudo_as_admin_successful
 total 16K
   rwxr-xr-x 7 akasha akasha 4.0K Sep 26 14:09 Operating-System-1132
 drwxr-xr-x 2 akasha akasha 4.0K Sep 26 14:40 RecycleBir
-rw-r--r- 1 akasha akasha 0 Sep 26 14:31 file.txt
drwxr-xr-x 3 akasha akasha 4.0K Sep 26 14:34 folder
-rw-r--r- 1 akasha akasha 6 Sep 26 14:33 hello.txt
                                                        Type here to search
                                                                                                                                                                                                                                                       ● ^ 8 @ □ // 4× 9/26/2025 등
  akasha@DESKTOP-NOLGFR1:~$ man ls
akasha@DESKTOP-NOLGFR1:~$ ls --help
Jsage: ls [OPTION]... [FILE]...
List information about the FILEs (the current directory by default).
Sort entries alphabetically if none of -cftuvSUX nor --sort is specified.
  Mandatory arguments to long options are mandatory for short options too.

-a, --all do not ignore entries starting with .

-A, --almost-all do not list implied . and ..
                                                                      do not list implied . and ..
with -l, print the author of each file
print C-style escapes for nongraphic characters
               --author
                                                                         with -1, scale sizes by SIZE when printing them;
e.g., '--block-size=M'; see SIZE format below
               --block-size=SIZE
                                                                         do not list implied entries ending with \sim with -lt: sort by, and show, ctime (time of last change of file status information); with -l: show ctime and sort by name;
     -B, --ignore-backups
                                                                          otherwise: sort by ctime, newest first
                                                                         list entries by columns color the output WHEN; more info below
               --color[=WHEN]
                                                                         list directories themselves, not their contents generate output designed for Emacs' dired mode list all entries in directory order append indicator (one of */=>@|) to entries WHEN likewise, except do not append '*'
              --directory
     -D, --dired
             --classify[=WHEN]
               --file-type
--format=WORD
                                                                          across -x, commas -m, horizontal -x, long -l, single-column -1, verbose -l, vertical -C
                                                                                                                                                                                                                                                       O S D D C 4× 9/26/2025 S
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- xviii. Uname -a (system information)
- xix. Date (current date)
- **xx.** Which Is (location of commands)
- **xxi.** Type Is (command type information)
- **xxii.** Ls -l (long format)
- xxiii. Sudo chmod 755 file name (change permissions numeric)
- xxiv. Sudo chown user_name: group_name file_name (change ownership if applicable)
- **xxv.** Sudo g-w File_name (remove write permission for the file)
- xxvi. Cp file name (copy file)
- xxvii. Mv file name (move or rename file)

