2. Numerical Summaries of values \( X_1, \ldots, X_n \)
   a. Measures of Location or Typical Value
      i. Mean \( \bar{X} \)
      ii. Median
      iii. Trimmed mean: Compromise that removes an equal number of observations on each extreme,
          - takes the mean of the rest.
          - Percent of trimming is amount removed from each end.
   b. Measures of spread
      i. Sample interquartile range
          - upper sample quartile is quantity with at least \( \frac{1}{4} \) of data above it and at least \( \frac{3}{4} \) below it
          - lower sample quartile has above and below reversed.
          - Sample IQR is difference between these.
      ii. Variance:
          - Take average of squared differences from mean
          - \( s^2 = \frac{1}{n-1} \sum_{j=1}^{n} (X_j - \bar{X})^2 \)
          - As though we took \( X_j \) as values a discrete random variable takes on, all equally likely,
          - Except that denominator is adjusted to make variance \( 0/0 \) if \( n = 1 \).