

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
 - i. ***cd -helen@MSI MINGW64 ~***
Go to the folder mentioned after 'cd'
 - ii. ***cd -helen@MSI MINGW64 ~/ev4/28***
Go to previous directory
 - iii. ***cd .helen@MSI MINGW64 ~/ev4/28***
Keeps the user in same directory
 - iv. ***cd ..helen@MSI MINGW64 ~/ev4***
Go one directory back(parent folder)
 - v. ***cd ~helen@MSI MINGW64 ~***
Go to home directory
 - vi. ***cd /helen@MSI MINGW64 /***
Go to root directory
 - vii. ***ls -lhelen@MSI MINGW64 /***
Shows the long listing format
 - viii. ***cd mediahelen@MSI MINGW64 /***
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. ***cdhelen@MSI MINGW64 ~***
DELL@DESKTOP-19URV6K MINGW64 ~ Takes to home directory
 - x. ***pwdhelen@MSI MINGW64 ~***
 - xi. ***cd mediahelen@MSI MINGW64 ~***
 - xii. ***helen@MSI MINGW64 ~***
 - xiii. ***ls -lhelen@MSI MINGW64 ~***
 - xiv. ***ls -alhelen@MSI MINGW64 ~***
Moves to the media folder located inside the root directory. No such file ,therefore error appeared.
 - xv. ***cd ~/ev4/<ur roll number>helen@MSI MINGW64 ~***
 - xvi. ***mkdir emptydummyhelen@MSI MINGW64 ~***
Display a detailed list of all the files and folders present .
 - xvii. ***mkdir dummyhelen@MSI MINGW64 ~***

xviii.

Go to the folder rollno_28 which is inside ev4, which is inside my home directory

xix. `cd dummyhelen@MSI MINGW64 ~/dummy`

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

xx. `touch file1helen@MSI MINGW64 ~/dummy`

Changes working directory to the folder named 'dummy'.

xxi. `touch file2helen@MSI MINGW64 ~/dummy`

`helen@MSI MINGW64 ~/dummy`

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

xxii. `ls -lhelen@MSI MINGW64 ~/dummy`

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

xxiii. `rm -i file2helen@MSI MINGW64 ~/dummy`

xxiv. `ls -lhelen@MSI MINGW64 ~/dummy`

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

xxv. `cd ../helen@MSI MINGW64 ~`

xxvi. `rm emptydummyhelen@MSI MINGW64 ~`

Moves to parent directory(

xxvii. `rmdir emptydummy helen@MSI MINGW64 ~`

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

xxviii. `rmdir dummy helen@MSI MINGW64 ~`

xxix. `rm -r dummyjovan@MSI MINGW64 ~`

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`

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-

	Permission	File	Directory
	r	read file	list files (ls)
	w	modify file	create/delete files
13. <i>chmod u+x combined</i>	x	run file	enter directory (cd)
--Grant execute permission to owner. Check the new permission using <i>ls -l combined</i>			
14. <i>chmod g-r combined</i>	-- Remove read permission from group		
15. <i>chmod 777 combined</i>	-- giving rwx= 111=7, full permission to all user, group and others		
16. <i>sudo useradd alice</i>	-- new user created using sudo super user		
17. <i>sudo passwd alice</i>	-- set new password using passwd		
18. <i>sudo userdel alice</i>			

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***