

# Variables

## Core Materials

### Variables

In this first Notebook we explain the core concept of variables in Python:

- what is a variable?
- how to introduce a variable
- naming rules for variables
- how to assign it a value
- how to manipulate a variable value
- how to do simple math with variables
- different types of variables
- sequence type indexing
- substrings
- how to print a variable

Variable types included:

- numeric: `int`, `float`
- Boolean
- String
- Sequence: `tuple`, `list`, `range`

## Optional materials

### PythonBasicProgramming\_\_23.ipynb

Printing using string formatting and f-strings.

### PythonBasicProgramming\_\_25.ipynb

String encoding, formatting and string operations

### Required Knowledge:

- PythonBasicProgramming\_\_20.ipynb