

Relationships between continuous variables

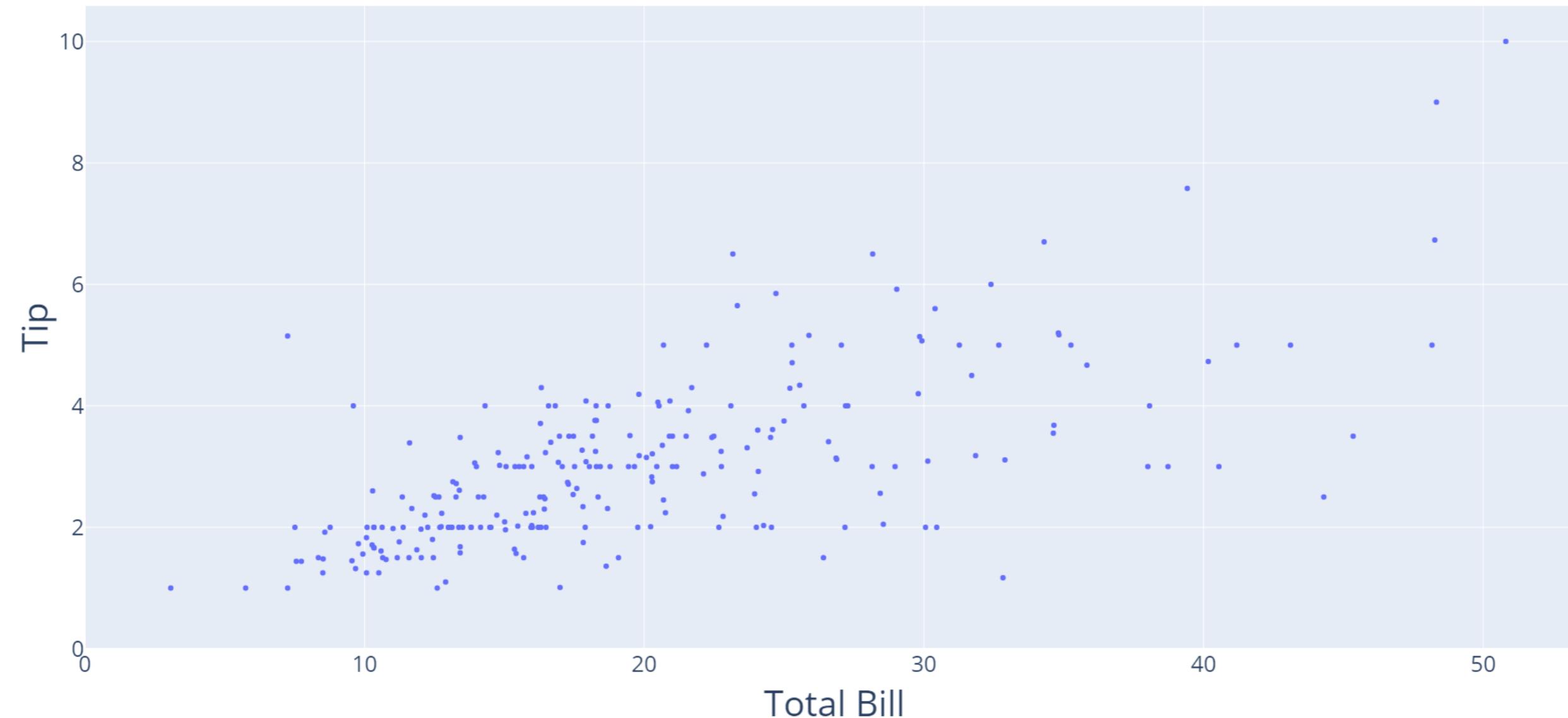
EXPLORATORY DATA ANALYSIS IN POWER BI



