

Getting Started with Python

STATISTICS FOR DATA SCIENCE

NASHVILLE  SOFTWARE SCHOOL

Objectives

1. Learn the basics about Anaconda and Jupyter Notebook
2. Learn the difference between markdown and code cells
3. Understand file structure setup for working with Jupyter Notebook
4. Learn basic keyboard shortcuts for Jupyter Notebook
5. Gain familiarity with commonly used resources for Python

What is Anaconda?

Anaconda is a popular, open source platform for coding with Python. It is very commonly used by those who code with Python for data analytics and data science.

It includes multiple applications. We will primarily using Jupyter Notebook as an interface to Python.

Learn more at <https://www.anaconda.com/>

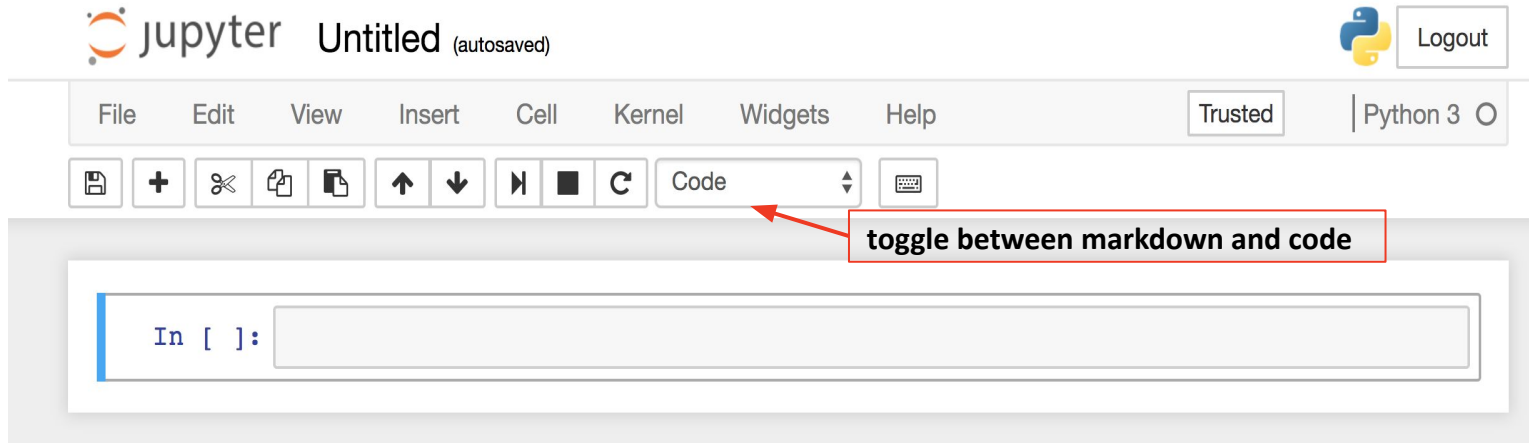
What is Jupyter Notebook?

Jupyter Notebook is an application that we will use to write and run Python code. It is organized with cells, providing an easy way to easily run just one particular component of code at a time.

The two main types of cells we will use are **code cells** and **markdown cells**.

- Code cells, as the name suggests, are where we will enter and run code.
- Markdown cells give us places to add text. The notebooks we go over in class have text for context/explanation, links to resources, etc. You can use markdown cells to add your own notes, flag things to come back to, etc. It is good practice to use markdown cells to help make your code more readable, both to others and to yourself in the future.
 - [Markdown is a markup language](#), and learning a bit of syntax gives you the ability to add formatting to your notes.

How to designate cell type in Jupyter Notebook



File Path Review

You will see, and need to enter, file paths in your Python code to allow the notebook to find various files, primarily data files. This is an example of what those will look like:

```
"../data/movies_data.csv"
```

- The “.” component directs to move one file up in the hierarchy
- The “/data” directs to move into the data folder
- The “/filename.fileextension” directs to go into the file of interest, in this case it is the movies_data.csv

Keyboard Shortcuts for Jupyter Notebook

There are many keyboard shortcuts available when you're working in Jupyter Notebook. You can [review a full list](#), but here are a few common ones:

- **Shift+Enter** - run the current cell and move to the next cell
- **a** - insert a cell above
- **b** - insert a cell below
- When clicked into a cell to type:
 - **Tab** - code completion, especially useful for completing variable names
 - **Ctrl+z** - undo changes, can click repeatedly to return to older version of that cell's code

Using Resources to Troubleshoot

Within Jupyter Notebook, there are a variety of ways to access documentation. We will go over these in the first notebooks, and we strongly encourage you to use them regularly as you begin to work on your own code.

You should also continue to build your search engine use skills. Typing “Python” (or a specific library) plus what you are trying to do or copying and pasting error messages into a search are good places to start. Pay attention to the sites you commonly see come up, and see which tend to have a format/style that works for you.

Stack Overflow is an especially useful resource for Python. Look for the answer with the green check next to it - that is the one accepted by the person who posted the question.