**Descriptive vs. Inferential Statistics**

In this section, we learned about how **Inferential Statistics** differs from **Descriptive Statistics**.

**Descriptive Statistics**

Descriptive statistics **is about describing our collected data** using the measures discussed throughout this lesson: measures of center, measures of spread, shape of our distribution, and outliers. We can also use plots of our data to gain a better understanding.

**Inferential Statistics**

Inferential Statistics **is about using our collected data to draw conclusions to a larger population**. Performing inferential statistics well requires that we take a sample that accurately represents our population of interest.

A common way to collect data is via a survey. However, surveys may be extremely biased depending on the types of questions that are asked, and the way the questions are asked. This is a topic you should think about when tackling the first project.

We looked at specific examples that allowed us to identify the

1. **Population** - our entire group of interest.
2. **Parameter** - numeric summary about a population
3. **Sample** - subset of the population
4. **Statistic** numeric summary about a sample

**Looking Ahead**

Though we will not be diving deep into inferential statistics within this course, you are now aware of the difference between these two avenues of statistics. If you have ever conducted a hypothesis test or built a confidence interval, you have performed inferential statistics. The way we perform inferential statistics is changing as technology evolves. Many career paths involving **Machine Learning** and **Artificial Intelligence** are aimed at using collected data to draw conclusions about entire populations at an individual level. It is an exciting time to be a part of this space, and you are now well on your way to joining the other practitioners!