* Two types of statistics - descriptive and inferential
* In statistics, a population refers to any complete collection of observations or potential observations, whereas a sample refers to any smaller collection of actual observations drawn from a population
* Random sampling is a procedure designed to ensure that each potential observation in the population has an equal chance of being selected in a survey
* Any statistical analysis is performed on data, a collection of actual observations or scores in a survey or an experiment.
* The precise form of a statistical analysis often depends on whether data are qualitative, ranked, or quantitative.
* Generally, qualitative data consist of words (Yes or No), letters (Y or N), or numerical codes (0 or 1) that represent a class or category. Ranked data consist of numbers(1st, 2nd, ...40th place) that represent relative standing within a group. Quantitative data consist of numbers (weights of 238, 170, . . . 185 lbs) that represent an amount or a count.
* A variable is a characteristic or property that can take on different values
  + A **discrete variable** *consists of isolated numbers separated by gaps*.
  + A **continuous variable** *consists of numbers whose values, at least in theory, have no restrictions*.