

Feel free to work with other students, but make sure you write up the homework and code on your own (no copying homework *or* code; no pair programming). Feel free to ask students or instructors for help debugging code or whatever else, though.

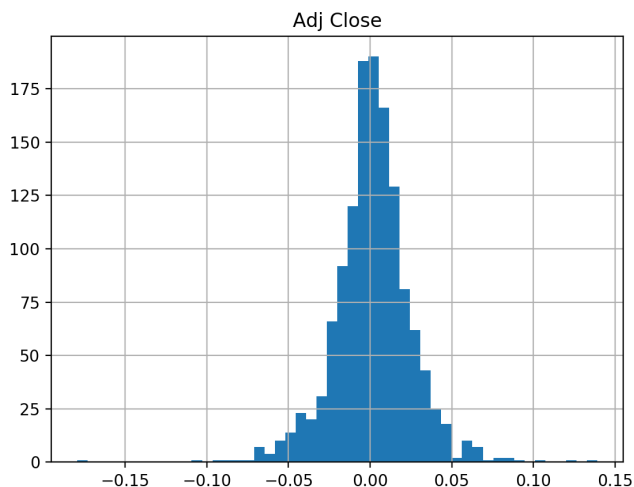
*Note:* You need to create a Github account for submission of the coding part of the homework. Please create a repository on Github to hold all your code and include your Github account username as part of the answer to the coding problems.

**1** Follow the tutorial in the following link and run all the code in the tutorial on your own machine and submit the code and output as homework 1.  
<https://www.datacamp.com/community/tutorials/finance-python-trading>

