

Introduction to Python for Data Movement



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Sean fun facts

- Work

- Worked in technology since 2003, mostly as a Data or Software Engineer
- Corps of Engineers → Acxiom → Dell → BlackBoard → Grand Canyon University → DriveTime → Cognizant → Salt River Project

- Outside of Work

- Husband since 2005
- Father since 2011 (2 boys)
- Christian
- Geek (reading, video games, sci-fi, fantasy, movies, comic books, etc.)
- Germany --> California --> Tennessee --> Arizona

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What this talk is (and isn't)

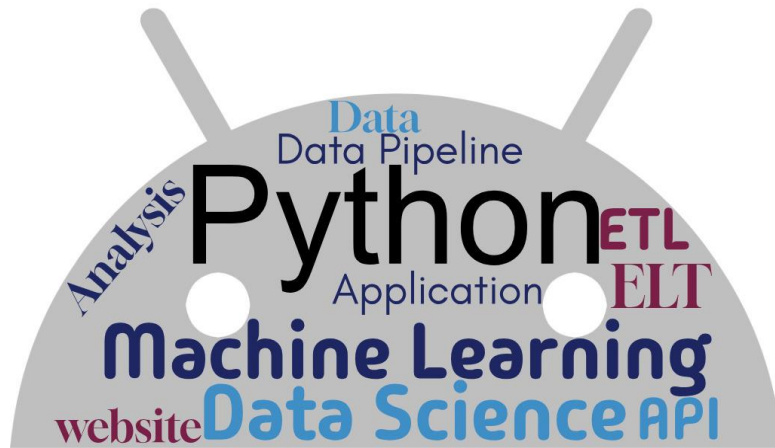


Is a quick intro to Python and one way it can be used to move data into a database.

Is NOT saying that Python is the only/recommended/best way to move data.

Python is a mature, powerful, simple language that is seeing a lot of usage in the data realm over the past decade. It is useful to know for a variety of reasons.

What is Python used for?



Python Fun Facts

- First Released in 1991
- High-level | Interpreted | Multi-Paradigm
- Extensible with packages
- Powerful, fun, and easy to use
- [TIOBE](#) language of the year many times
- Named for “Monty Python’s Flying Circus”



[TIOBE](#) language of the year: 2007, 2010, 2018, 2020, 2021, and 2024

The Zen of Python

- Beautiful is better than ugly.
- Simple is better than complex.
- Complex is better than complicated.
- Readability counts.
- Now is better than never.
- If the implementation is hard to explain, it's a bad idea.
- If the implementation is easy to explain, it may be a good idea.

For the rest see PEP 0020



Long time Pythoneer Tim Peters succinctly channels the BDFL's guiding principles for Python's design into 20 aphorisms, only 19 of which have been written down. Here are a few of my favorites.

From <https://peps.python.org/pep-0020>

Extensible

- The Python Package Index (PyPI)
- Use pip to install packages from PyPi



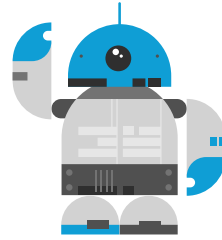
<https://pypi.org/> - The Python Package Index (PyPI) is a repository of software for the Python programming language.

Originally known as the cheese shop after the “Cheese Shop” sketch from Monty Python’s Flying Circus

Pip – recursive acronym “pip installs packages”

Demo Pre-requisites

- Python and 2 packages
 - requests
 - pyodbc
- VS Code and Microsoft Python extensions
- Sql Server Developer Edition
- Query Environment for Sql Server (SSMS, VS Code, etc)
- Sample API Jokes Endpoint



<https://www.python.org/>

<https://pypi.org/project/requests/>

<https://pypi.org/project/pyodbc/>

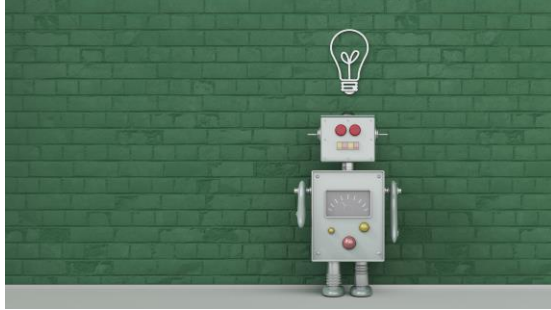
<https://code.visualstudio.com/download>

<https://www.microsoft.com/en-us/sql-server/sql-server-downloads>

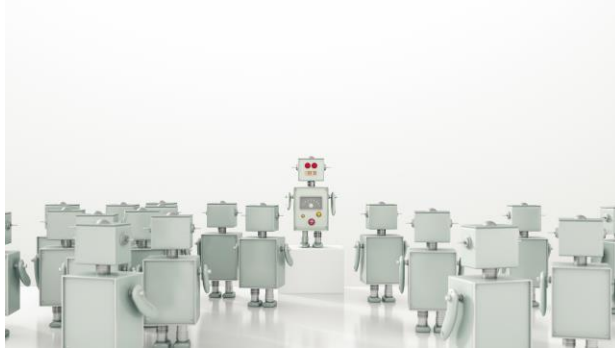
<https://learn.microsoft.com/en-us/sql/ssms/download-sql-server-management-studio-ssms?view=sql-server-ver16>

<https://sampleapis.com/api-list/jokes>

Demo



Discussion



End

