# Lab 1 – Installing PyCharm & Creating a program

First thing you will need for programming will be something to program in, which is an IDE!

An IDE stands for Integrated Development Environment. Basically, it allows you to type your code, correct syntax errors, run and test your code, and debug it. The IDEs also have the functionalities to *compile* and *interpret* the program. Some of the widely used IDs are Eclipse for Java programming development, Microsoft Visual Studio, Android Studio for Mobile Apps development, RStudio for R programs and PyCharm for Python programming.

1. Downloading PyCharm:
   1. For Windows computers, go to <https://www.jetbrains.com/pycharm/download/#section=windows> and download the Community version.
   2. If you are using a Pi or a Linux machine, you will be required to use Tar and change the file permissions to download it. It might be a bit more complex: <https://itsfoss.com/install-pycharm-ubuntu/>

Now that you have that installed, you can start a new project.

