This week there will be a demo on Linux operating system.

Linux has been installed in your lab's desktops.

Some Common Linux Commands

- 1. cat /etc/shells: The command to know the list of shells available on our Linux.
- date: This command is used to display the current data and time.
- 2. cal : This command is used to display the calendar of the current month and current year.
- 3. echo "text": This command is used to print the arguments on the screen. tty: It will display the terminal name.
- 4. bc : It will change the mode and in the new mode, arithmetic operations such as +, -, *, /, %, n, sqrt(), length(), =, etc can be performed.
- 5. clear: It is used to clear the screen.
- 6. man <command name> : It help us to know about the particular command and its options and working. It is like "help" command in windows. 7
- 7. Is options: It is used to list all the contents in the current working directory. Options: a– used to list all the files including the hidden files. c– list all the files columnwise. d– list all the directories. m– list the files separated by commas. p– list files include "/" to all the directories. r– list the files in reverse alphabetical order. f– list the files based on the list modification date. x–list in column wise sorted order.
- 8. pwd: To print the complete path of the current working directory.
- 9. mkdir <directory name> : To create or make a new directory in a current directory.
- 10. cd <directory name> : To change or move the directory to the mentioned directory.
- 11. rmdir <directory name> : To remove a directory in the current directory and not the current directory itself.
- 12. cat > filename.txt : to create a new text file . cat filename.txt : to display text file on screen. cat filename1.txt filename2.txt > filename3.txt : concatenate these two files and can save to another file. cat -n filename.txt : To display the contents of a file with line number. cat filename1.txt >> filename2.txt : To append the contents of filename1.txt to filename2.txt.
- 13. sort <filename > : To sort the contents in alphabetical order. sort -r <filename> : To sort the contents in reverse alphabetical order.
- 14. cp <source filename> <destination filename> : To copy the contents from source to destination file so that both contents are same.

- 15. mv <source filename> <destination filename> : To completely move the contents from source file to destination file and to remove the source file.
- 16. rm <filename> : To permanently remove the file we use this command.
- 17. wc<filename> : To list the content count of no of lines , words, characters. Options : -c to display no of characters. -l to display only the lines. -w to display the no of words.
- 18. pg <filename> : This command is used to display the contents of the file page wise and the next page can be viewed by pressing the enter key.
- 19. head<filename> : It is used to display the top ten lines of file.
- 20. tail<filename> : This command is used to display the last ten lines of file.
- 21. grep "pattern" <filename> : This command is used to search and print the specified patterns from the file.
- 22. Pipe (|): It is a mechanism by which the output of one command can be channelled into the input of another command.
- 23. ps : This command is used to provide information about the currently running processes, including their process identification numbers (PIDs).

Exercise: Read up on the following few commands and try them in Linux's terminal

- a. find
- b. ifconfig
- c. netstat
- d. sudo (if using Ubuntu)
- e. apt-get (if using Ubuntu)
- f. install any software
- g. tar (Create and extract)
- h. zip (create and unzip)
- i. list all folder in /usr/bin directory
- j. run a python program via Terminal
- k. install new package via pip for python
- I. change permissions of a file
- m. ping
- n. check memory usage