Install OpenCV-Python in Ubuntu

> **Note**
> : Please prefer binaries distributed with PyPI, if possible. See **Install OpenCV for Python with pip** for details.

Goals

In this tutorial We will learn to setup OpenCV-Python in Ubuntu System. Below steps are tested for Ubuntu 16.04 and 18.04 (both 64-bit).

OpenCV-Python can be installed in Ubuntu in two ways:

- Install from pre-built binaries available in Ubuntu repositories
- Compile from the source. In this section, we will see both.

Another important thing is the additional libraries required. OpenCV-Python requires only **Numpy** (in addition to other dependencies, which we will see later). But in this tutorials, we also use **Matplotlib** for some easy and nice plotting purposes (which I feel much better compared to OpenCV). Matplotlib is optional, but highly recommended. Similarly we will also see **IPython**, an Interactive Python Terminal, which is also highly recommended.

Installing OpenCV-Python from Pre-built Binaries

This method serves best when using just for programming and developing OpenCV applications.

Install package python3-opencv with following command in terminal (as root user).

```
$ sudo apt-get install python3-opencv
```

Open Python IDLE (or IPython) and type following codes in Python terminal.

```
import cv2 as cv
print(cv.__version__)
```

If the results are printed out without any errors, congratulations !!! You have installed OpenCV-Python successfully.

It is quite easy. But there is a problem with this. Apt repositories may not contain the latest version of OpenCV always. For example, at the time of writing this