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Version of Python: 2.7.13 Version of Spyder: 3.23

Description: In this program we download the data for several indexes in the last 25 years. We check the lognormal distribution of prices and the normal distributions of returns and we calculate the probability of the event: "Black Monday" occurred in 1987 (22.5% drop in a single day). We also realize simulations of geometric Brownian movement and we create a model based in Fractal Analysis and Hurst Exponent.

Installation: Please install on your pc the latest version of Anaconda with Python 2.7 and the latest version of Spyder. The program was run in Windows 10 but it should work also if you use a Mac PC or a Linux distribution.

One can download the Anaconda / Python 2.7 / Spyder here:

https://www.anaconda.com/download/

Packages Used:

The following packages should be installed by the anaconda environment or via through pip install package in anaconda prompt: Pandas, Numpy, MatPlotlib, Pylab, Scipy.