Maarten Van den Broeck
Content Developer at DataCamp

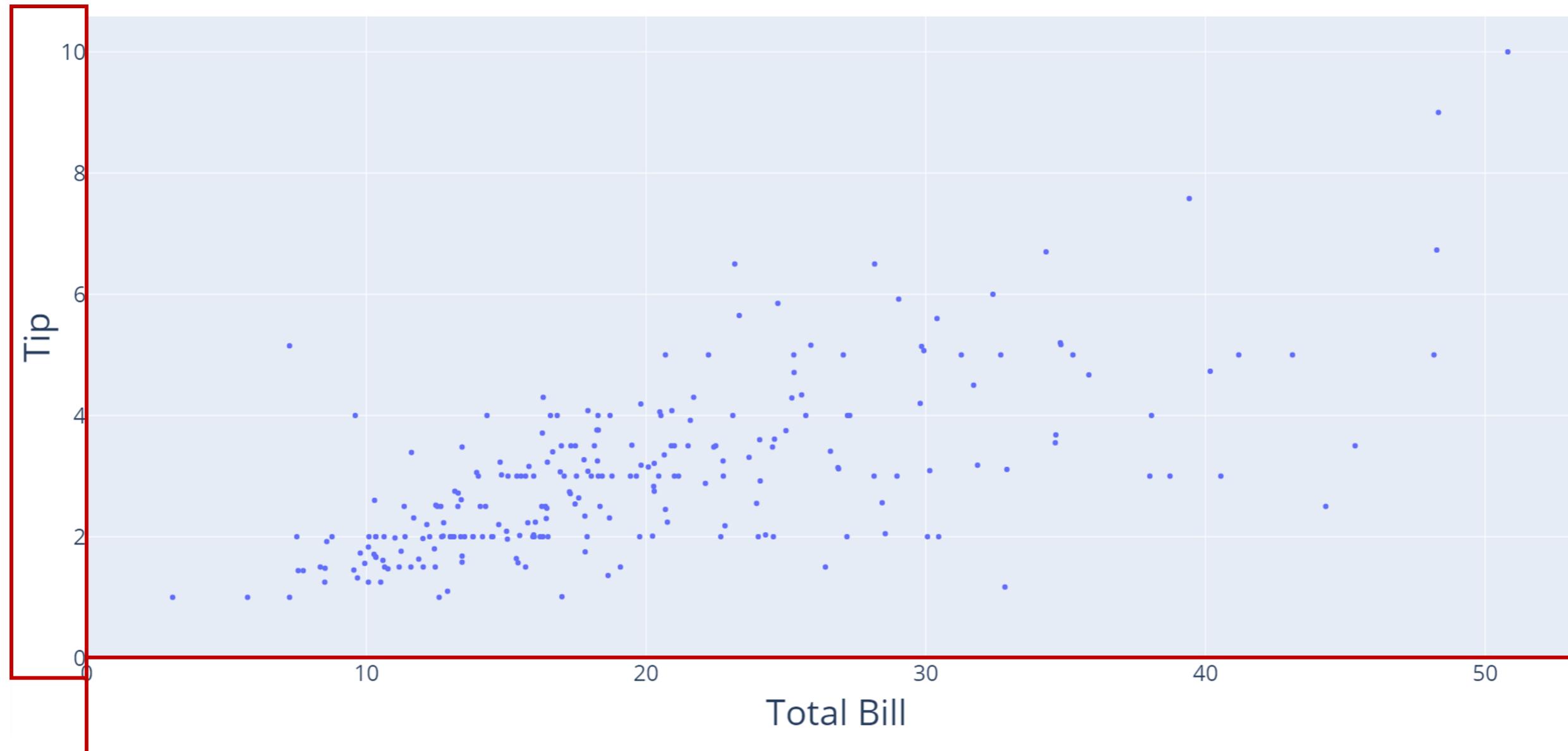
What are scatter plots?

