PHILOSOPHY AND HISTORY OF SCIENCE WITH COMPUTATIONAL MEANS

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Some Python Data Types

Name	Category	Type	Description	Example
Strings	Text	str	Ordered sequences of data	"Hello" 'Hi'
Integers	Numeric	int	Positive or negative whole numbers	-10 600
Float	Numeric	float	Numbers with a decimal point	5.7 8.0
Complex	Numeric	complex	Numbers with an imaginary component	z x+y
Lists	Sequence	list	Ordered sequence of objects	["yes","ja","oui","sí"]
Tuples	Sequence	tuple	Immutable sequence of objects	("Ok", 3.14, 42)
Dictionaries	Mapping	dict	Unordered collection of key:value pairs	{'name': 'Lucy'}
Sets	Set	set	Unordered collection of unique objects	{"a","b",'c','d'}
Booleans	Boolean	bool	Logical value	True, False

Variable Assigments

You can find out the type of variable using the following built-in function:

```
type(x)
```

- We can assign the data types to a variable name.
- - Take into account that names cannot start with a number; there can be no spaces or symbols (but you can use an underscore).
  - Typically, we use lowercase letters for variable names.
  - Avoid names that have a special meaning in Python, for example, 'str' or 'int.' These words will have a different color syntax highlighting that will alert you.

- In Python, it is possible to reassign a variable name to a different data type (in other languages, it would produce an error).

```
soul = 3
soul = ['vegetative', 'sensitive', 'rational']
```