**Developer:** Guido van Rossum, Master of Matehmatic and Computer Science

**Release :**1991

**Type :** Interpreted language

**Interpretataion :** CPython, the reference implementation of Python, is open source software

**Name :** Named after a TV Show called 'Monty Python's Flying Circus' and not after Python-the snake.

**Version :** python 2.x and python 3 (released in 2008)

**Encoding :** python2 - raw data (mark with u for unicode) , python3 – unicode (utf-8)

**About the origin of Python,** van Rossum wrote in 1996:

> Over six years ago, in December 1989, I was looking for a "hobby" programming project that would keep me occupied during the week around Christmas. My office ... would be closed, but I had a home computer, and not much else on my hands. I decided to write an interpreter for the new scripting language I had been thinking about lately: a descendant of ABC that would appeal to Unix/C hackers. I chose Python as a working title for the project, being in a slightly irreverent mood (and a big fan of Monty Python's Flying Circus)

**Popularity :**

| Dec 2017 | Dec 2016 | Change | Programming Language | Ratings | Change |
|----------|----------|--------|----------------------|---------|--------|
| 1 | 1 | | Java | 13.268% | -4.59% |
| 2 | 2 | | C | 10.158% | +1.43% |
| 3 | 3 | | C++ | 4.717% | -0.62% |
| 4 | 4 | | Python | 3.777% | -0.46% |
| 5 | 6 | ⌃ | C# | 2.822% | -0.35% |
| 6 | 8 | ⌃ | JavaScript | 2.474% | -0.39% |
| 7 | 5 | ⌄ | Visual Basic .NET | 2.471% | -0.83% |
| 8 | 17 | ⌃⌃ | R | 1.906% | +0.08% |
| 9 | 7 | ⌄ | PHP | 1.590% | -1.33% |
| 10 | 18 | ⌃⌃ | MATLAB | 1.569% | -0.25% |

**Fig:** Top Programming Langauge          Courtesy: https://www.tiobe.com/tiobe-index/ (Jan,18)

## Very Long Term History

To see the bigger picture, please find below the positions of the top 10 programming languages of many years back. Please note that these are *average* positions for a period of 12 months.

| Programming Language | 2017 | 2012 | 2007 | 2002 | 1997 | 1992 | 1987 |
|---|---|---|---|---|---|---|---|
| Java | 1 | 2 | 1 | 1 | 15 | - | - |
| C | 2 | 1 | 2 | 2 | 1 | 1 | 1 |
| C++ | 3 | 3 | 3 | 3 | 2 | 2 | 4 |
| C# | 4 | 5 | 7 | 11 | - | - | - |
| Python | 5 | 7 | 6 | 12 | 27 | 16 | - |
| Visual Basic .NET | 6 | 14 | - | - | - | - | - |
| JavaScript | 7 | 9 | 8 | 7 | 20 | - | - |
| PHP | 8 | 6 | 4 | 5 | - | - | - |

**Fig:** Ranking of Programming Langauge (Past History)

**Features :**

**Easy-to-learn**
**Easy-to-read**
**Easy-to-maintain**
**broad standard library**
**Interactive Mode**
**Portable**
**Extendable (**low-level modules to the Python interpreter).
**Databases**
**GUI Programming**
**Scalable**

**Dynamic type system**
**Reference counting and garbage collector** for **automatic memory management**
Supports **multiple programming paradigms** includign oop and procedural ,functional ..
Can be used as a **scripting language** or can be compiled to byte-code
Can be **easily integrated** with C, C++, COM, ActiveX, CORBA, and Java.

**Functionality**

As of September 2017, the Python Package Index, the official repository for third-party Python software, contains over 117,000 packages with a wide range of functionality, including:

- Graphical user interfaces
- Web frameworks
- Multimedia
- Databases
- Networking
- Test frameworks
- Automation

- Web scraping
- Documentation
- System administration
- Scientific computing
- Text processing
- Image processing

Source: [https://en.wikipedia.org/wiki/Python_(programming_language)](https://en.wikipedia.org/wiki/Python_(programming_language))