

Basic Linux Commands

Usefullink-

<https://itworkshopktu2024.blogspot.com/2024/11/familiarization-of-basic-linux-commands.html>

1. Do the following in the order given

a) Create a directory EV2. (mkdir ev4)

b) Navigate to that directory (cd ev4)

c) Create a directory with your roll number

d) Navigate to that

e) Type the following commands and write the resultant directory path(use pwd if required) .

Also pen down your understanding of the result

f)

i. cd DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_55

Go to the folder mentioned after 'cd'

ii. cd - /c/Users/DELL/ev4

Go to previous directory

iii. cd . DELL@DESKTOP-19URV6K MINGW64 ~/ev4

Keeps the user in same directory

iv. cd .. DELL@DESKTOP-19URV6K MINGW64 ~

Go one directory back(parent folder)

v. cd ~ DELL@DESKTOP-19URV6K MINGW64 ~

Go to home directory

vi. cd / DELL@DESKTOP-19URV6K MINGW64 /

Go to root directory

vii. ls -l DELL@DESKTOP-19URV6K MINGW64 /

Shows the long listing format

viii. cd media

bash: cd: media: No such file or directory

DELL@DESKTOP-19URV6K MINGW64 /

Move into the folder named 'media'. Since such a file is not created ,error appeared.

ix. cd

DELL@DESKTOP-19URV6K MINGW64 ~

Takes to home directory

x. pwd /c/Users/DELL

xi. cd media bash: cd: media: No such file or directory

xii. DELL@DESKTOP-19URV6K MINGW64 ~

xiii.

xiv. cd /media bash: cd: /media: No such file or directory

DELL@DESKTOP-19URV6K MINGW64 ~

Moves to the media folder located inside the root directory.

No such file ,therefore error appeared.

xv. ls -l

DELL@DESKTOP-19URV6K MINGW64 ~

Display a detailed list of all the files and folders present .

xvi. ls -al DELL@DESKTOP-19URV6K MINGW64 ~

Shows all files, including hidden ones.

xvii. cd ~/ev4/<ur roll number>

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_55

Go to the folder rollno_55 which is inside ev4, which is inside my home directory.

xviii. mkdir emptydummy

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_55

Create a new directory named 'emptydummy'

xix. mkdir dummy

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_55

Creates a new directory named 'dummy' inside your current working directory.

xx. cd dummy

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_55/dummy

Changes working directory to the folder named 'dummy'.

xxi. touch file1

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_55/dummy

Created a new empty file named 'file1' inside the current working directory('dummy')

xxii. touch file2

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_55dummy

Created a new empty file named 'file1' inside the current working directory('dummy')

xxiii. ls -l

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_55/dummy -rw-r--r-- 1 DELL 197121 0 Feb 9 10:05 file1

-rw-r--r-- 1 DELL 197121 0 Feb 8 11:05 file2

xxiv. rm -i file2

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_55/dummy

Deletes the file named "file2" after asking for confirmation.

xxv. ls -l

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_55/dummy

Displayed all the files.

xxvi. cd .. DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_55

Moves to parent directory('rollno_55')

xxvii. rm emptydummy

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_55

Attempts to remove directory "emptydummy", but results in error since it is used for files.

xxviii. rmdir emptydummy -- only empty dirs removed with rmdir

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_55

xxix. rmdir dummy -- will give an error since not empty

rmdir: failed to remove 'dummy': Directory not empty

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_55

xxx. rm -r dummy

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_55

Delete the directory 'dummy' along with all the files inside it.

2. cat >file1.txt -- You can use cat to create a file and input text directly from the terminal. Type the content 'My first line', and press CTRL+D to save and exit

3. cat >file2.txt -- Type the content 'Hello Second line', and press CTRL+D to save and exit

4.

5. cat > file3.txt -- Write 'Hello line' as input and save the file

6. cat file1.txt file2.txt > file_combined.txt -- > overwrites, >> appends

7. cat file_combined.txt --Need not type the entire filename...Write file_c and press Tab to see how it autocompletes

8. cat file3.txt >> file_combined.txt -- appends

9. cat file_combined.txt

10. grep -i hello file*

11. cp file1.txt ~/ev4

12. mv file_combined.txt combined -- check new file using ls -l

Change permissions → chmod

You can do this in two ways.

Method A: Symbolic mode (easy to read)

Examples

1. Give execute permission to owner: ex: chmod u+x file.sh

2. Remove write permission from group: ex: chmod g-w file.txt

3. Add read permission to everyone: ex: chmod a+r file.txt

4. Set exact permissions:ex: chmod u=rwx,g=rx,o=r myfile

Method B: Numeric (octal) mode (most used)

Permission values for rwx = 421

Examples

1. Owner: rwx, Group: r-x, Others: r-- => chmod 754 file.txt

2. Read/write for owner only: => chmod 600 file.txt

Permissions meaning differ with ref to files and directories-

13. chmod u+x combined

--Grant execute permission to owner. Check the new permission using ls -l combined

14. chmod g-r combined -- Remove read permission from group

15. chmod 777 combined -- giving rwx= 111=7, full permission to all user, group and others

Permission

File

Directory

r

read file

list files (ls)

w

modify file

create/delete files

x

run file

enter directory (cd)

16. sudo useradd alice -- new user created using sudo super user

17. sudo passwd alice -- set new password using passwd

18. sudo userdel alice -- Attempt to delete the user account named alice .

If in a network server, write command can work like a "chat" with someone logged into the same system(server)

The write command sends a real-time message to another user.

Both the sender and receiver must be logged into the same system.

The message is displayed directly on the receiver's terminal

Syntax : write username [tty]

username: The name of the user you want to send the message to.

tty (optional): Specifies the exact terminal session of the user (useful if the user has multiple sessions open).

Ex: write alice

There is also an option for the user to enable/block messaging using mesg y or mesg n