2nd set SAS assignments

For the current and the coming SAS exercises: Get familiar with the included SAS Help function and the SAS Online Tutorial which can be found here:


1. Working with data

i) Create a library named saskurs pointing to a directory of your choice.

ii) Import the dataset stockprices.xls with PROC IMPORT into your library call it stockprices.

   Hint PROC IMPORT: Use SAS help. See PROC IMPORT Statement. Define in the procedure datafile, out and the options replace and DBMS.

iii) Use a data step and format the variable DATUM as date8.. Label the variables:

   - DAX: DAX Index
   - BAS: BASF Stock Price
   - BAY: Bayer Stock Price
   - HOE: Hoechst Stock Price
   - CBK: Commerzbank Stock Price
   - DBK: Deutsche Bank Stock Price
   - DRB: Dresdner Bank Stock Price

   Hint: Use a macro for labeling the stocks to avoid a too long code.

iv) Make use of a data step to create a series of the lagged price for each stock (use function \texttt{lag()}) and calculate the log-return for each stock price series (use function \texttt{log()}). Drop the lagged prices from the dataset. \textbf{Hint}: Use a macro to avoid a too long code.
v) Choose a return series and/or a price series and plot them. (Use **PROC GLOT**) **Hint:** Write a macro that is flexible regarding the plotted variable (=return or price) and the stock.

vi) Create a data set from `stockprices` that contains the first or the last observation of each year. **Hint:** `dat_year=year(datum)`; Sort the data by `datum`. Then use a data step with a by statement, as by `dat_year datum`; and `first.dat_year` or `last.dat_year`.

vii) Export the data set from vi) into a .txt file with **PROC EXPORT**. **Hint** **PROC EXPORT:** Use SAS help. See **PROC EXPORT** Statement. Define in the procedure **DATA**, **OUTFILE** and the options **REPLACE** and **DBMS**.