

Python for Beginners

*aka Programming for
Beginners*

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All files for this tutorial can be found at:

<https://is.gd/Python101>

What is Programming?

Programming is a way to “instruct the computer to perform various tasks”.

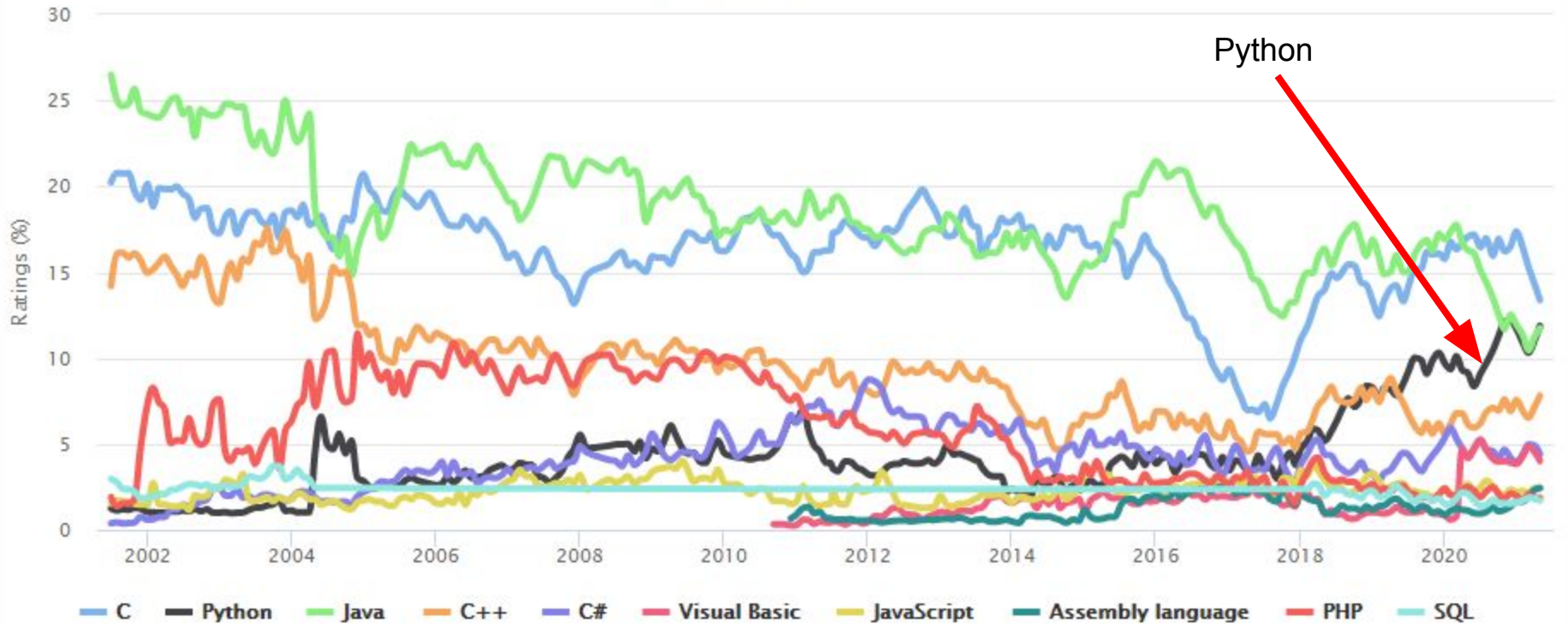
Why Python?

Top 10 Reasons Why Python is So Popular With Developers in 2021

1. Easy to Learn and Use
2. Mature and Supportive Python Community
3. Support from Renowned Corporate Sponsors
4. Hundreds of Python Libraries and Frameworks
5. Versatility, Efficiency, Reliability, and Speed
6. Big data, Machine Learning and Cloud Computing
7. First-choice Language
8. The Flexibility of Python Language
9. Use of python in academics
10. Automation

TIOBE Programming Community Index

Source: www.tiobe.com



Our First Program!

Hello, World!

A "Hello, World!" program generally is a computer program that outputs or displays the message "Hello, World!". Such a program is very simple in most programming languages, and is often used to illustrate the basic syntax of a programming language.

It is often the first program written by people learning to code. It can also be used as a sanity test to make sure that a computer language is correctly installed, and that the operator understands how to use it.

Hello World -- Demo and Exercises

<https://is.gd/1VHgVn>

(We will also do a quick overview of Google Colab, the primary editor we will be using for our demos and exercises.)

Basic IPO Model of Programming



Getting Input Using the Keyboard

Example:

```
name = input('What is your name? ')
```

Input and Variables -- Demo and Exercises

<https://is.gd/yk4pYL>