The data in sclass.csv contains data on over 29,000 Mercedes S Class vehicles – essentially every such car in this class that was advertised on the secondary automobile market during 2014. For websites like Cars.com or Truecar that aim to provide market-based pricing information to consumers, the Mercedes S class is a notoriously difficult case. There is a huge range of sub-models that are all labeled "S Class," from large luxury sedans to high-performance sports cars; one sub-category of S class even serves as the official pace car in Formula 1 Races. Moreover, individual submodels involve cars with many different features. This extreme diversity—unusual for a single model of car—makes it difficult to provide accurate information to consumers.

The variables in this data set are:

- id: a numerical id for this car in a larger data set on Mercedes vehicles

- trim: categorical variable for car's trim level, e.g. 550, 63 AMG, etc. The trim is like a sub-model designation.

- subTrim: only options are either hybrid or "unspecified"

- condition: new, used, or Certified Pre-Owned

- isOneOwner: true or false (one owner = true)

- mileage: mileage on the car

- year: the model year

- color: exterior paint color of the car

- displacement: engine size in liters; coded as a categorical variable

- fuel: gas, diesel, hybrid

- state: state in which the car was advertised

- region: region of the US in which the car was advertised.

- soundSystem: brand of sound system

- wheelType: alloy, chrome, etc.

- wheelSize: wheel size in inches, e.g. 18 inches, 19 inches, etc.

- featureCount: how many features listed on the sticker does the car have. price: the price in dollars

Your task is to explore the data set using the tools you have learned. The goal is to understand what predicts price. Find an interesting relationship involving three variables, one of which is price.

(A natural thing to try here here is to focus on price versus something, and then independently focus on price versus something else. That would be two bivariate relationships involving price. It's good to start your data exploration by looking at bivariate relationships, but ideally that's not where it should end. The best responses will tell a story about a genuinely multivariate relationship among price and two other variables at once.)

Provide appropriate visual/numerical evidence to summarize that relationship, and explain briefly what you have found. You definitely need a picture or two, but you shouldn't need more than a few paragraphs of text. The idea here is for you to spend a decent amount of time exploring the data and looking for relationships, but ultimately to zoom in on a single good story and tell it well.