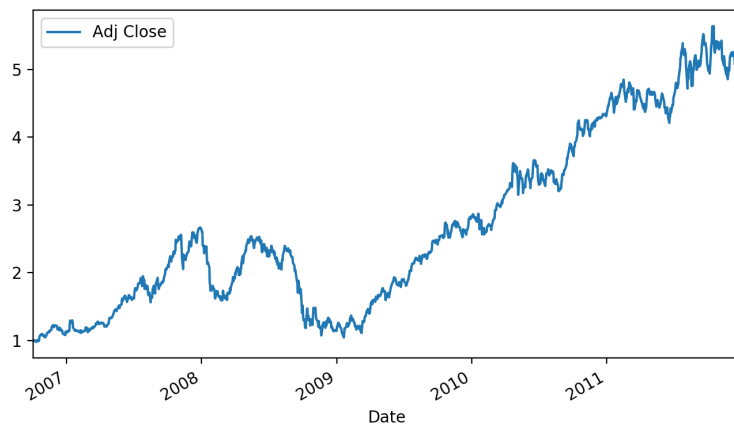
Time Series Data of Close Price



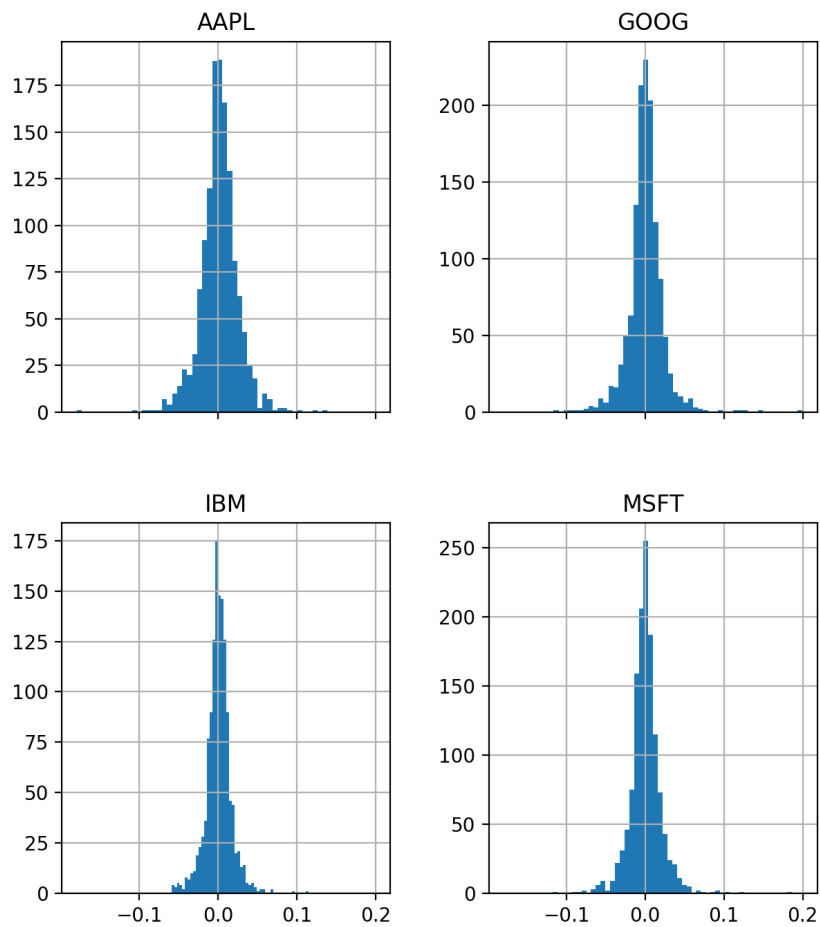
Histogram of Adjusted Close Price vs daily percent change



