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 EV4. (***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 Jonnathan@DESKTOP MINGW64 ~***
      go to directory
      ii. ***cd - /c/Users/Jonnathan/EV4/32***
      go to previous directory
      iii. ***cd . Jonnathan@DESKTOP MINGW64 ~/EV4/32***
      stay in current directory
      iv. ***cd .. Jonnathan@DESKTOP MINGW64 ~/EV4***
      move to parent directory
      v. ***cd ~ Jonnathan@DESKTOP MINGW64 ~***
      go to home directory of current user
      vi. ***cd / Jonnathan@DESKTOP MINGW64 /***
      go to root directoryofsystem
      vii. ***ls -l Jonnathan@DESKTOP MINGW64 ~***
      to list files with detailed information
      viii. ***cd media bash: cd: media: No such file or directory move into the folder named media***
      ix. ***cd Jonnathan@DESKTOP MINGW64 ~***
      takes to home directory
      x. ***pwd /c/Users/Jonnathan***
      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 root directory ls -l
      xiii. ***Jonnathan@DESKTOP MINGW64 ~***
      to list fails with detailed information
      xiv. ***ls -al Jonnathan@DESKTOP MINGW64 ~***
      showing all files including hidden ones
      xv. ***cd ~/ev4/****<ur roll number> Jonnathan@DESKTOP MINGW64 ~/EV4/33*
      go to the folder rollno32 which is inside EV4
      xvi. ***mkdir emptydummy Jonnathan@DESKTOP MINGW64 ~/dummy***
      create new dictionary named emptydummy
      xvii. ***mkdir dummy1 Jonnathan@DESKTOP MINGW64 ~/dummy create new dictionary dummy1***

xviii. ***cd dummy Jonnathan@DESKTOP MINGW64 ~/dummy/dummy***
changes working directory to folder named dummy

xix. ***touch file1 Jonnathan@DESKTOP MINGW64 ~/dummy/dummy***
create a new file named file1 inside the current working directory

xx. ***touch file2 Jonnathan@DESKTOP MINGW64 ~/dummy/dummy***
Created a new empty file named 'file1' inside the current working directory

xxi. ***ls -l -rw-r--r-- 1 Jonnathan 197523 0 Feb 09 00:03 file1***
-rw-r--r-- 1 Jonnathan 197523 0 Feb 09 00:03 file2

xxii. ***rm -i file2 rm -i file2 rm: remove regular empty file 'file2'? y***
Deletes the file named "file2" after asking for confirmation.

xxiii. ***ls -l Jonnathan@DESKTOP -rw-r--r-- 1 Jonnathan 197523 0 Feb 9 00:03 file1***
Displayed all the files

xxiv. ***cd .. Jonnathan@DESKTOP MINGW64 ~/dummy***
Moves to parent directory('rollno_33')

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 Jonnathan@DESKTOP MINGW64 ~/dummy***
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 Jonnathan@DESKTOP MINGW64 ~/dummy***
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. 6. 7.
cat > file3.txt -- Write '***Hello line***' as input and save the file
cat file1.txt file2.txt > file_combined.txt -- > overwrites, >> appends
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	runfile	enter directory (cd)

13. ***chmod u+x combined***
-- Grant execute permission to owner
Check the new permission using ***ls -l combined***

14. 15. ***chmod g-r combined*** -- Remove read permission from group
others ***chmod 777 combined*** *-- giving rwx= 111=7, full permission to all user, group and*

16.

17.
18. ***sudo useradd alice*** *-- new user created using sudo super user*
sudo passwd alice *-- set new password using passwd*
sudo userdel alice

Ifin 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 messageis displayed directlyon the receiver's terminal

Syntax: write username [tty]

username:The nameof the user you want to send the message to.
tty(optional): Specifies the exact terminal session oftheuser(usefuliftheuserhasmultiplesessions open).

Ex: ***write alice***

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