ANLY 515 Risk Modeling
Homework 2 (100 points)
Remember to upload your answers by the due date. There will be a penalty of 10 points for each day the homework is late.

- The homework report must include all charts and answers required.
    - Upload 2 pdf files (answers, code)
- A file with the R code you developed must be included as an appendix. Please label each section of the code based on the question that you are answering. For example the code to download and create the subsets should be under "Create the data files".

Students should have a five-year portfolio. The calculations for this homework will be based on the data from the third year of your portfolio.

- Identify the five-year period of your portfolio
    a) Identify the period for this homework
- Use only 4 stocks from your portfolio

Part A – Individual Security Returns

1. Calculate Returns
    a) Calculate portfolio price returns for the homework period

2. Dividend reinvestment strategy
    a) Calculate portfolio total gross returns for the homework period
    b) Calculate portfolio logarithmic gross returns for the homework period
    c) Are the results the same?

3. Plot a comparison of Total Price returns and Total Gross returns

Part B – Portfolio Returns

Use the same investment period and the same stocks

1. Create an equally-weighted portfolio (rebalance each quarter)
2. Create a value-weighted portfolio (rebalance each quarter)
    a. Create weight pie charts for each quarter
3. Plot a comparison between the EW and the VW portfolios