

Introduction

Python is a general purpose, dynamic, high-level, and interpreted programming language. It supports Object Oriented programming approach to develop applications. It is simple and easy to learn and provides lots of high-level data structures.

Python supports multiple programming pattern, including object-oriented, imperative, and functional or procedural programming styles.

Python was invented by Guido van Rossum in 1991 at CWI in Netherland.

Guido van Rossum was a fan of the popular BBC comedy show of that time, "Monty Python's Flying Circus". So he decided to pick the name Python for his newly created programming language.

Where is Python used?

Python is a general-purpose, popular programming language and it is used in almost every technical field. The various areas of Python use are given below.

- Data Science
- Data Mining
- Desktop Applications
- Console-based Applications
- Mobile Applications
- Software Development
- Artificial Intelligence
- Web Applications
- Enterprise Applications
- 3D CAD Applications
- Machine Learning
- Computer Vision or Image Processing Applications.
- Speech Recognitions

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Python Popular Frameworks and Libraries

Python has wide range of libraries and frameworks widely used in various fields such as machine learning, artificial intelligence, web applications, etc. We define some popular frameworks and libraries of Python as follows.

- **Web development (Server-side)** - Django Flask, Pyramid, CherryPy
- **GUIs based applications** - Tk, PyGTK, PyQt, PyJs, etc.
- **Machine Learning** - TensorFlow, PyTorch, **Scikit-learn**, Matplotlib, Scipy, etc.
- **Mathematics** - Numpy, Pandas, etc.