

# Python as a second language

Introduction to Python

## Thank You

- Geert Jan Bex
  - <https://github.com/gjbex/training-material/tree/master/Python>
  - <https://creativecommons.org/licenses/by/4.0/deed.ast#>
- Slides + demo-files
  - [https://franklbvp.github.io/python\\_intro/](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  
<https://www.codecademy.com/catalog/language/python>
      - 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