

## 1. Who made python

- Guido van Rossum
- Netherlands
- Centrum Wiskunde & Informatica (CWI), a research institute in Amsterdam
- British comedy group **Monty Python's Flying Circus**, not the snake

## 2. Why we learn python or uses of python

- a. Web development
- b. Scientific computation
- c. Optimization
- d. Machine learning and deep learning
- e. Open source
- f. Rich in libraries
- g. Web scraping
- h. Work with files
- i. Work on different os
- j. Interpreted language

## 3. Python version and tools

## 4. How python made from c

## 5. How python is different from other languages

## 6. Python syntax

## 7. Variables and their names

## 8. Type of variable initialization: camel, pascal, snake case

## 9. One value to multiple variables

## 10. Multiple value to multiple variables

11. Global and local variables
12. 35 keywords
13. Data types
  - a. Int
  - b. Float
  - c. String
    - i. Slicing in string
    - ii. Formatted string literal
    - iii. Split function
    - iv. Strip function
    - v. Replace function
    - vi. Concatenate
    - vii. Escape characters
    - viii. Capitalize
  - d. Complex
  - e. List
  - f. Set
  - g. Tuple
  - h. Dictionary
  - i. Range
14. Python numbers: int, float, complex
15. Operators
  - a. Arithmetic
  - b. Assignment
  - c. Comparison/Relational
  - d. Logical
  - e. Bitwise
  - f. Membership

g. Identity

16. Indentation
17. Comments
18. Type function
19. Type casting
20. Input and output function of c and python