**pwd** – ***print working directory | present working directory***

**cd, cd ~** - ***change directory*** to go straight to the home/user directory

**cd c:/csm\_classes** – change to a specific path

**cd ..** – change to parent directory | move one directory back

**cd /** - to go straight to the root directory

**d:** to change the drive from C => D (Windows)

**ls** – ***list directory***

**ls -l** – list with detailed information like the permissions, size, owner, etc.

**ls -R** - list all the files in the sub-directories as well

**ls -a** – list hidden files

**ls -al** - list the files and directories with detailed information like the permissions, size, owner, etc.

? = reflect single character | \* = 0 or more characters

**ls num?9\*** [num2956, num99…]

**head fileName**– display first 10 lines

**head -n 5 filename -** display first 5 lines

**tail fileName**– display last 10 lines

**mv SourcePath DestinationPath** – move file

**cp SourcePath DestinationPath**– copy file

**rm filename** – remove file

**rm -r** -alternative to rmdir(with content)

**locate** – search globally

**find** – search for a file within a directory

**mkdir** – make directory (i.e., folder)

**rmdir** – remove only empty directory

**wc** – word count (number of lines, words, char)

**wc -w** - only words

**cat filename** – to display file content in console

**cat file1 file2 > file3** - joins two files (1 and 2) and stores the output of them in a new file (3)

**cat filename | tr a-z A-Z >output.txt -** to convert a file to upper or lower case

**echo Hello, saranj >> name.txt – to insert data in a file**

***To create a file***

**touch filename**

**cat > filename** = to create a file and write into it via terminal

using text editors (Vim, vi, pico, nano …)

**sudo** – (super user do) used for admin right task

**grep content filename** - to search for content in a file (case sensitive)

**df** – report on disk space usage

**du** – disk usage (space a file or a directory takes)

**diff file1 file2** – difference (display only difference among files)

**tar** – to archive multiple files into tar ball (file format similar to zip)

**chmod** – to change read(r), write(w) and execute(x) permissions (admin | group | public)

Environment Variables $PWD, $USER

**history** – to see previous executed commands

**<command name> -- help** – to get detail about the command

**uname** – username

**hostname** – get hostname

**ping <ipAddress>** - connected device speed

**clear** – to clear terminal

**top** – task manager, use for thread management, real time view of individual thread.

**htop** – task manager with better interface

**wget <link>–** to get anything from internet

**jobs** – to display current job

**ifconfig** – to see all the connected devices (display all ip address)

**man <commandName>** - display command manual

**zip** – to zip a file

**unzip** – to unzip a file

**apt-get update** – for update

**apt-get upgrade** – for upgrade

**apt-get update && apt-get upgrade**

***In Terminal***

~# = user directories (home/user…)

/# = root directories (bin, etc, boot…)

TAB button – to autofill

**Ctrl+C** will stop and terminate the command

**Ctrl+Z** will simply pause the command.

If you accidental freeze your terminal by using **Ctrl+S**,

simply undo this with the unfreeze **Ctrl+Q**.

**Ctrl+A** moves you to the beginning of the line while **Ctrl+E** moves you to the end.

Run multiple commands in one single command by using the “**;**” to separate them.

For example, **Command1; Command2; Command3.**

Or use **&&** if you only want the next command to run when the first one is successful.

**ctr + r** = to search in previous linux command from history in reverse order