**Starting a Terminal**

**Dash** -> **Search for Terminal**

**Dash** -> **More Apps** -> **'See More Results'** -> **Terminal**

**Dash** -> **More Apps** -> **Accessories** -> **Terminal**

**Keyboard Shortcut:** Ctrl + Alt + T

 The tilde (~) symbol stands for your home directory. If you are user, then the tilde (~) stands for /home/user

**pwd**: The **pwd** command will allow you to know in which directory you're located (**pwd** stands for "print working directory").

**ls**: The **ls** command will show you ('list') the files in your current directory. Used with certain options, you can see sizes of files, when files were made, and permissions of files. Example: **"ls ~"** will show you the files that are in your home directory.

**cd**: The **cd** command will allow you to change directories. When you open a terminal you will be in your home directory. To move around the file system you will use **cd**. Examples:

* To navigate into the root directory, use **"cd /"**
* To navigate to your home directory, use **"cd"** or **"cd ~"**
* To navigate up one directory level, use **"cd .."**
* To navigate to the previous directory (or back), use **"cd -"**
* To navigate through multiple levels of directory at once, specify the full directory path that you want to go to. For example, use, **"cd /var/www"** to go directly to the /www subdirectory of /var/. As another example, **"cd ~/Desktop"** will move you to the Desktop subdirectory inside your home directory.

**cp**: The **cp** command will make a copy of a file for you. Example: **"cp file foo"** will make an exact copy of "file" and name it "foo", but the file "file" will still be there. If you are copying a directory, you must use **"cp -r directory foo"** (copy recursively).

 **mv**: The **mv** command will move a file to a different location or will rename a file. Examples are as follows: **"mv file foo"** will rename the file "file" to "foo". **"mv foo ~/Desktop"** will move the file "foo" to your Desktop directory, but it will not rename it. You must specify a new file name to rename a file.

* To save on typing, you can substitute '~' in place of the home directory.
* Note that if you are using **mv** with **sudo** you can use the ~ shortcut, because the terminal expands the ~ to your home directory. However, when you open a root shell with **sudo -i** or **sudo -s**, ~ will refer to the root account's home directory, not your own.

 **rm**: Use this command to remove or delete a file in your directory.

 **rmdir**: The **rmdir** command will delete an empty directory. To delete a directory and all of its contents recursively, use **rm -r** instead.

 **mkdir**: The **mkdir** command will allow you to create directories. Example: **"mkdir music"** will create a directory called "music".

 **man**: The **man** command is used to show you the manual of other commands. Try **"man man"** to get the man page for **man** itself. See the "**Man** & Getting Help" section down the page for more information.

 **sudo**: The **sudo** command is used to perform file operations on files that the **Root User** would only be allowed to change. An example would be trying to move one of your documents that another user accidentally moved to **/** back to your **documents** directory. Normally, to move the file, you would type **mv /mydoc.odt ~/Documents/mydoc.odt**, but you are not allowed to modify files outside of your home directory. To get around this, you would type **sudo mv /mydoc.odt ~/Documents/mydoc.odt**. This will successfully move the file back to its correct location, provided that you are not a **standard** user, who has less (administrative) ability than an **administrator**. Be aware, though, that by using the **sudo** command, you need to be **extra** careful.

Exit from -> :q!

## System Information Commands

* **df**: The **df** command displays filesystem disk space usage for all mounted partitions. "**df -h**" is probably the most useful - it uses megabytes (M) and gigabytes (G) instead of blocks to report. (**-h** means "human-readable")
* **du**: The **du** command displays the disk usage for a directory.

**Command privileges.**  
  
    sudo command - run command as root  
    sudo su – root shell open  
    sudo su user – open shell as a user  
    sudo -k – forget your password sudo  
    gksudo command – sudo visual dialog (GNOME)  
    kdesudo command – sudo visual dialog (KDE)  
    sudo visudo – edit / etc / sudoers  
    gksudo nautilus – root file manager (GNOME)  
    kdesudo konqueror – root file manager (KDE)  
    passwd – change your password   
 **Command Network**  
  
    ifconfig – displays information network  
    iwconfig – displays information from wireless  
    sudo iwlist scan – scan wireless networks  
    sudo /etc/init.d/networking restart – reset the network  
    (file) /etc/network/interfaces – manual configuration  
    ifup interface – bring online interface  
    ifdown interface – disable interface   
  
**Commands Display**  
  
    sudo /etc/init.d/gdm restart – reset X (Gnome)  
    sudo /etc/init.d/kdm restart – reset X (KDE)  
    (file) /etc/X11/xorg.conf – show Configuration  
    sudo dpkg-reconfigure - reconfigure xserver-xorg-phigh - reset configuration X  
    Ctrl+Alt+Bksp – X display reset if frozen  
    Ctrl+Alt+FN – switch to tty N  
    Ctrl+Alt+F7 – switch back to X display   
  
**Commands Service System.**  
  
    start service – service to start work (Upstart)  
    stop service – service to stop working (Upstart)  
    status service – check if service is running (Upstart)  
    /etc/init.d/service start – start service (SysV)  
    /etc/init.d/service stop – stop service (SysV)  
    /etc/init.d/service status – check service (SysV)  
    /etc/init.d/service restart – reset service (SysV)  
    runlevel – get current runlevel   
  
**Commands for Firewall.**  
  
    ufw enable – turn on the firewall  
    ufw disable – turn off the firewall  
    ufw default allow – allow all connections by default  
    ufw default deny – drop all connections by default  
    ufw status – current rules and  
    ufw allow port – to allow traffic on port  
    ufw deny port – port block  
    ufw deny from ip – ip block   
 **Command System.**  
  
    lsb\_release -a – get the version of Ubuntu  
    uname -r – get kernel version  
    uname -a – get all the information kernel   
 **Commands for Package Manager.**  
  
    apt-get update – refresh updates available  
    apt-get upgrade – update all packages  
    apt-get dist-upgrade – version update  
    apt-get install pkg – installing pkg  
    apt-get remove pkg – uninstall pkg  
    apt-get autoremove – removing packages obsotletos  
    apt-get -f install – try to fix packages  
    dpkg –configure -a – try to fix a broken package  
    dpkg -i pkg.deb – install file pkg.deb  
    (file) /etc/apt/sources.list – list of repositories APT   
  
**Special Packages For commands.**  
  
    ubuntu-desktop – Setting the standard Ubuntu  
    kubuntu-desktop – KDE Desktop  
    xubuntu-desktop – desktop XFCE  
    ubuntu-minimal – core earnings Ubuntu  
    ubuntu-standard – the standard utilities Ubuntu  
    ubuntu-restricted-extras – not free, but useful  
    kubuntu-restricted-extras – ditto KDE  
    xubuntu-restricted-extras – ditto XFCE  
    build-essential – packages used to compile  
    linux-image-generic – latest generic kernel image  
    linux-headers-generic – latest headlines   
  
**Applications commands.**  
  
    nautilus – File Manager (GNOME)  
    dolphin – File Manager (KDE)  
    konqueror – Web browser (KDE)  
    kate – text editor (KDE)  
    gedit – text editor (GNOME)