**Linux – Ubuntu 17.10**

Ctrl + Alt + T = Terminal

**Replacement of windows applications**

Ms Office = Libre Office

Photoshop = GIMP

**To install anything**

You can go to Ubuntu Software and search any software you want and you can install from there.

Or

You can download any software which has .deb extension which is same as .exe in windows

Or

Ctrl + Alt + T -> sudo apt-get install package-name

**To update ubuntu**

sudo apt-get update

sudo apt-get upgrade

sudo apt-get dist-upgrade

However, be careful while using dist-upgrade as it might also remove packages to satisfy dependencies.

**To create shortcuts on desktop**

Ctrl + Alt + T

sudo apt install gnome-panel

gnome-desktop-item-edit --create-new ~/Desktop

**To change owner of any folder**

sudo chown -R username:username /locationpath

The gksu and gksudo commands allow you to elevate your permissions when running graphical applications.

They are essentially equivalent graphical commands to [the su command](https://www.lifewire.com/switch-user-su-command-3887179) and [the sudo command](https://www.lifewire.com/what-to-know-sudo-command-3576779).

### **Installation**

By default gksu isn't necessarily installed by default any more within all Linux distributions.

You can install it within Ubuntu from the command line using [the apt-get command](https://www.lifewire.com/ubuntu-command-line-package-apt-get-2205716)as follows:

*sudo apt-get install gksu*

You can also install gksu using [the synaptic package manager](https://www.lifewire.com/guide-to-synaptic-package-manager-2205707). As of writing this tool isn't available in the main Ubuntu Package Manager.

### **Why Would You Use gksu**

Imagine you are using the Nautilus file manager and you wish to edit a file in a folder owned by another user or indeed a folder that can only be accessed as the root user.

When you open a folder which you have limited permissions to access you will find that options such as create file and create folder are greyed out.

You could open a terminal window, switch to another user using the su command and then create or edit files using [the nano editor](https://www.lifewire.com/beginners-guide-to-nano-editor-3859002). Alternatively, you could use the sudo command to edit files in places where you don't have the correct permissions.

The gksu application lets you run Nautilus as a different user which means you will have access to the files and folders that are currently greyed out.

### **How To Use gksu**

A simple way to run gksu is to open a terminal window and type the following:

*gksu*

A small window will open with two boxes:

* run
* as user

The run box wants to know the name of the program you wish to run and the as userbox lets you decide which user to run the program as.

If you run gksu and enter nautilus as the run command and leave the user as root you will now be able to manipulate files and folders previously inaccessible.

You don't have to use the gksu command on its own. You can specify the command you wish to run and the user all in one as follows:

*gksu -u root nautilus*

### **Difference Between gksu And gksudo**

In Ubuntu gksu and gksudo perform the same task as they are symbolically linked. (they both point to the same executable).

You should, however, assume that gksu is the graphical equivalent of the su command which means you have switched to the environment of the user. The gksudo command is equivalent to the sudo command which means you are running the application as the person you are impersonating which by default is root.

**To Change PHP version from terminal**

sudo update-alternatives --set php /usr/bin/php5.6

**Commands in linux**

passwd - to change the password of the current user.

pwd - returns your location within the directory structure. (Present Working Directory)

whoami - to see which user you’re logged in as.

ls -l - (long listing) To get more information about the files and directories, such as their permissions,

owner, size, and when they were last modified.

ls -la - to see hidden files as well.

--help - add --help to any command to know more about that command.

man - before command or application to see the manual of respective.

locate - this command will go through your entire filesystem and locateevery occurrence of that word.

whereis - This command returns not only the location of the binary but also its source and man page if they are available.

which - it only returns the location of the binaries in the PATH variable in Linux.

Here’s the basic syntax for find :

find directory options expression

kali >find / ➊ -type f ➋ -name apache2 ➌

First I state the directory in which to start the search, in this case / ➊. Then I specify

which type of file to search for, in this case f for an ordinary file ➋. Last, I give the name

of the file I’m searching for, in this case apache2 ➌.

ps - The ps command is used to display information about processes running on the machine.

cat > hackingskills - to create files.

cat hackingskills - will show the content of the file "hackingskills".

To add, or append, more content to a file, you can use the cat command with a double

redirect ( >> ), followed by whatever you want to add to the end of the file.

cat >> hackingskills

To overwrite that same file. we can use the same command to create the file.

cat > hackingskills

press CTRL ­D to come out of the prompt.

touch newfile - to create a new file.

mkdir newdirectory - to create a new directory.

cp - To copy files, we use the cp command. This creates a duplicate of the file in the new location and leaves the old one in place.

mv - The mv command can be used to move a file or directory to a new location or simply to give an existing file a new name.

rm - To remove a file, you can simply use the rm command.

rmdir - To remove a directory but it will remove only empty directory.

rm -r - To remove a directory and content of that directory.

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Important directories in linux

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/root The home directory of the all­powerful root user

/etc Generally contains the Linux configuration files—files that control when and how

programs start up

/home The user’s home directory

/mnt Where other filesystems are attached or mounted to the filesystem

/media Where CDs and USB devices are usually attached or mounted to the filesystem

/bin Where application binaries (the equivalent of executables in Microsoft Windows)

reside

/lib Where you’ll find libraries (shared programs that are similar to Windows DLLs)

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Advanced Packaging Tool - apt-get

adding software - apt-get install package-name

removing software - apt-get remove package-name

**Checking permissions**

ls -l (directory)

The first character tells you the file type, where d stands for a directory and a dash ( – )

indicates a file. These are the two most common file types.

The next section defines the permissions on the file. There are three sets of three

characters, made of some combination of read ( r ), write ( w ), and execute ( x ), in that

order. The first set represents the permissions of the owner; the second, those of the

group; and the last, those of all other users.

Regardless of which set of three letters you’re looking at, if you see an r first, that user

or group of users has permission to open and read that file or directory. A w as the

middle letter means they can write to (modify) the file or directory, and an x at the end

means they can execute (or run) the file or directory. If any r , w , or x is replaced with a

dash ( - ), then the respective permission hasn’t been given. Note that users can have

permission to execute only either binaries or scripts.

Let’s use the third line of output in Listing 5­1 as an example:

­rw­r­­r­­ 1 root root 33685504 June 28 2018 hashcat.hcstat

The file is called, as we know from the right end of the line, hashcat.hcstat. After theinitial – (which indicates it’s a file), the permissions rw- tell us that the owner has read

and write permissions but not execute permission.

The next set of permissions ( r-- ) represents those of the group and shows that the

group has read permission but not write or execute permissions. And, finally, we see

that the rest of the users also have only read permission ( r-- ).

These permissions aren’t set in stone. As a root user or file owner, you can change

them.

**Changing permissions**

chmod -

**Move into Trash**

cd ~/.local/share/Trash

**To Check how many PHP version is installed on the system**

apt list --installed | grep php

Step 3: Switch PHP 7.0 to PHP 5.6  
Switch from PHP 7.0 to PHP 5.6 while restarting Apache to recognize the change:

a2dismod php7.0 ; a2enmod php5.6 ; service apache2 restart

sudo service apache2 restart