

Introduction



What is Python?

Python is a very popular general-purpose interpreted, interactive, object-oriented and high-level programming language. Python is dynamically-typed and garbage-collected programming language. Python was created by Guido van Rossum, and first released on February 20, 1991.

Why learn Python?

Python provides many useful features to the programmer. These features make it most popular and widely used language.

Easy-to-learn: Python has few keywords, simple structure, and a clearly defined syntax. This allows the student to pick up the language quickly.

Easy-to-read: Python code is more clearly defined and visible to the eyes.

Easy-to-maintain: Python's source code is fairly easy-to-maintain.

A broad standard library: Python's bulk of the library is very portable and cross-platform compatible on UNIX, Windows, and Macintosh.

Interactive Mode: Python has support for an interactive mode which allows interactive testing and debugging of snippets of code.

Portable: Python can run on a wide variety of hardware platforms and has the same interface on all platforms.

Extendable: You can add low-level modules to the Python interpreter. These modules enable programmers to add to or customize their tools to be more efficient.

Databases: Python provides interfaces to all major commercial databases.

GUI Programming: Python supports GUI applications that can be created and ported to many system calls, libraries and windows systems, such as Windows MFC, Macintosh, and the X Window system of Unix.

Scalable: Python provides a better structure and support for large programs than shell scripting.

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:

1. Data Science
2. Data Mining
3. Desktop Applications
4. Console-based Applications
5. Mobile Applications
6. Software Development
7. Artificial Intelligence
8. Web Applications
9. Enterprise Applications
10. 3D CAD Applications
11. Machine Learning
12. Computer Vision or Image Processing Applications.
13. Speech Recognitions

Careers with Python:

If you know Python nicely, then you have a great career ahead. Here are just a few of the career options where Python is a key skill:

1. Game Developer
2. Web Designer
3. Python Developer
4. Full-Stack Developer
5. Machine Learning Engineer
6. Data Scientist
7. Data Analyst
8. Data Engineer
9. DevOps Engineer
10. Software Engineer