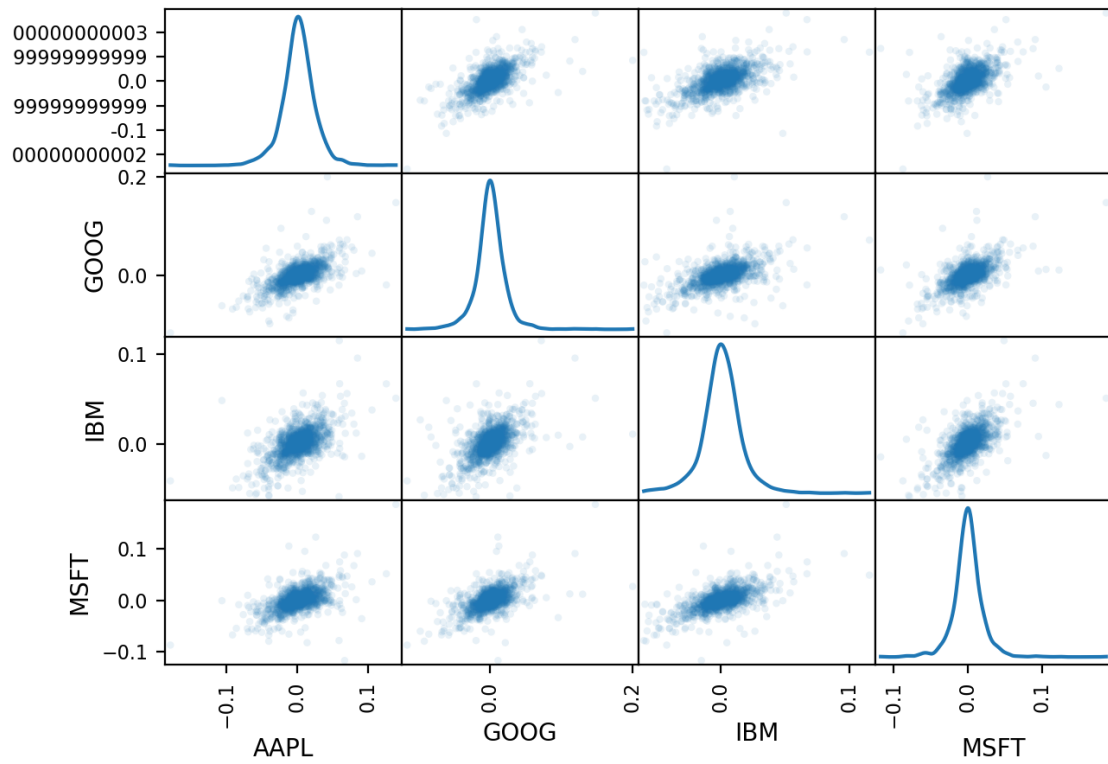
## Cumulative daily rate of return



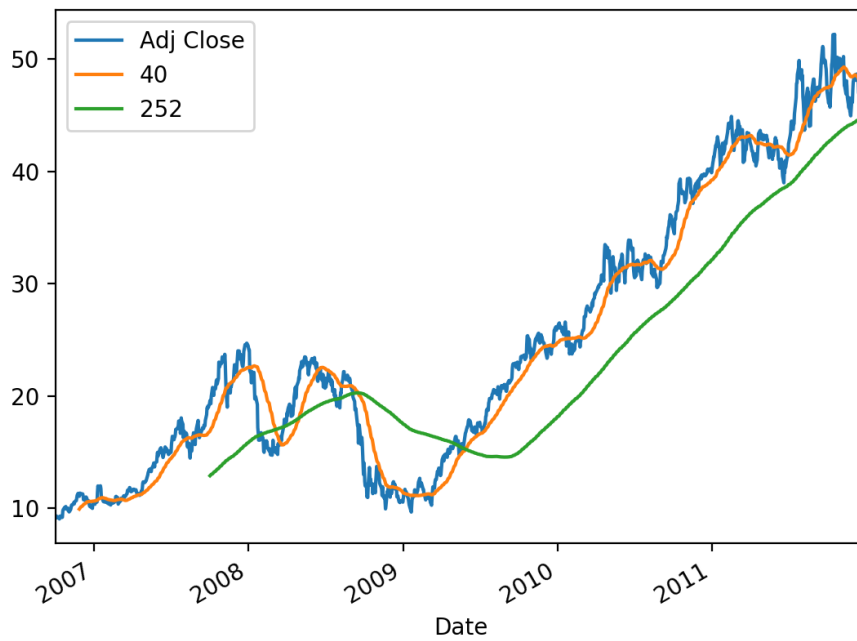
## Histogram for multiple stocks



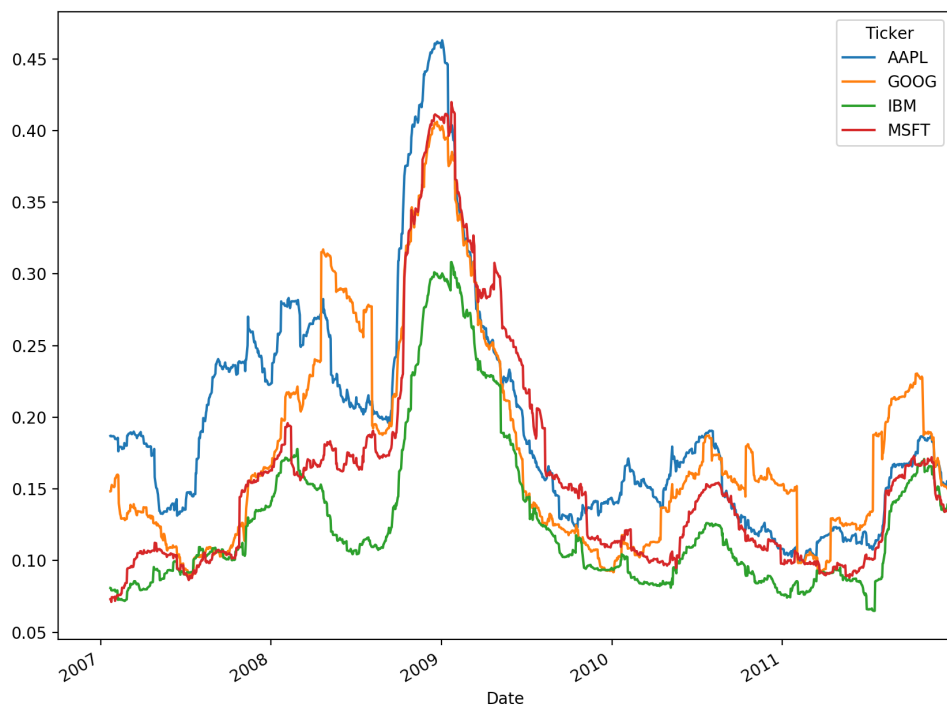