Tip Amount vs. Total Bill



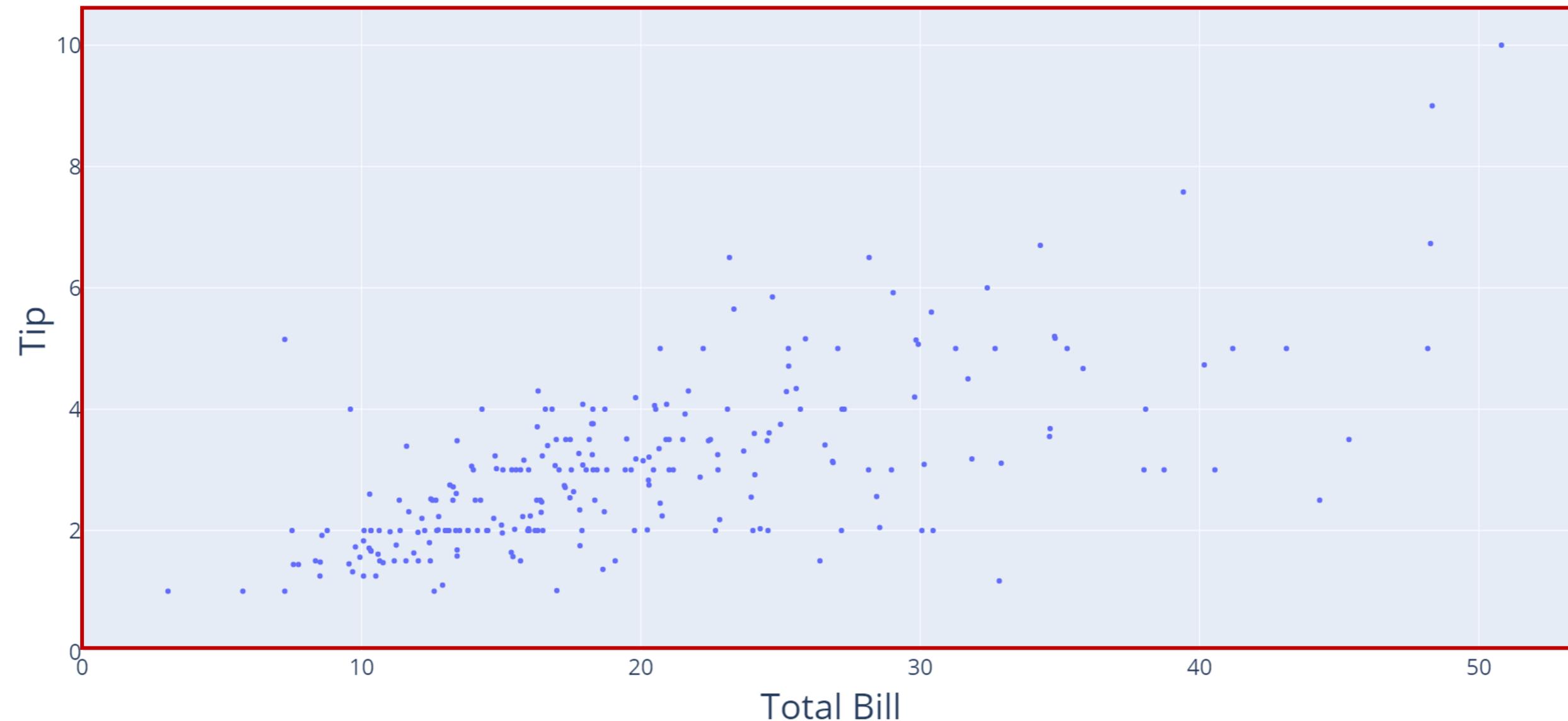
What are scatter plots?

