

Python

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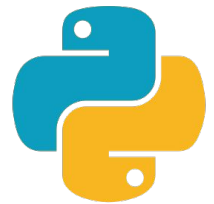
What is Python?

Python is a high-level programming language that was released in 1991. It was originally used to prototype apps but evolved for use in numerous applications such as backend web development, artificial intelligence, and most notably, data science. Python can also be used to create productivity tools, games, and desktop apps.

History of Python:

The implementation of Python began in 1989 by Dutch programmer, Guido Van Rossum. Van Rossum had previously worked on the team that developed ABC, a programming language released in 1975. Remembering his frustrations with ABC, he designed “a simple scripting language that possessed some of ABC's better properties, but without its problems”.

Although Python’s logo depicts two snakes, its name was actually influenced by a British comedy show- “Monty Python’s Flying Circus”.



Why Learn Python?

Beginner Friendliness: Python is very easy to learn because it is a high-level language that reads much like English. This allows beginners to focus on programming concepts and fundamentals without worrying about syntax.

Community: Python is a very flexible and versatile general use language and is used in many applications. It also has a large community in all popular programming reference sites and has many libraries.

Career Opportunities: Python is ranked as the 2nd most demanded skill and the skill with the highest average salary.

Future: In addition, Python's development system is dependent on community output. Python is actively worked on and its updates are pushed out yearly. Python will continue to remain relevant for a long time to come.

How is Python used?

Python is often used for backend website development, scientific and numerical computing, software development, education and business applications.

Many popular and important companies use Python:

- Google (YouTube)
- Facebook (Instagram)
- Amazon
- Netflix
- DropBox
- Spotify
- Reddit



What did we learn with Python?

In our introduction to programming with Python, we learned the basic syntax and the fundamentals of programming. We made our own functions and used premade functions like `print()` and `raw_input()` as well as libraries. We learned about comments, variables, and conditionals and worked with different data types such as strings, floats, and integers.

Syntax: the “spelling” or “grammar” of a programming language

Variables: a place to store data, is able to change over the course of a program

Functions: a “mini program” which can work with data and carry out a certain task.

What projects did we do with Python?

During the Artemis Project, we used IDLE, an integrated development environment or IDE. IDEs are just software applications that help programmers write programs. We began scratching the surface of Python and its different applications.

We created a change calculator which would ask the user for the coins he or she had and then would output the total.

We also worked with a partner to create a caesar cipher encrypter and decrypter. After, we started to code our own games.

Examples of Projects:

Now we will open our change calculator and our game! :)



Thank You for Listening!



Sources:

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