## Intro to Data Manipulation in Python

- Understand how data manipulation fits in the data science workflow and its importance
- Be able to import a package in python
- Be able to read in data with pandas
- Be able to understand what a data frame is and what rows and columns represent
- Be able to select a column using two different methods
- Be able to return the head of the data
- Be able to return the tail of the data
- Be able to return the shape of the data and understand the output
- Be able to return the names of columns from the data frame
- Be able to return the data types of columns from the data frame
- Be able to check the value of counts for a column
- Be able to check basic summary statistics of a column and a data frame
  - Mean
  - Median
  - Maximum
  - Minimum
- Be able to check a correlation matrix of a data frame, and interpret the output
- Understand what a dictionary is and its structure
- Be able to rename columns of a data frame
- Be able to subset multiple columns of a data frame