

Some Basic Linux (Ubuntu) Commands

- **ls** = lists files and folders (directories)
- **ls -l** = gives detailed information about all the files and directories
- **ls -la** = gives detailed information about all the files, folders including hidden items

NOTE: Hidden files start with a dot (.)

- **pwd** = shows present working directory
- **cd ..** = moves one level down in directories
- **cd** = brings back to the home directory
- **cd FolderName** = goes to the folder FolderName
- **touch FileName** = creates an empty file FileName
- **cat > FileName** = create s a file FileName where we can edit and CTRL + D to save
- **cat FileName** = displays file content in terminal
- sed command for editing keywords in a file.
- **cat >> FileName** = edits the file content
- **mkdir FolderName** = creates a folder FolderName
- **mkdir Folder Name** = creates two folders , Folder and Name
- **clear** = clears the terminal
- **CTRL + L** = also clears the terminal
- **sudo cp FileName /FolderName** = copies a file FileName to the folder FolderName
- **rm FileName** = deletes a file FileName
- **rm -r FolderName** = deletes a folder FolderName

- **rm -r Folder1 Folder2 Folder3** = deletes all the three folders
- **mv File1 File2** = changes file name of File1 to File2
- **mv folder1 folder2** = changes folder name of folder1 to folder2
- **man command** = displays details about that command (for eg: man touch)
- **vim FileName** = enters into vim editor to edit the file FileName
- **#!/bin/bash** = shebang
- **#!/bin/sh** = shebang
- **#!/bin/ksh** = shebang
- **ESC + :wq!** = to save a file and exit
- **ESC + :q!** = to exit without saving the file
- **cat FileName** = prints (displays) the content of a file called FileName
- **sh FileName** = executes shell script FileName
- **./ FileName** = executes shell script FileName

File Permission in Linux

- **chmod** = grants permission on a file
- 4 = read, 2 = write, 1 = execute, 0 = no access at all
- **chmod 764** = me (7), group (6), everyone (4)
- **history** = lists all the commands entered
- **top** = launches task manager

Advanced Shell Scripts Commands

- **df -h** = to check free disk space
- **free -h** = to check free memory
- **nproc** = to check number of CPUs
- **set -x** = enables debug mode, which displays exact commands in the output also
- **set -e** = exits from script if there is an error in the script
- **ps -ef** = displays details about all the processes running in a machine
- **ps -ef | grep “python”** = displays details about only specified process i.e python
- **|** : this pipe command integrates two commands and sends output of first command to another command
- **./test.sh | grep 1** = this is an example command, which displays numbers containing “1” among various other numbers from the script “test.sh”
- **grep name fileX** = displays contents containing **name** from fileX
- **awk** =
- **curl** command retrieves any information from the anywhere
- **wget** command fetches information and also stores on local directory
- **curl** vs **wget** command
- **-ge** = means greater than or equal to
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Other Commands

- `sudo apt-get install git` – installs git
- `sudo apt install firefox` – installs firefox
- `sudo apt remove firefox` – removes firefox
- `sudo su -` = switches to the root user
- `su vivek`= switches to any user eg: vivek