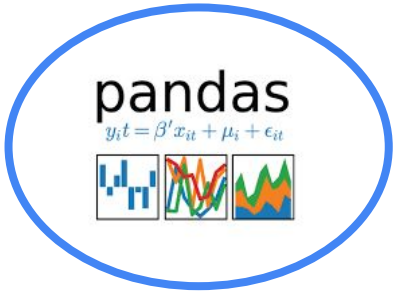
Pandas

04.12.19 / Us (again)

Today's Focus



Pandas

Matplotlib II

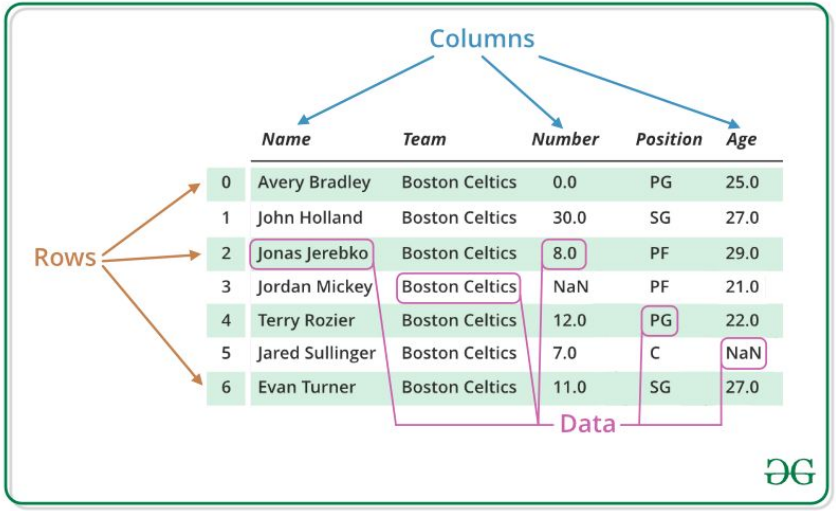
Challenges

Pandas

- Python library designed for data manipulation and analysis
- High-performance, easy-to-use data structures: DataFrames and Series
- Objective: Carry out entire data analysis workflow in Python (no need for domain specific languages like R!)
- Really easy to import from and export to Excel spreadsheets

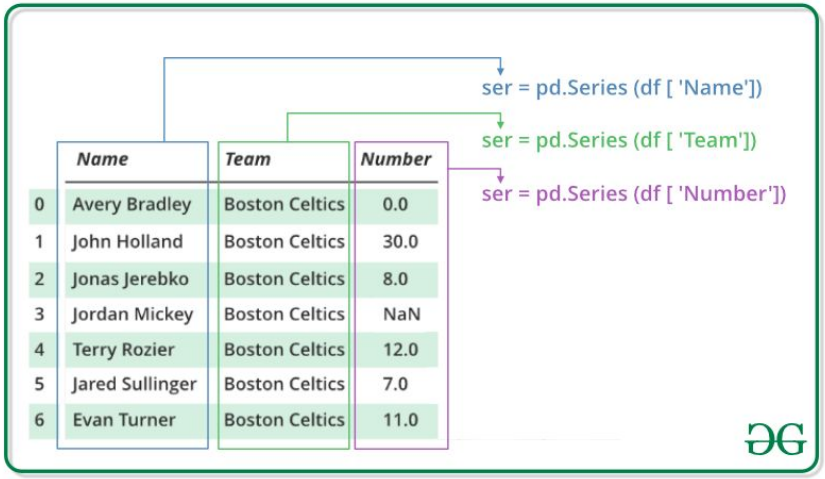
What is a DataFrame?

- Python object: 2d table (like a spreadsheet with column names and row labels)



What is a Series?

- Python object: 1d array (like a single spreadsheet column)



	Name	Team	Number
0	Avery Bradley	Boston Celtics	0.0
1	John Holland	Boston Celtics	30.0
2	Jonas Jerebko	Boston Celtics	8.0
3	Jordan Mickey	Boston Celtics	NaN
4	Terry Rozier	Boston Celtics	12.0
5	Jared Sullinger	Boston Celtics	7.0
6	Evan Turner	Boston Celtics	11.0

Pandas vs NumPy

- Pandas provides us with some powerful objects like DataFrames and Series
- NumPy provides multi-dimensional arrays, DataFrames are 2d tables
- Pandas works when data is in tabular format
- NumPy works when data is numeric

There is no best alternative, which one you should use depends on the use case (sometimes you even need to use both)

Let’s jump to the Jupyter Notebook, see you there!!

Google Drive link with files:

https://tinyurl.com/sr3qbnx

Thanks!

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