

### Chapter 7: Data Wrangling: Clean, Transform, Merge, Reshape

1. There are 3 major methods of combining data
  - a. `Pandas.merge` connects data frames based on keys
  - b. `pandas.concat` appends one stack of data to the end of another
  - c. `combine_first` combines instances of variables, filling in empty slots
2. Data frames can be reshaped/pivoted, turning rows into columns and vice versa using the `stack` and `unstack` methods.
3. Data can be “transformed,” meaning that it can be filtered, cleaned or changed in other manners. Some of the operations that can be run are removing duplicates, mapping by a single attribute, replacing/removing values, renaming variables, or breaking them down into smaller sets of categories.

### Chapter 8: Plotting and Visualizations

1. Pandas graphs are able to be customized greatly, from altering tick size/divisions, line style, color, and most any aspect of each graph.
2. Pandas has many different types of plots available, such as line, bar and scatter graph.
3. Besides Pandas, there are many other API's available with plotting implementations included.