**DTSC-580: Data Manipulation** 

**Assignment: Halloween Candy** 

## **Directions**

In this assignment, your job will be to clean and wrangle the data to prepare it for a machine learning project. You will both submit your notebook to be automatically graded to CodeGrade and answer questions about this data and the cleaning process through a Brightspace quiz.

Once you have completed all the tasks in the notebook, save your notebook as halloween\_candy, and verify that all the tests pass in CodeGrade. Then when you take the quiz you can be more sure that the answers you provide in the quiz are accurate. Note that some CodeGrade automatic tests will not pass until the entire notebook is finished so you should wait until at least you have completed the data cleaning section to check that part of your work.

## **Show Work**

Remember that you must show your work. Students submissions are spot checked manually to verify that they are not hard coding the answer by checking CodeGrade's expected output. If this is seen, the student's answer will be manually marked wrong and their grade will be changed to reflect this.

For example, if the answer to Q1, the mean of a specific column, is 22:
# correct way
Q1 = df['column\_name'].mean()

# incorrect way
Q1 = 22

Below is a simple rubric indicating how you will be graded for the CodeGrade section of the assignment:

## **Correct Answers 80%**

Are your answers correct for the respective questions and exercises?

## **Correctly Transformed DataFrames 20%**

Do your transformed DataFrames match with the solution DataFrames?