## **3. Python data visualization ...**

So far you have learned several plot types in Python. Taking into consideration Seaborn and Matplotlib, which library do you prefer for plotting in Python? why?

**Data visualization is the act of taking information (data) and placing it into a visual context, such as a map or graph. Data visualizations make data easier for the human brain to understand. You can more easily detect patterns, trends, and outliers in groups of data.**

**Good data visualizations should give meaning to your data and clearly communicate what is happening in your analysis. Excel has been a go-to data visualization tool for many years. Often, data visualization does not need to be fancy. As long as your audience understands your work, it is effective data visualization.**

**Matplotlib is a Python 2D plotting library which produces publication quality figures**

**Seaborn is a python data visualization library based on matplotlib. It provides a high-level interface for drawing attractive and informative statistical graphics. Seems to be accepted as an extension to matplotlib functionality, particularly for statistical visualization.**

**Pandas is an open source python library providing high-performance, easy-to-use data structures and data analysis tools.**

**The ggplot python library evolved out of the ggplot2 R-specific package.**

**Bokeh is different in that it does not depend on matplotlib and is geared toward generating visualizations in the web browser. It is meant to make interactive web visualizations.**

**Plot Types:**

**\*\*Scatter plot\***

**\*\*Distribution plot\*\***

**\*\*Categorical Plot\*\***

**\*\*Comparison Plot\*\***

**\*\*Grid\*\***

**\*\*Matrix Plot\*\***