Access and Excel Integration Assessment

1. Create a new module in Visual Basic Editor window and then rename the module as ‘Test’
2. Create a ‘updateProfolio’ subroutine in the Test module

For each stock, load latest 100 days stock close prices into dCls array, calculate daily return ratio and then store the ratios into dRto array

1. Calculate Sharpe Ratio (see the following formula) for each stock and then print the results in ‘Report’ worksheet, Column E.

Formula:

100 days average return ratio / 100 days standard deviation return ratio

Note: Dim vData() as Double

Note: use STDEV for calculating standard deviation

1. Update the Sharpe ratio in tblProfolio table

worksheetfunction.Match(5,[A:A],0)

1. Base on the results in step 3, Remove 2 stock records with lowest Sharpe ratio in tblProfolio table.
   1. You may use DELETE action query
   2. Option: Use SMALL and MATCH Worksheetfunction to find the last 2 Sharpe Ratio stocks
2. Base on the results in step 3, add 2 stock records into tblProfolio with highest sharpe ratio.
   1. You may use INSERT INTO SQL statement
   2. Use LARGE and MATCH Worksheetfunction to find the largest 2 Sharpe Ratio stocks
   3. Write your answer in the Portfolio worksheet

Bonus will be given if students are able to demonstrate the following skills:

* All answers are adjusted to 2 decimal places
* Handling dynamic size data table on worksheets
* Include Initialization and Validation sections in your program
* Insert comments to explain each section, FOR statements and IF statements
* Use variables to store intermediate answers. Marks will be taken off if your program printing values on the worksheets (except Step 3 in your test)