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Tip Amount vs. Total Bill

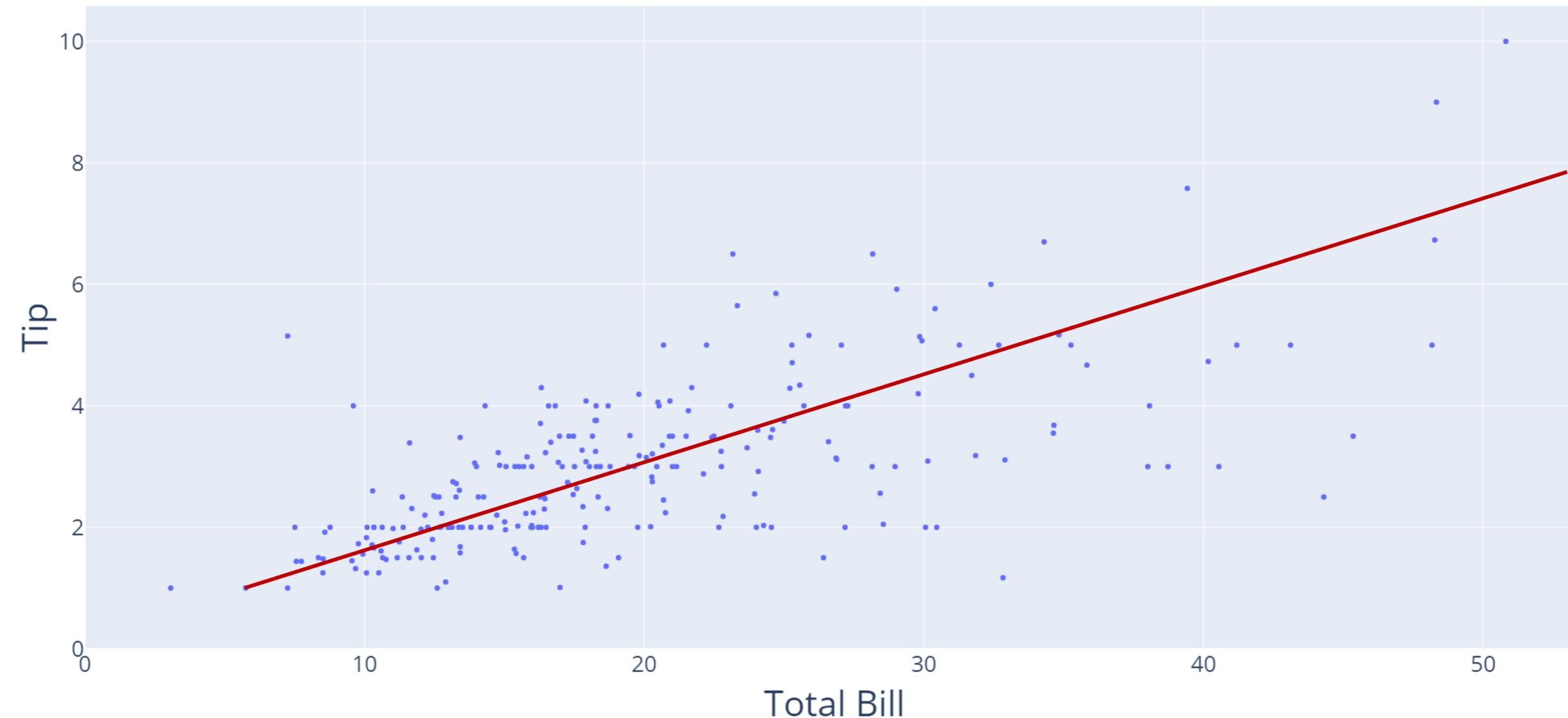


Interpreting a scatter plot

Tip Amount vs. Total Bill

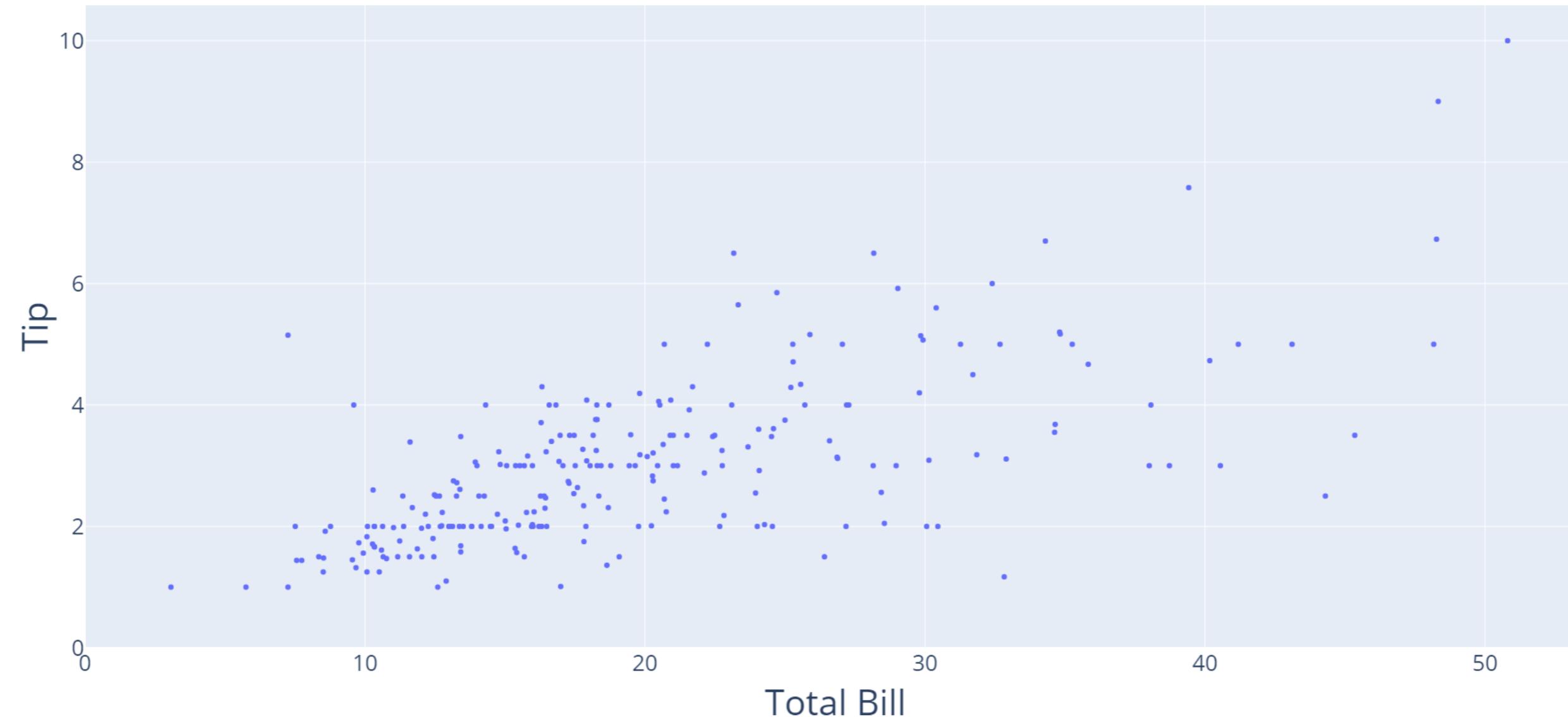
