From  To 

(For Neuroscience)

Outline

- Why python?
- My story
- Installation
- Recommended tools
- Basic syntax and data structures
- Numpy and Pandas for data analysis:
  - Fundamentals
  - Operations (cleaning, filtering)
  - Queries
- **MNE for EEG analysis**
- Suggested libraries for fMRI analysis

Why 

- It is a general-programming language (has extensive built-in library)
- It is FREE!
- It is FASTER!
- It has an active development community
- Many great libraries (almost anything you can think of is already available) also for Neuroscience
- Syntax is simple and intuitive
- Object oriented in nature (makes the program more structured and better organized)

My Story

What is 

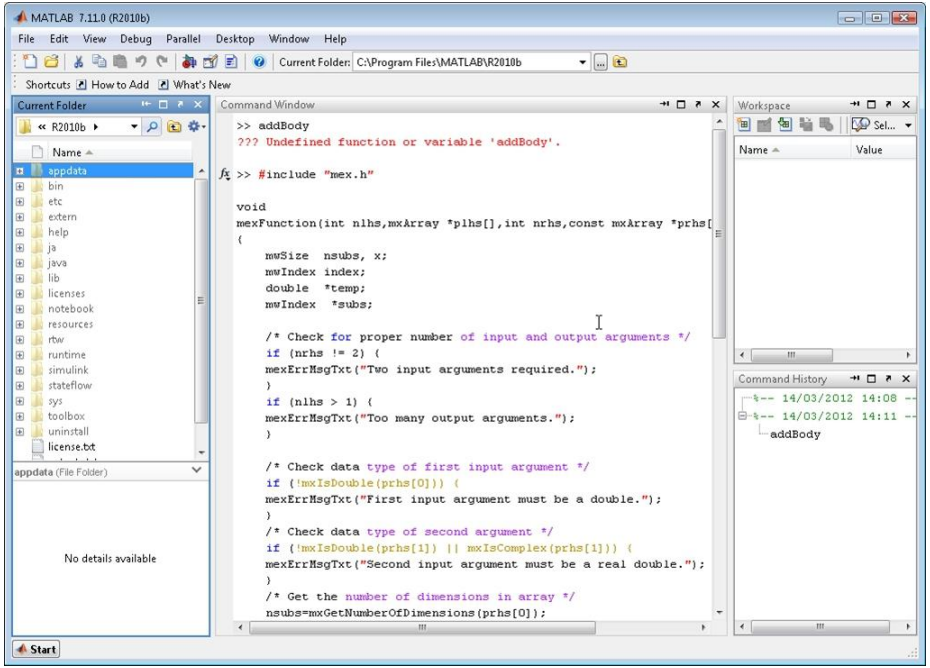
- An open source distribution of Python language.
- Used for large-scale data processing, predictive analytics, and scientific computing.
- Aims to simplify package management and deployment.

Installation: https://www.continuum.io/downloads

- To install new library: go to anaconda terminal and issue "pip install ..."

What we will work with and how it looks

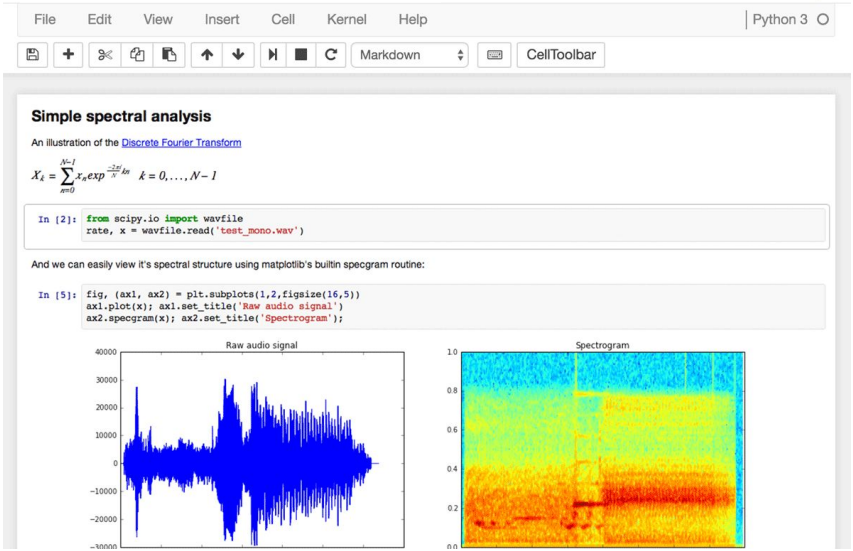
MATLAB has 1 IDE:



What we will work with and how it looks

Python has many IDEs

jupyter



(Pycharm)