Q1. What is the distinction between a numpy array and a pandas data frame? Is there a way to convert between the two if there is?

**Numpy is memory efficient**. Pandas has a better performance when a number of rows is 500K or more. Numpy has a better performance when number of rows is 50K or less. Indexing of the pandas series is very slow as compared to numpy arrays.

Q2. What can go wrong when an user enters in a stock-ticker symbol, and how do you handle it?

A ticker symbol change really means nothing to you, the investor, in the grand scheme of things. The change doesn't do anything to markets or to the way you execute trades.

Q3. Identify some of the plotting techniques that are used to produce a stock-market chart.

**Line chart, bar chart, point and figure chart and candlestick chart**.

Q4. Why is it essential to print a legend on a stock market chart?

**he legend displays information about the points that are currently hovered over or, if none are hovered over, about the last points shown on the plot**

Q5. What is the best way to limit the length of a pandas data frame to less than a year?

import pandas as pd. ​ drinks = pd. read\_csv('http://bit.ly/drinksbycountry') print(drinks. ...

import pandas as pd. ​ cols = ['beer\_servings', 'continent'] small\_drinks = pd. ...

import pandas as pd. ​ dtypes = {'continent':'category'} cols = ['beer\_servings', 'continent']

Q6. What is the definition of a 180-day moving average?

A moving average is a statistic that captures the average change in a data series over time.In case of 180 day, the time will be 180

Q7. Did the chapter's final example use "indirect" importing? If so, how exactly do you do it?

Indirect import means when we use certains functions, this functions while execution calls modules in the back end.