



Why Python?

Python is an incredibly efficient language: your programs will do more in fewer lines of code than many other languages would require. Python's syntax will also help you write "clean" code. Your code will be easy to read, easy to debug, and easy to extend and build upon compared to other languages.

People use Python for many purposes: to make games, build web applications, solve business problems, and develop internal tools at all kinds of interesting companies. Python is also used heavily in scientific fields for academic research and applied work.

Setting Up Your Programming Environment

Python 2 and Python 3

Today, two versions of Python are available: Python 2 and the newer Python 3. Every programming language evolves as new ideas and technologies emerge, and the developers of Python have continually made the language more versatile and powerful. Most changes are incremental and hardly noticeable, but in some cases code written for Python 2 may not run properly on systems with Python 3 installed. Throughout this book I'll point out areas of significant difference between Python 2 and Python 3, so whichever version you use, you'll be able to follow the instructions. If both versions are installed on your system or if you need to install Python, use Python 3. If Python 2 is the only version on your system and you'd rather jump into writing code instead of installing Python, you can start with Python 2. But the sooner you upgrade to using Python 3 the better, so you'll be working with the most recent version.

Running Snippets of Python Code

Python comes with an interpreter that runs in a terminal window, allowing you to try bits of Python without having to save and run an entire program.

1. >>> print("Hello Python interpreter!")

Hello Python interpreter!

The text in bold is what you'll type in and then execute by pressing enter.