# 7 Reasons why Python is a Great Choice for Professionals

# 1. Python is a High-Level Programming Language

A high-level programming language is one that abstracts away many of the details of the inner workings of the computer. A good example is memory management. Lower-level programming languages require a detailed understanding of the complexities of how computer's memory is laid out, allocated and released, in addition to the time spent and lines of code required to handle tasks. Python abstracts away and handles many of these details automatically.

#### 2. It is Concise

Python language, the code is more concise and <u>entirely focussed on the logic of what you want to achieve.</u>

For example, Python doesn't require the use of curly braces or semicolons to delineate functions, loops, and lines the way many other languages do, which makes it more concise and, as some argue, improves readability.

# 3. Easy to learn and Understand

One observation that has influenced language in python is that programs are read more often than they are written. <u>Python excels here as its code looks very close to plain English</u>.

# 4. Suitable for Rapid, Iterative Development

Python is ideal for prototyping and rapid, iterative development because of interactive interpreter tools such as the <u>Python shell</u>, <u>IPython</u>, and <u>Jupyter notebooks</u>. In these interactive environments, you can write and <u>execute each line of code in isolation and see the results immediately.</u> Other languages have this too but in most cases not the same degree as python.

# 5. Can be used Both for Prototyping and Production Code

In addition to being great for prototyping, Python is also an excellent and powerful language for large production applications. Some of the largest software companies in the world make heavy <u>use of Python in a variety of applications and use cases.</u>

# 6. The Python Standard Library

Everything needed for basic operations is built right into the language, but in addition to that, the Python <u>standard library has tools for working</u> with files, media, networking, date and time information, and much more.

# 7. Python Is Free!!!

Python is developed under an <u>open-source license</u> making it free also for commercial use.