Programming

Class 15 - Numpy - Pandas



Universidad CES

Fundaments

Numpy is an open source Python library that is used in almost all fields of science and engineering. It is the universal standard for working with numeric data in Python and is the core of the scientific ecosystems of Python and PyData.

Syntaxis:

Import numpy as np

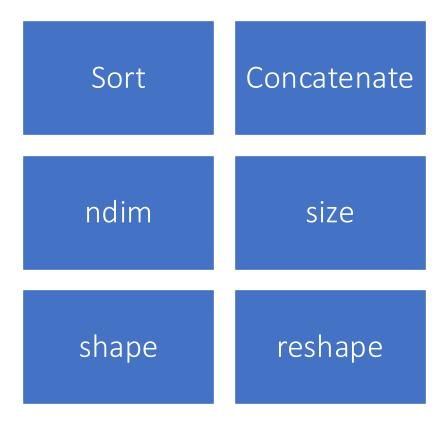


It is an matrix of data structure. Information or raw elements are stored in it.

It is the central structure of the numpy library and allows the implementation of multiple functions that facilitate data handling, especially numerical data in the python programming language.



Numpy functions



There are many other functions, these are just a few.

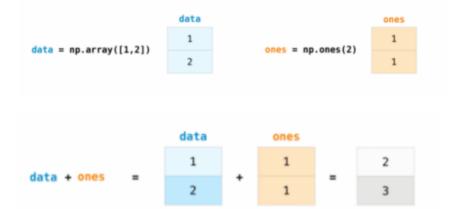
*See examples.

Indexation numpy

Access the values of a numpy array

	data	data	a[0]	data[1]	data[0:2]	ı	data[1:]	data[-2:]	l a	data	
0	1		1		1					1	Ι.
1	2			2	2		2	2		2	
2	3						3	3	2	3	ľ

Operators Numpy





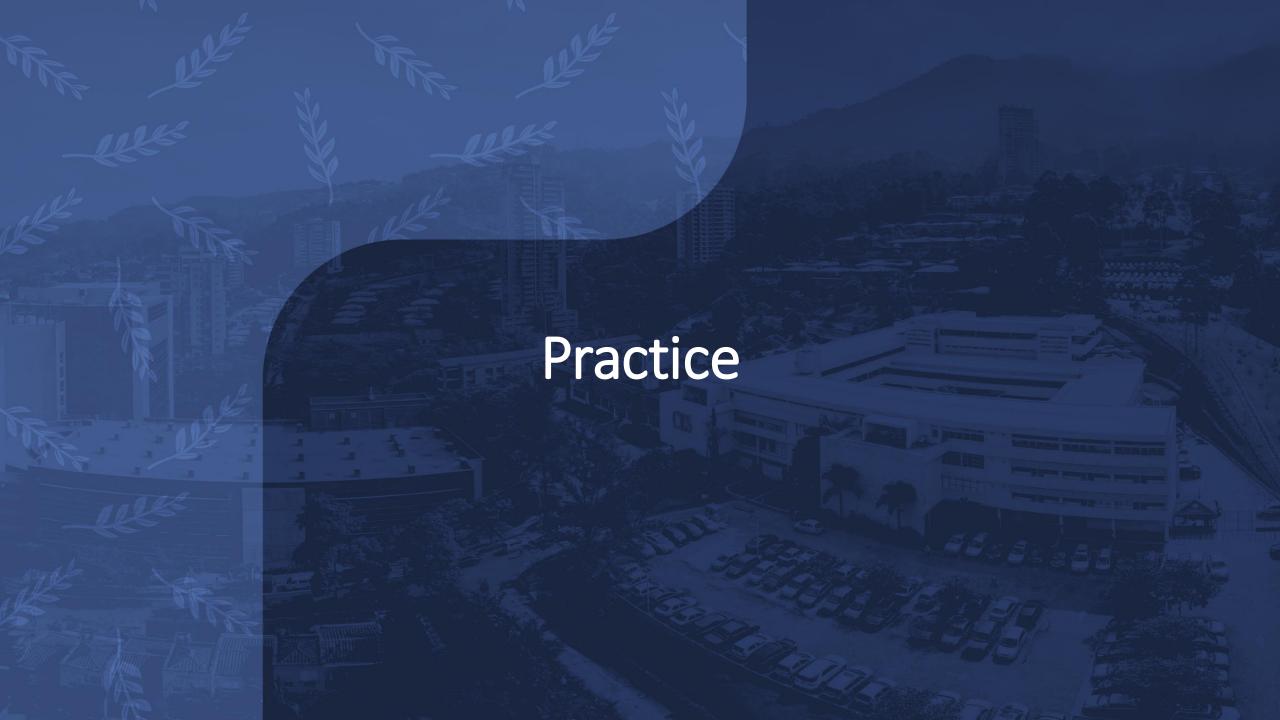
Basic operations:

- Sum
- Subtraction
- Multiplication
- Division

Advanced and most used operations:

- Max
- Min
- Sum
- Media

<u>Pandas</u>



Thank you

