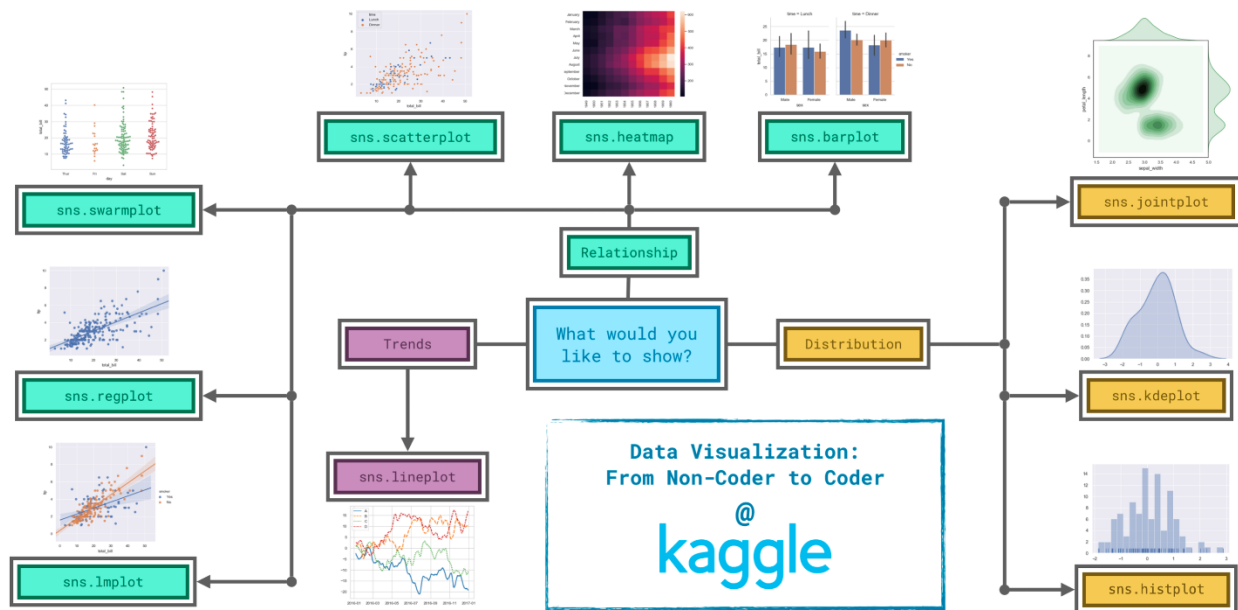# Plot Types and Custom Styles

Since it's not always easy to decide how to best tell the story behind your data, we've broken the chart types into three broad categories to help with this.

- **Trends** - A trend is defined as a pattern of change.
  - `sns.lineplot` - **Line charts** are best to show trends over a period of time, and multiple lines can be used to show trends in more than one group.

- **Relationship** - There are many different chart types that you can use to understand relationships between variables in your data.
  - `sns.barplot` - **Bar charts** are useful for comparing quantities corresponding to different groups.

- o `sns.heatmap` - **Heatmaps** can be used to find color-coded patterns in tables of numbers.
- o `sns.scatterplot` - **Scatter plots** show the relationship between two continuous variables; if color-coded, we can also show the relationship with a third [categorical variable](#).
- o `sns.regplot` - Including a **regression line** in the scatter plot makes it easier to see any linear relationship between two variables.
- o `sns.lmplot` - This command is useful for drawing multiple regression lines, if the scatter plot contains multiple, color-coded groups.
- o `sns.swarmplot` - **Categorical scatter plots** show the relationship between a continuous variable and a categorical variable.

- **Distribution** - We visualize distributions to show the possible values that we can expect to see in a variable, along with how likely they are.
  - o `sns.histplot` - **Histograms** show the distribution of a single numerical variable.
  - o `sns.kdeplot` - **KDE plots** (or **2D KDE plots**) show an estimated, smooth distribution of a single numerical variable (or two numerical variables).
  - o `sns.jointplot` - This command is useful for simultaneously displaying a 2D KDE plot with the corresponding KDE plots for each individual variable.