5.2 Lesson Summary - Plotting With Pandas

Visualizing data is very helpful in revealing patterns in a data set. Pandas is particularly well-suited to handling large amounts of data. Pandas supports plotting data directly from a DataFrame making it more convenient to visualize your data.

Concept: Matplotlib's **pyplot** supports plotting DataFrames or data extracted from DataFrames. If you had "Date" and "StockPrice" fields in the *stock\_df* DataFrame you could plot a line chart of this data using the following code:

*import matplotlib.pyplot as plt*

*plt.plot(stock\_df["Date"], stock\_df["StockPrice"])*

*plt.show()*

* Activity: 02-Ins\_PandasPlot

Concept: Pandas provides the ability to directly plot a DataFrame. DataFrames often contain more data than you wish to visualize so you may need to restrict the data displayed in your table to get the best results. To create a line chart of the "Date" and "StockPrice" fields in a *stock\_df* DataFrame you could use the following code:

*stock\_df[["Date", "StockPrice"]].plot()*

*plt.show()*

* Activity: 02-Ins\_PandasPlot, 03-Stu\_BattlingKings

Concept: Using Pandas **grouping** and **sorting** functionality can help your data visualizations be the most meaningful.

* Activity: 04-Ins\_GroupPlots, 06-Stu\_MilesPerGallon