Interpreting a scatter plot

Tip Amount vs. Total Bill



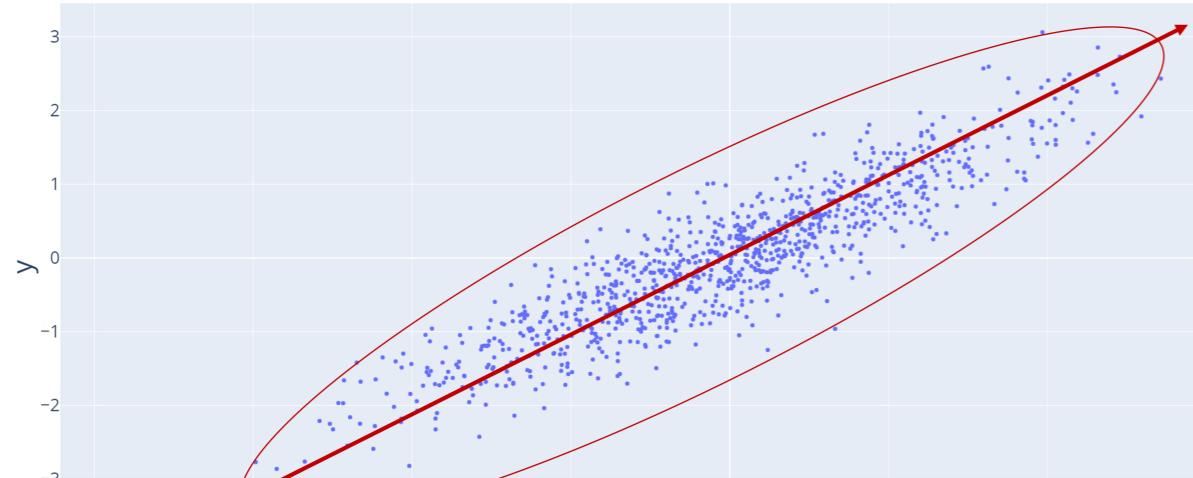
Interpreting a scatter plot

Tip Amount vs. Total Bill

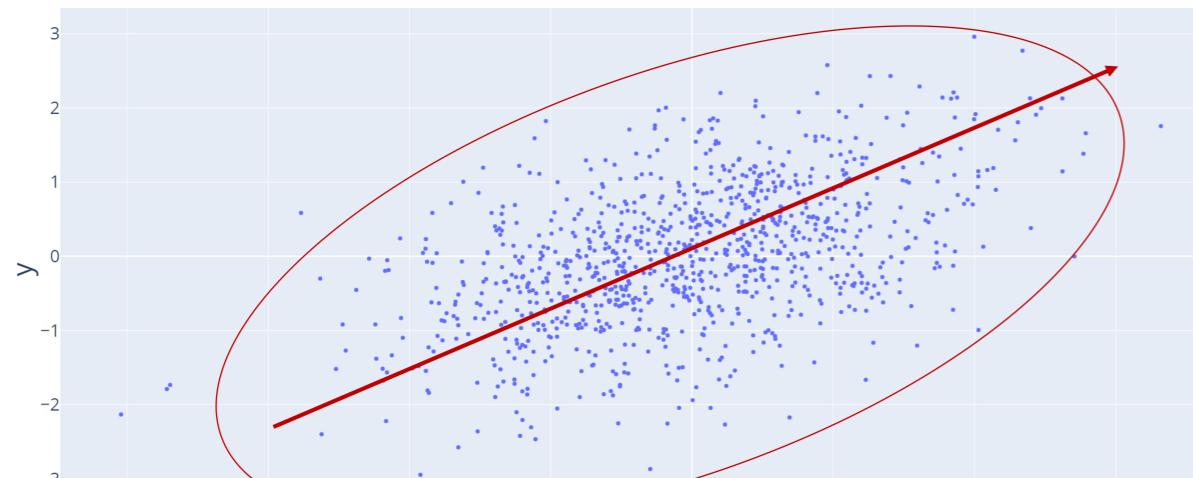


Interpreting a scatter plot