## Scatter Matrix



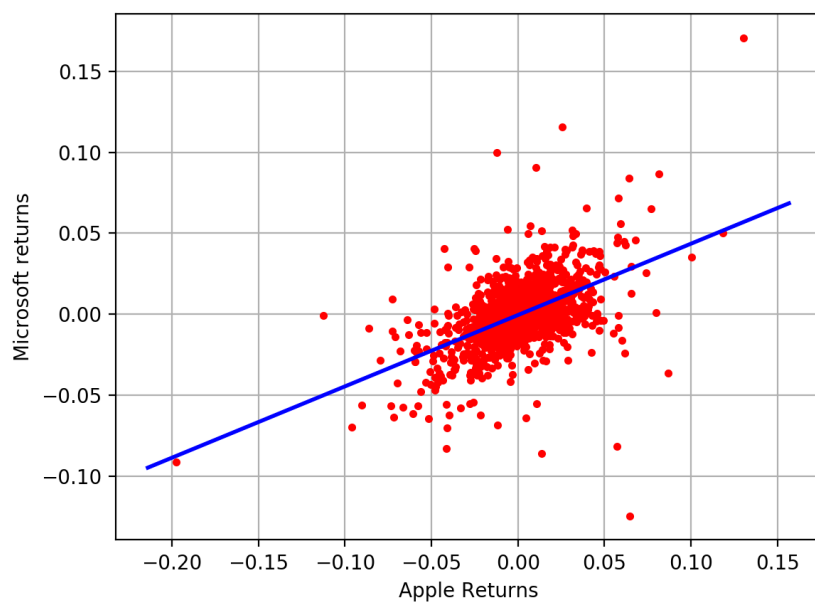
Daily vs short window vs long window



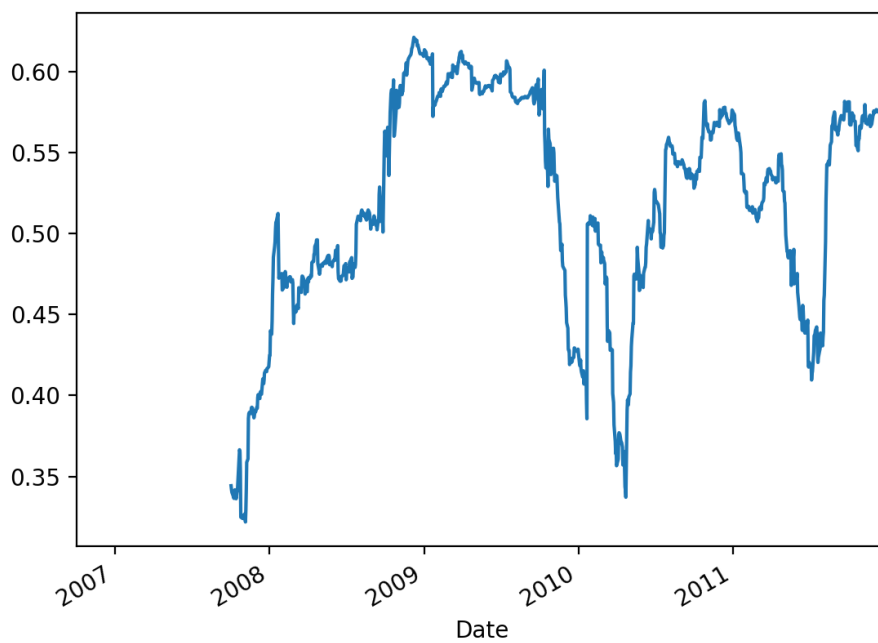
## Volatility for multiple stocks



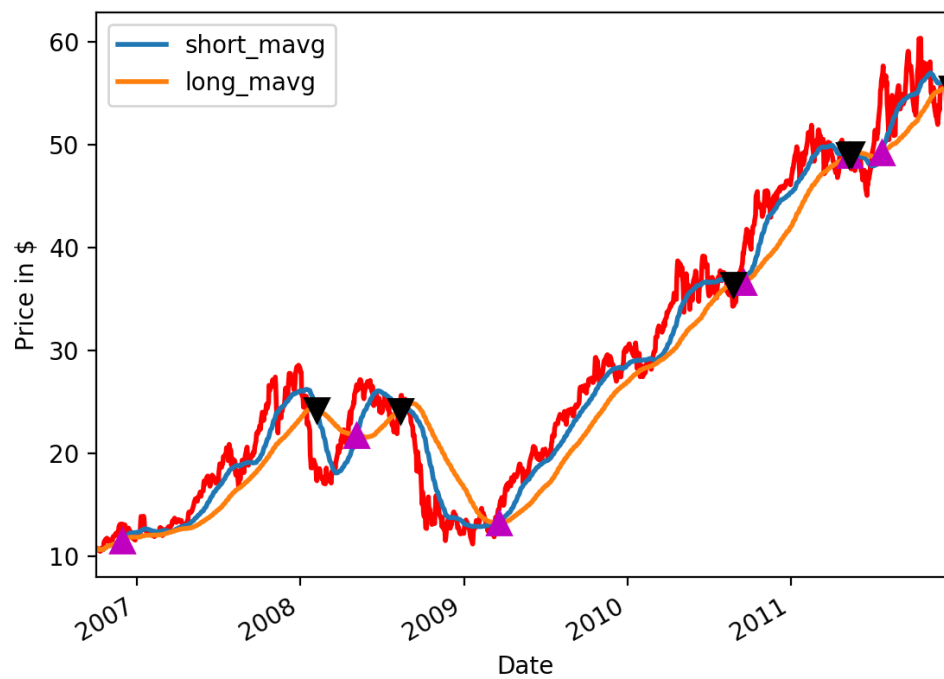
