Introduction to Data Science for Social Scientists

Lesson 1 - Intro to Python



1. Python's history, relevance and usefulness

Python is a widely-used general-purpose, high-level programming language. It was initially designed by Guido van Rossum in 1991 and developed by Python Software Foundation. It was mainly developed for emphasis on code readability, and its syntax allows programmers to express concepts in fewer lines of code.

What started as a hobby project, soon became a general purpose programming language: nowadays, you can use Python to build practically any piece of software. But how did this happen?

Well, first of all, Python is open source. It's free to use.

Second, it's very easy to build packages in Python, which is code that you can share with other people to solve specific problems. Throughout time, more and more of these packages specifically built for data science have been developed. Suppose you want to make some fancy visualizations of your company's sales. There's a package for that. Or what about connecting to a database to analyze sensor measurements? There's also a package for that. People often refer to Python as the swiss army knife of programming languages as you can do almost anything with it.

Arithmetic Operators + Comments + Basic Functions + Order of operations

```
In [ ]: ## Multiplication
    1 + 2
Out[ ]: 3
```