

PYTHON



DEAF YOUNG
CODE

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What is Python?



Python is a very popular general purpose programming language. It became known for its simplicity, ease of learning and speed of programming. Many professional programmers use Python at least as an auxiliary language, because it allows them to quickly and easily automate various tasks..



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Video



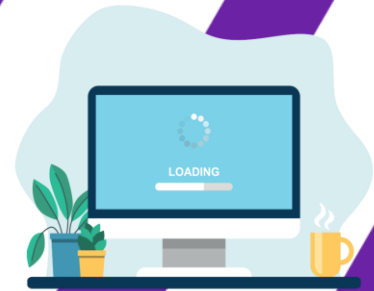
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Why we use Python?



We use Python because it is one of the most beginner-friendly and versatile programming languages available today. Its simple and human-readable syntax allows developers to focus on solving problems rather than worrying about complex coding rules.

Python is also very powerful, offering libraries and frameworks for almost every field of computing, from data analysis to artificial intelligence. Another reason why Python is widely used is its strong community support and continuous updates, which make it a reliable language for both academic learning and professional development



Where we use Python?



Python is used in many areas, including:

Web development (e.g., Django, Flask)

Data science and machine learning (e.g., Pandas, TensorFlow)

Artificial intelligence (AI)

Automation and scripting

Game development

Cybersecurity

Software testing and prototyping



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Key features

Simplicity and Readability:

Python's syntax is close to human language, which makes it easy to understand.

Open-Source:

It is free to use, modify, and distribute.

Cross-Platform:

Python works on all major operating systems, including Windows, macOS, and Linux..

Extensive Standard Library:

It comes with built-in modules for tasks like file handling, networking, and databases



Key features

Supports Multiple Paradigms:

You can use object-oriented, functional, and procedural programming styles.

Dynamic Typing and Memory Management:

Variables don't need explicit type declarations, and memory is managed automatically.

Strong Community and Ecosystem:

Millions of developers contribute to Python, so help, tutorials, and third-party tools are always available.

Integration:

Python can easily integrate with other languages and technologies like C, C++, Java, and .NET.



Why is it useful for the deaf?



Python is especially valuable for creating accessibility solutions for the deaf community. Because of its simplicity, deaf learners can focus on logic and problem-solving without being overwhelmed by complicated syntax. Python also provides many libraries and frameworks that allow developers to build tools supporting accessibility. For example:

1.

Speech-to-Text Applications:

Python can be used with libraries like Speech Recognition to convert spoken language into text, making conversations more accessible.



Why is it useful for the deaf?



2.

Subtitling and Captioning Systems:

With Python, developers can create programs that generate captions for videos in real time.



3.

Sign Language Recognition:

Using machine learning libraries, Python can help build systems that interpret sign language gestures into text or speech.



Why is it useful for the deaf?

4.

Communication Apps:

Python supports the development of text-based or visual communication tools, which are more accessible for the deaf.



5.



In short, Python empowers the deaf community by enabling both learning and creating assistive technologies that improve communication and accessibility.



Thank you for your attention!



Stay tuned for the next presentation!

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