Python Labs

Kannan Singaravelu, CQF

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Welcome!

Python Labs is a series of sessions that will guide you through the implementation of the models learned in the core lectures. These labs are of intermediate-level difficulty and require some understanding of programming. It is strongly recommended that you go through the Python primers if you are new to Python programming.

Each Python Lab will be held twice - at 13:00 hrs GMT and 18:00 hrs GMT - lasting up to 60 minutes. The same content will be covered in both sessions. Python codes will be uploaded to the portal either as PDF or HTML files. Please note Python lab scripts are not shared as Jupyter Notebook.

Python has now become an official programming language of the CQF Program and you'll be solving all future assignments, exams, and final projects using Python, it is strongly recommended that you attend live Python labs sessions to gain the maximum.

How To Get Help?

Being able to frame the right question is a very important skill in the world of programming.

- Questions via chat (on live webcast)
- Documentation Pages
- Stack Overflow
- Raise a ticket

Learning Platform

Jupyter ecosystem is a great tool for data analysis and we'll be using Jupyter notebook for the labs.

Coding Motto

"If you have limited time to solve a problem, spend more time in solving it than finding a right solution."

Installation & Settings

It is strongly recommended to create a virtual environment for your labs by using any one method. Refer to the below table for installation steps.

Steps	Command [Mac: Optional]
Method 1	
Install Ananconda	*https://www.anaconda.com*
Create 'pythonlab' folder	*~ /projects/pythonlab*
Save the requirements.txt	*~ /projects/pythonlab/requirements.txt*
Create a new conda environment	*conda create - -name pythonlab python=3.9*
Activate the new environment	*conda activate pythonlab*
Install libraries	*pip install -r requirements.txt*
Method 2	
Create virtual environment	*python3 -m venv pythonlab*
Activate the environment	*source pythonlab/bin/activate*
Install libraries	*pip3 install -r requirements.txt*

Table 1: Installation Steps.

Good luck!

I hope you will find Python Labs useful. Please take a look at the full suite of programming modules including primers, exercises, electives, and workshops. Refer here for a curated list of Python resources on quantitative finance. Please also let me know if you have any feedback.

June 2023, Certificate in Quantitative Finance.