Linux

What is Linux?

An open-source operating system.

Methods:

2. Virtual Box

Commands:

1. `pwd` - displays current directory location

2. `cd (filename)/` - navigate to a directory

3. `cd..` - return to previous directory

4. `ls` - list of directories

5. `(ls -al)` - data/files in the form of list

6. `cd/usr/share/backgrounds/` - navigate to a specific location

7. `file (file name)` - displays info about the particular file

8. `mkdir (folder name)` - creates a directory at a location

9. `rm -r (folder name)` - deletes a directory

10. `cat (name).txt` - creates a text file

11. `cp (file name).txt /home/ubuntu/Documents(new file name).txt` - makes a copy of the file at a specified location

12. `mv (file name).txt (location)(new file name).txt` - renames a file

13. `df` - drives and their disk spaces

14. `du -hs (location of directory)/*` - more detailed info of a directory

15. `find (location) -name (name of the file)*` - searches for a particular file in the directory

16. `echo (text)` `>` `(file name)` - creates a new file and saves text (Redirecting command)

17. ' | ' - pipe operator; ls -al | grep "Videos"

18. Environment Variables - `env` , `$(name), echo/cd $HOME` - navigate in the file system

19. `head -n 3 (file location)` - outputs first 3 lines of a large file

20. `tail -n 18 (file location)` - outputs bottom lines of a large file

21. `cat (file name)` - output the file contents

22. `sort (file name)` - prints content in sorted order

23. `sort -r (file name)` - content in reverse order

24. `nano (file name)` - text editor; ctrl+O for saving, ctrl+X for quitting

25. `emacs (file name)` - text editor, ctrl+S for saving

26. `ps -A` - all the running process in the linus computer will be displayed

27. `htop` - interface of running tasks, kills background running applications, change priority

28. `kill -9 (application id)` - kills the running application, find list by ps

29. `ifconfig` -a - you can see on the devices connect on your machine, wire/wireless

30. `ping (website name)` - to check the connectivity with a website

31. `sudo apt install wicd-curses` - install wireless connectivity program

    `wicd-curses` - to start a program

32. `sudo apt -get install (software name)` - install with super authority

33. `sudo apt -get remove (software name)` - remove application with super authority

34. `zip (zip filename) (files 1,2,..,n)` - create a zip file

35. `unzip (zip filename)` unzips files

36. `tar cvf (tar file name) (files 1,2,..,n)` - create a tar file

37. `tar cvfz (compressed file name) (files 1,2,…,n)` - compressed tar archived

38. `tar xvf (tar file name)` - extract tar file

39. `tar xvfz (tar file name)` - extract compressed tar file

40. `sudo adduser (username)` - adds user to the linux computer

41. `passwd (username)` - change password

42. `sudo bash` - starts terminal with administrator rights and can change/modify the root files

43. `lsb_release -a` - tells you about your linux distribution

44. `history` - displays previous commands

45. `time cat` : displays the current stopwatch time

46. To create a bash script

i. open text editor and type all the commands to be executed

ii. save the file with (name).sh

iii. `chmod 755 (name).sh`

iv. `./(name).sh`

47. `wget` : Download files from the web.

48. `netstat` : Display network statistics.

49. `cron` : Schedule tasks to run at specific times.

50. `strace` : Trace system calls and signals of a process.

51. `lsof` : List open files and processes.

52. `fdisk` / `parted` : Partitioning tools (legacy vs modern command).