

# Terminal is fun (Really)

Train yourself to use command line to your interest in order to install and upgrade different packages. Using GUI for installing applications might be convenient, but contrary, the terminal is a fast approach for this purpose. You will learn how to manage your softwares via apt-get.

## What is apt-get?

`apt-get` is a friendly command line tool to interact with the packaging system.

It requires administrator privileges (super user accessibility), henceforth, we'll be using `sudo` with `apt-get`.

It can be used to find new packages, install, update and upgrade them.

## Using `apt-get` Commands:

Following are several functions that can be performed via `apt-get`.

### Updating Package Database:

The first task to execute on any Linux system after a fresh install is to run an update on the local packages' database. Without updating, the system wouldn't know of any new available packages.

```
sudo apt-get update
```



### Upgrading Packages:

Once you have updated all applications, you can now upgrade all of them to their latest versions available.

```
sudo apt-get upgrade
```



To upgrade some specific package:

```
sudo apt-get upgrade <package_name>
```



## Difference between `apt-get update` and `apt-get upgrade`:

`apt-get update` only updates the database of packages, i.e. the database will become aware that for some package **abc**, a newer version is available.

`apt-get upgrade` renews the packages to their latest versions.

## Installing Packages:

You can install any specific package using `apt-get`. For example, to install the **vim** editor:

```
sudo apt-get install vim
```



## Removing Packages:

`apt-get remove` removes binary files of a package and leaves the configuration files untouched.

```
sudo apt-get remove <package_name>
```



`apt-get purge` removes anything associated with the package including the configuration files.

```
sudo apt-get purge <package_name>
```



# Using `apt-cache` to Search for Packages

If you want to search for packages or get information about them, you can use this command. You don't even have to use `sudo` here.

```
apt-cache search <search_term>
```

