Consider the automobile data set posted on blackboard. The Automobile dataset has a different characteristic of an auto such as body-style, wheel-base, engine-type, price, mileage, horsepower and many more. **In Python**, answer the following:

- 1. (3 points) Using the pandas library, read the csv datafile and create a data-frame called autos
- 2. (3 points) Report the mean price
- 3. (3 points) Report the median price
- 4. (3 points) A common rule of thumb to determine the skewness of a numeric dataset is to compare the mean and the median using the following rules:
  - $\bullet$  If the mean > the median  $\Rightarrow$  right-skewed distribution
  - If the mean  $\approx$  the median  $\Rightarrow$  symmetric distribution
  - $\bullet$  If the mean < the median  $\Rightarrow$  left-skewed distribution

Using the above rules, what is the skewness of price?

- 5. (3 points) Compute the variance of price
- 6. (3 points) Compute mean of the log(price)