How to Compile And Run Different Languages on Ubuntu

-Parsa Bordbar

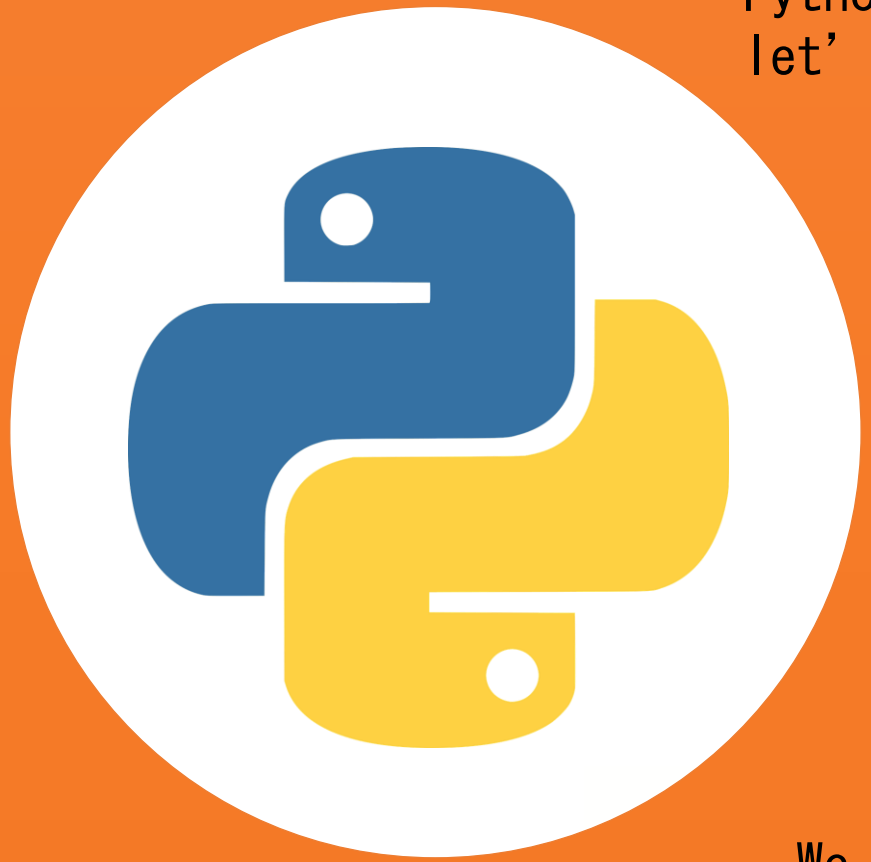
$ sudo apt update

apt-get does not install new versions of software, instead it
Updates the package list for upgrades for packages that need upgrading, as well as new packages that have just come to the repositories. It will do this for all of repos and PPAs. From http://linux.die.net/man/8/apt-get:

In this tutorial We are going to Use apt install command To install packages That we need..

$ sudo apt upgrade

apt-get upgrade will fetch new versions of packages from apt-get update list and install all packages and their dependencies.



Python is pre-installed in most distros,
let’ s check if we have it or not:

```
python3 --version
```

If we don’ t have it we can install it like this:

```
sudo apt install python3
```

How to run Python code ?

```
python3 filename.py
```

We can use nano, Vim or Vs code to write
The code and then run it.

For JavaScript we have to Install nodejs to run JS outside of Browsers

```
$sudo apt install npm
```

For running JS code with node we can use the command:

```
$node filename.js
```

Npm is nodeJs package manger => we use it to download and install packages… npm installs nodejs for us… so we can code outside of Browers

For installing c++ on ubuntu we have to at first isnatall build-essential:

```
$ sudo apt install build-essential
```

Installing gcc/g++ compiler:

```
$ sudo apt install g++
```

For cheeking if we have it installed:

```
$ g++ --version
```

We have to first Compile it using:

```
$ g++ samplefile.cpp –o samplefile
```

How to run the .cpp file:

```
./samplefile
```

Rust or rust-lang is a general-purpose programming language for system-level development projects. Rust is known for its speed, memory efficiency, seamless integration with other languages, and type safety.

Cheekking for rust on the system:

```
rustc -V
```

Instaling rust:

```
sudo apt install rustc
```

Running rust code:

```
$ rustc main.rs
$ ./main
```

For Java we need JDK => Java Development Kit

```
$ sudo apt install default-jdk
```

For compiling Java code we can use command:

```
$ javac filename.java
```

When we compile Java code this gives us a filename.class file with the class name we used in our program we have to run this class to see the result:

```
$ java className
```

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