

Introduction to Pandas

Pandas is a package for data manipulation and analysis in Python. The name Pandas is derived from the econometrics term *Panel Data*. Pandas incorporates two additional data structures into Python, namely **Pandas Series** and **Pandas DataFrame**. These data structures allow us to work with *labeled* and *relational* data in an easy and intuitive manner. These lessons are intended as a basic overview of Pandas and introduces some of its most important features.

In the following lessons you will learn:

- How to import Pandas
- How to create Pandas Series and DataFrames using various methods
- How to access and change elements in Series and DataFrames
- How to perform arithmetic operations on Series
- How to load data into a DataFrame
- How to deal with Not a Number (NaN) values

The following lessons assume that you are already familiar with NumPy and have gone over the previous NumPy lessons. Therefore, to avoid being repetitive we will omit a lot of details already given in the NumPy lessons. Consequently, if you haven't seen the NumPy lessons we suggest you go over them first.

Downloading Pandas

Pandas is included with **Anaconda**. If you don't already have Anaconda installed on your computer, please refer to the Anaconda section to get clear instructions on how to install Anaconda on your PC or Mac.

Pandas Versions

As with many Python packages, Pandas is updated from time to time. The following lessons were created using Pandas version 0.22. You can check which version of Pandas you have by typing `!conda list pandas` in your Jupyter notebook or by typing `conda list pandas` in the Anaconda prompt. If you have another version of Pandas installed in your computer, you can update your version by typing `conda install pandas=0.22` in the Anaconda prompt. As newer versions of Pandas are released, some functions may become obsolete or replaced, so make sure you have the correct Pandas version before running the code. This will guarantee your code will run smoothly.

Pandas Documentation

Pandas is a remarkable data analysis library and it has many functions and features. In these introductory lessons we will only scratch the surface of what Pandas can do. If you want to learn more about Pandas, make sure you check out the Pandas Documentation:

[Pandas Documentation](#)