## **WEEK 2 - CONFIDENCE INTERVALS**

In this second week, we will learn about estimating population parameters via confidence intervals. You will be introduced to five different types of population parameters, assumptions needed to calculate a confidence interval for each of these five parameters, and how to calculate confidence intervals. Quizzes will appear throughout the week to test your understanding. In addition, you'll learn how to create confidence intervals in Python.

## **Learning Objectives**

- Define a confidence interval
- Determine assumptions needed to calculate confidence intervals for their respective population parameter
- Calculate confidence intervals by hand for one population proportion, difference in two population proportions, one population mean, one population mean difference for paired data, and difference in population means for independent groups
- Demonstrate your understanding of confidence intervals by communicating statistical ideas clearly and concisely for a potential client
- Create confidence intervals in Python