# Python as a second language

Introduction to Python

### Thank You

- Geert Jan Bex
  - <a href="https://github.com/gjbex/training-material/tree/master/Python">https://github.com/gjbex/training-material/tree/master/Python</a>
  - https://creativecommons.org/licenses/by/4.0/deed.ast#
- Slides + demo-files
  - https://franklbvp.github.io/python intro/

# What will be covered in this session?

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## Scope

- Teach programming in Python
  - prerequisite: you should know how to program in some other language, if not consider first completing
    - CodeAcademy <u>https://www.codecademy.com/catalog/language/python</u>
    - LearnPython https://www.learnpython.org/
- These sessions won't teach you how to program, how to find algorithms, ... that's beyond the scope

• Taken from GJ Bex

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#### Content

- Environment
  - · User environment
    - · Command line
    - Spyder
    - Notebook
  - Slides: Python intro-userEnvironments

#### Content

- Basic syntax
  - Slides: Python\_intro-programming-syntax
- Variables
- Operators
  - Slides: Python\_intro-programming-variables\_operators
- Built-in atomic Data types
  - Slides: Python\_intro-programming-builtin\_datatypes
- Data structures
  - Lists
  - Tuples
  - Sets
  - Dictionaries
  - Slides: Python\_intro-programming-datastructures

#### Content

- Flow control
  - · Basic flow control commands
    - Slides: Python\_intro-programming-control\_flow
  - Functions
    - Slides: Python intro-programming-functions
- IO
  - Slides: Python\_intro-programming-io

# Using the demo files

- Using the demo notebooks
- Download the zip file
- Unzip the file a local disk (Windows ex. in c:\Temp)
- Notebook
  - Start Anaconda powershell
    - 'cd' to the folder with ipynb files
    - jupyter notebook
- py source files
  - 'cd' to the folder with py files
  - Start editor / IDE
  - · Run from command line