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_33
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_33

Go to the folder rollno_33 which is inside ev4, which is inside my home directory.

xviii. mkdir emptydummy

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/

rollno_33 Create a new directory named

xix. mkdir dummy 'emptydummy'

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_33

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

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

rollno_33/dummy

Changes working directory to the folder named 'dummy'.

xxi. ***touch file1***

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_33/dummy

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

xxii. ***touch file2***

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_33/dummy

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

xxiii. ls -l

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_33/dummy

-rw-r--r-- 1 DELL 197121 0 Feb 8 11:05 file1

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

-rm -i file2

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_33/dummy

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

xxv. ***ls -l***

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_33/

dummy Displayed all the files.

xxvi. ***cd .. DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_33***

Moves to parent directory('rollno_33')

xxvii. ***rm emptydummy***

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_33

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_33

xxix. ***rmdir dummy*** – will give an error since not empty

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

xxx. ***rm -r dummy***

DELL@DESKTOP-19URV6K MINGW64 ~/ev4/rollno_33
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-

Permission	File	Directory
r	read file	list files (ls)
w	modify file	create/delete files
x	run file	enter directory (cd)

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*

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 delta 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***