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 -***
      Jyothika@JYOTHIKA MINGW64 ~
      Go to directory
      ii. ***cd -***
      /c/Users/jyoth/ev4/35
      Go to previous directory
      iii. ***cd .***
      Jyothika@JYOTHIKA MINGW64 ~/ev4/35
      Stay in the current directory
      iv. ***cd ..***
      Jyothika@JYOTHIKA MINGW64 ~/ev4
      Move to parent directory
      v. ***cd ~***
      Jyothika@JYOTHIKA MINGW64 ~
      Go to home directory of the current user
      vi. ***cd /***
      Jyothika@JYOTHIKA MINGW64 /
      Go to root directory of the system
      vii. ***ls -l***
      Jyothika@JYOTHIKA MINGW64 /
      To list files with detailed information
      viii. ***cd media***
      bash: cd: media: No such file or directory
      Move into the folder named 'media'.since such a file is not created,error appeared
      ix. ***cd***
      Jyothika@JYOTHIKA MINGW64 ~
      Takes to home directory
      x. ***pwd***
      /c/Users/jyoth
      Present working directory
      xi. ***cd media***
      bash: cd: media: No such file or directory
      xii. ***cd /media***
      bash: cd: /media: No such file or directory
      Moves to the media folder located inside the root directory, no such

file, therefore error appeared

xiii. ls -l

Jyothika@JYOTHIKA MINGW64 ~

Display a detailed list of all the files and folders present

xiv. ***ls -al***

Jyothika@JYOTHIKA MINGW64 ~

Shows all files including hidden ones

xv. ***cd ~/ev4/****<ur roll number>*

Jyothika@JYOTHIKA MINGW64 ~/ev4/35

Go to the folder rollno_29 which is inside ev4, which is inside my home directory.

xvi. ***mkdir emptydummy***

Jyothika@JYOTHIKA MINGW64 ~/ev4/35

Create a new directory named 'emptydummy'

xvii. ***mkdir dummy***

Jyothika@JYOTHIKA MINGW64 ~/ev4/35

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

xviii. cd dummy

Jyothika@JYOTHIKA MINGW64 ~/ev4/35/dummy

Changes working directory to the folder named 'dummy'.

xix. ***touch file1***

Jyothika@JYOTHIKA MINGW64 ~/ev4/35/dummy

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

xx. ***touch file2***

Jyothika@JYOTHIKA MINGW64 ~/ev4/35/dummy

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

xxi. ***ls -l***

total 0

-rw-r--r-- 1 Jyothika 197121 0 Feb 9 00:08 file1

-rw-r--r-- 1 Jyothika 197121 0 Feb 9 00:09 file2

xxii. ***rm -i file2***

Jyothika@JYOTHIKA MINGW64 ~/ev4/35/dummy

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

xxiii. ***ls -l***

total 0

-rw-r--r-- 1 Jyothika 197121 0 Feb 9 00:08 file1

Displayed all the files.

xxiv. cd ..

Jyothika@JYOTHIKA MINGW64 ~/ev4/35
Moves to parent directory('rollno_35')

xxv. ***rm emptydummy***
rm: cannot remove 'emptydummy': Is a directory
Attempts to remove directory "emptydummy", but results in error since it is used for files.

xxvi. ***rmdir emptydummy***
Jyothika@JYOTHIKA MINGW64 ~/ev4/35
– only empty dirs removed with rmdir

xxvii. ***rmdir dummy***
rmdir: failed to remove 'dummy': Directory not empty
– will give an error since not empty

xxviii. ***rm -r dummy***
Jyothika@JYOTHIKA MINGW64 ~/ev4/35
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
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***

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***