## Ordinary Least-Squares Regression (OLS)



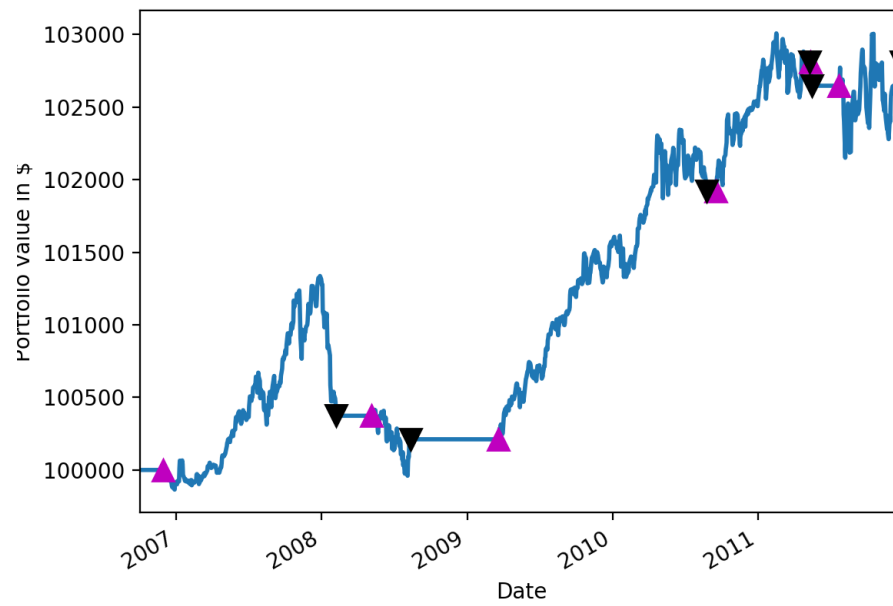
## Rolling correlation of returns



## Short and long moving averages, and buy and sell signals



## Portfolio Total



## Maximum Drawdown

