Introduction to Finance Worksheet 2

Problem 1. *Estimate the variance of a non-dividend yielding stock*[1] *using the exponentially weighted moving average model. Graph the volatility over time. Graph several values of* λ*. What conclusions can you draw?*

Problem 2. *Choose an exotic option. Assume that a stock evolves via geometric browning motion and find the value of the option at expiration. Describe your solution clearly. What conclusions can you draw?*

[1] You can find historical data at `finance.yahoo.com`