## **Python**

The choice of development tools is sometimes based on unique constraints or personal preference. But I have experienced some common thoughts of the lovers of Python. The primary factors cited by Python users seem to be these:

## **Software Quality**

For many, Python's focus on readability, coherence, and software quality in general sets it apart from other tools in the scripting world. Python code is designed to be readable, and hence reusable and maintainable, much more than traditional scripting languages. The uniformity of Python code makes it easy to understand, even if we did not write it. In addition, Python has deep support for more advanced software reuse mechanisms, such as object-oriented (OOps) and functional programming.

## **Developer Productivity**

Python boosts developer productivity many times beyond compiled or statically typed languages such as C, C++, and Java. Python code is typically one-third to one-fifth the size of equivalent C++ or Java code. That means there is less to type, less to debug, and less to maintain after the fact. Python programs also run immediately, without the lengthy compile and link steps required by some other tools, further boosting programmer's speed.

Most Python programs run unchanged on all major computer platforms. Porting Python code between Linux and Windows, for example, is usually just a matter of copying a script's code between machines. Moreover, Python offers multiple options for coding portable graphical user interfaces, database access programs, web-based systems, and more. Even operating system interfaces, including program launches and directory processing, are as portable in Python as they can possibly be.

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### **Support Libraries**

Python comes with a large collection of prebuilt and portable functionality, known as the standard library. This library supports an array of application-level programming tasks, from text pattern matching to network scripting. In addition, Python can be extended with both homegrown libraries and a vast collection of third-party application support software. Python's third-party domain offers tools for website construction, numeric programming, serial port access, game development, and much more.

# **Enjoyment**

Because of Python's ease of use and built-in toolset, it can make the act of programming more pleasure than a chore. Although this may be an intangible benefit, its effect on productivity is an important asset.