The goal of this assignment is to help you get started on your project. In this project you'll create a revenue function based on data from the National Association of Theater Owners. To begin this assignment, read the Project Letter. You can find the Project Letter in the Project folder on the class website. In this assignment, you'll carry out the first two steps of the proposed strategy in the Project Letter. Follow the steps below to get the scatter plot of the data and to find a relationship between the admissions and price of admission.

1. Start by opening Excel and entering the data from the project letter into two columns. It is suggested that you graph the "admissions x as a function of the price p". Use this statement to help you organize how you place the rows of data into columns in Excel.

2. Make a scatter plot of the admissions x as a function of the price p in Excel. If you don't remember how to do this, revisit Tech Assignment 1 where you graphed the student to teacher ratios as a function of the years after 2000.

3. Label each axis on your graph with appropriate labels.

4. Using the Trendline command in Excel, find a model for the relationship between the admissions x and the price p. If you have forgotten how to find a regression model using Trendline, consult Tech Assignment 3 where you found models for the number of students and teachers. Make sure you include the equation of the model as well as the value of R^2 on your graph. Make sure you forecast forward and backward so that your model extends beyond the data and across the window of your scatter plot.

5. The equation of the model on your scatter plot is written with x as the independent variable and y as the dependent variable. Edit the label to reflect the variables in this problem, admissions x as a function of the price p.

6. Although any model is acceptable for this Tech Assignment, it would be nice if you found one that is appropriate for carrying out the last two steps in the proposed project strategy in the Project Letter. Try carrying out the strategy with the model you found in step 4 above.

7. For this Tech Assignment, I want to see your scatter plot of admissions x as a function of the price p with the model you found for this data. I'll be assigning points for the following characteristics:

   a. The scatter plot with admissions x as a function of the price p.
   b. Labels on each axis.
   c. An appropriate model.
   d. A label on the model with the appropriate variable names and the value of R^2.

Copy the scatter plot with these characteristics from Excel to Word. The graph should be appropriate for inclusion in your technical memo on this project. Include in your Word document your name, the date and your class.

8. Attach your Word document to the Turn In page in the Technology Assignment folder.