

1.1 Introduction to Python

Python is an open source and cross-platform programming language, that has become increasingly popular over the last ten years. It was first released in 1991. Latest version is 3.7.0. CPython is the reference implementation of the Python programming language. Written in C, CPython is the default and most widely-used implementation of the language.

Python is a multi-purpose programming language (due to its many extensions), examples are scientific computing and calculations, The programming language is maintained and available from (Python Software Foundation): <https://www.python.org> Here you can download the basic Python features in one package, which includes the Python programming language interpreter, and a basic code editor, or an integrated development environment, called IDLE.

But this is just the Python core, i.e. the interpreter a very basic editor, and the minimum needed to create basic Python programs. Typically you will need more features for solving your tasks. Then you can install and use separate Python packages created by third parties.

Python is an object-oriented programming language (OOP), but you can use Python in basic application without the need to know about or use the object-oriented features in Python.

Python is an interpreted programming language, this means that as a developer you write Python (.py) files in a text editor and then put those files into the python interpreter to be executed. Depending on the Editor you are using, this is either done automatically, or you need to do it manually.

1.2 The New Age of Programming

The way we create software today has changed dramatically the last 30 years, from the childhood of personal computers in the early 80s to today's powerful devices such as Smartphones, Tablets and PCs.

The Internet has also changed the way we use devices and software. We still have traditional desktop applications, but Web Sites, Web Applications and so-called Apps for Smartphones, etc. are dominating the software market today.

We need to find and learn Programming Languages that are suitable for the New Age of Programming. We have today several thousand different Programming Languages, so why should we learn Python? I guess you will need to learn more than one Programming Language to survive in today's software market. Python is easy to learn, so it is a good starting point for new programmers.
