## **Collaborative Assignment 1**

James is a budding entrepreneur, and for the last two years he has been operating a sandwich stand in the lobby of his office building during the lunch hour. He also knows that careful data analysis can help him run his business more effectively. As a result, he has been tracking sandwich demand over the two years and he has carefully recorded the number of each type of sandwich demanded, the number he brought with him to sell, and his prices for each type of sandwich.

Your job is to use the data to determine how many sandwiches of each type he should bring each day in order to maximize his expected profits. Two CSV files are available to support your analysis. The daily sales data contains number brought and number demanded for each sandwich. (Note that there may be days where demand exceeds supply, but James is clever and he records the requests he is unable to fulfill.) The pricing data contains the cost and sale price of each type of sandwich.

Analyze the data and provide a recommendation to James. Be sure to identify any assumptions you make and be sure to back up your recommendations with thorough analysis. You should, as a group, submit a single report (expected to be 1-3 pages, but that is a guideline and not a rule) that provides your analysis. You may also attach any relevant code, but that is not required and will not be taken into account for grading purposes.

This assignment should be submitted through the module 2 collaborative assignment mechanism in blackboard by end of day (11:59 p.m. EDT) on **Wednesday, September 27, 2014**. Each group has its own discussion board and file share available.