

INTRODUCTION TO

Python Programming

A gentle, beginner-friendly first look at Python — what it is, where it came from, and why the whole world is using it.

Lesson 1 · Getting Started

What Is Python?

THE THEORY, IN PLAIN WORDS



Python is a programming language.

- It is a set of instructions we write so a computer can understand us and perform tasks.
- Python is a general-purpose language — it is not built for just one job. It can build websites, analyze data, automate tasks, and much more.
- It is a high-level language, meaning it reads almost like plain English rather than complex machine code.
- It is an interpreted language — the computer runs the code line by line, which makes testing and fixing code quick and easy.

QUICK FACT

Beginner-Friendly by Design

Python's simple, English-like syntax is why it's the #1 recommended first language for new programmers worldwide.

Hello, World! in Python:

```
print("Hello, World!")
```

A Little History

WHO CREATED PYTHON — AND WHEN



Guido van Rossum

Creator of Python

A Dutch programmer who began writing Python as a hobby project during his Christmas holidays.

1

1989

Guido van Rossum starts working on Python as a personal project, wanting a language that was easier to read and write.

2

1991

Python 0.9.0, the first public version, is officially released to the world.

3

2000s

Python 2 arrives and steadily grows a large, friendly, global community of developers.

4

Today

Python is one of the most popular and widely-taught programming languages on Earth.

Why Is It Called "Python"?

A FUN FACT MOST BEGINNERS DON'T KNOW



Not the snake — a comedy show!

Many beginners assume Python is named after the snake. In fact, Guido van Rossum named it after “Monty Python’s Flying Circus,” a British comedy series he enjoyed. He wanted the language to feel fun and a little unconventional — not stiff or overly serious.

WHY LEARN PYTHON?

- **Easy to read and write**
  Its syntax looks close to plain English.
- **Free and open-source**
  Anyone can download and use it at no cost.
- **Huge community**
  Millions of learners and experts share help online.
- **Runs everywhere**
  Windows, Mac, Linux, and even the web.

Where Is Python Used?

REAL-WORLD APPLICATIONS

Web Development

Building websites and web apps (e.g. Instagram, Pinterest).

Data Science

Analyzing data and creating charts to find insights.

AI & Machine Learning

Powering chatbots, recommendation systems, and more.

Automation

Automatically doing repetitive computer tasks.

Game Development

Building simple 2D games and prototypes.

Scientific Research

Used by scientists for research and simulations.

Who Uses Python?

TRUSTED BY THE WORLD'S BIGGEST ORGANIZATIONS



Google

Uses Python across many internal tools and services.



Instagram

One of the largest websites built on Python.



Netflix

Uses Python for backend systems and data analysis.



Spotify

Uses Python to analyze data and recommend music.



NASA

Uses Python for scientific research and space missions.



YouTube

Built several core features using Python.

When Should You Use Python?

AND WHO IS IT FOR?



Good Situations to Use Python

- You are just starting to learn programming.
- You want to quickly test or build an idea (a prototype).
- You need to analyze or organize data.
- You want to automate a repetitive, boring task.
- You are exploring AI or machine learning.



Who Is Python For?

- Absolute beginners with no coding experience at all.
- Students learning their very first programming language.
- Working professionals who want to automate their daily tasks.
- Anyone curious about data, AI, or building software.

Let's Recap

WHAT WE LEARNED TODAY



What Python Is

A simple, high-level, general-purpose programming language.



Its History

Created by Guido van Rossum, first released in 1991.



Where It's Used

Web apps, data science, AI, automation, games, and research.



Who It's For

Perfect for absolute beginners and curious learners like you!

Coming up next: Variables in Python →