

Programs, languages and compilers

First steps with Python



1. Python programming language

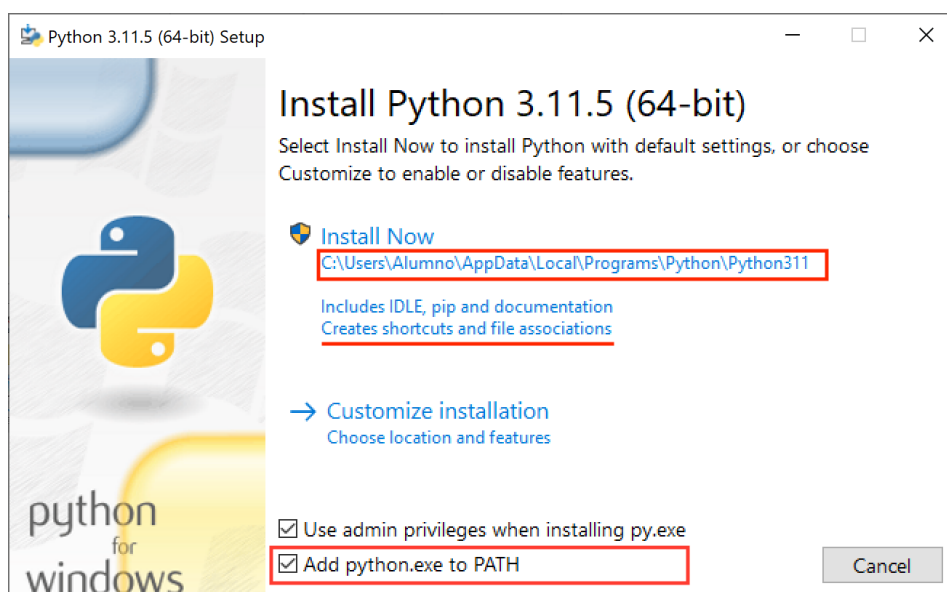
Python is an interpreted language that is really easy to learn (it is usually chosen in many educational institutions to teach programming). Resulting code is usually much more compact and understandable than the same code in other traditional languages, for the same task. We can also develop several types of applications with this language, such as system scripts, video games (with libraries like *PyGame*) or server side web applications (with frameworks like Django). It is also very appreciated in some other tasks like hacking and deep learning.

2. Installing Python

Let's try with an interpreted language such as Python. In order to install it under Windows or Mac OSX, we need to go to its official [download](#) page.

Python interpreter is usually a command called `python` or `python3`, depending on the version and operating system that we are using. Nowadays, Python 2 is no longer maintained, so we will use Python 3. For instance, in Windows Python 3 interpreter is launched through `python` command, whereas in Linux we use `python3` command instead.

When you install Python in Windows, make sure you check the option to add Python automatically to your PATH variable. You can also change the default installation folder:



Regarding Linux, we can firstly check which version of Python we have currently installed with this command:

```
python3 --version
```

We can easily update or install from scratch Python (version 3) with these command:

```
sudo apt-get install python3
```

Exercise 1:

Create a source file called `test.py` with this source code in Python programming language:

```
print("Hello")
```

Save the changes and try to run it with one of these commands (depending on the name of your Python interpreter in your system):

```
python test.py  
python3 test.py
```