Exercise 3

Consider the dataset 2010CL_BL.xls and perform the following tasks:

1. Construct a time series for the daily returns on your chosen PORTFOLIO over the period 2/1/2006-2/2/2009.

2. Construct some measure of the first order autocorrelation of daily returns and squared daily returns and compare them.

3. Construct and histogram of returns and comment on their (a-)normality

4. Estimate a GARCH model and an exponential smoothing model for the daily returns. On the basis of your estimated models produce alternative forecasts of volatility of daily returns over the period 02/02/2009-01/02/2010.

5. Produce daily measures of daily and weekly VaR of your portfolio for the period 2/2/2009-2/02/2010 and compare them with the observed returns.