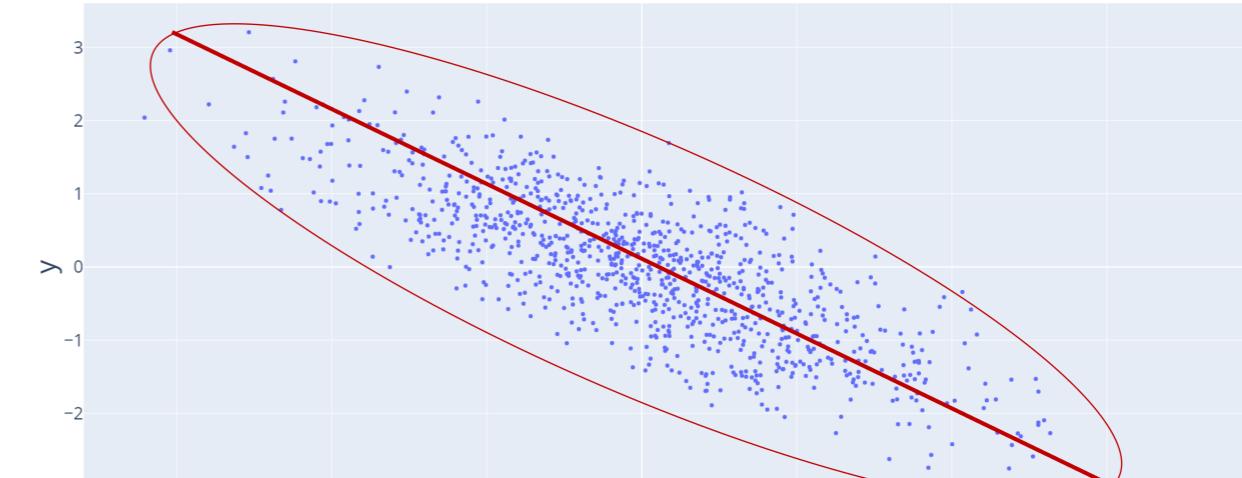
Strong-positive



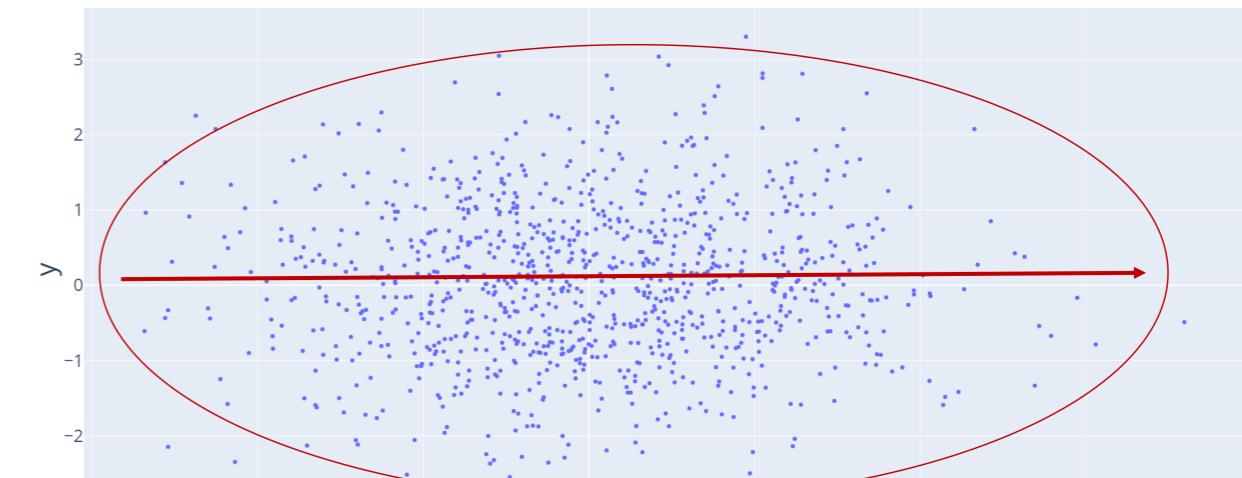
Weak-positive



Strong-negative



No relationship



Correlation coefficient

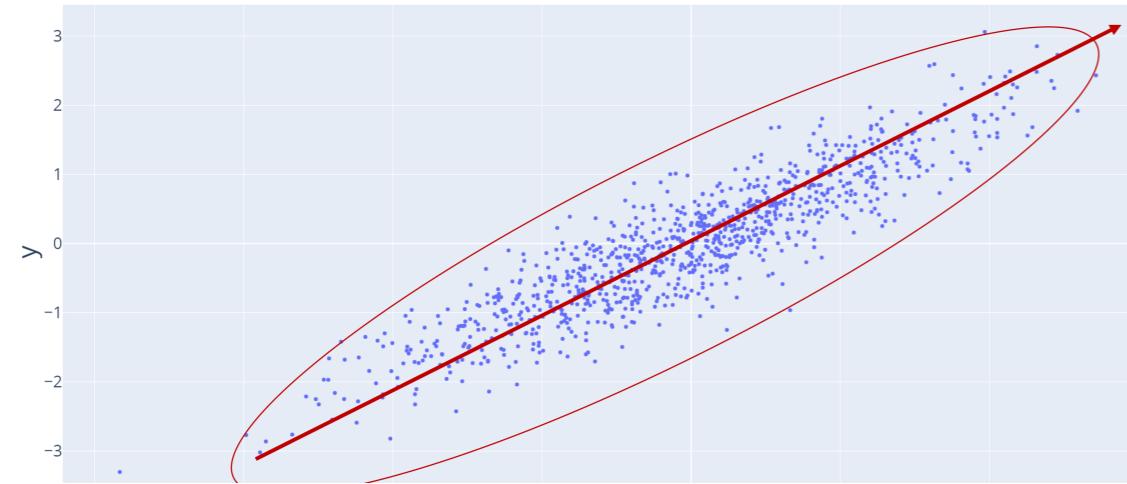
- Used to quantify the relationship
- Represented by the letter, r

| $r =$ | Relationship description |
|-------|--------------------------|
| -1 | Strong-negative |
| 0 | No relationship |
| 1 | Strong-positive |

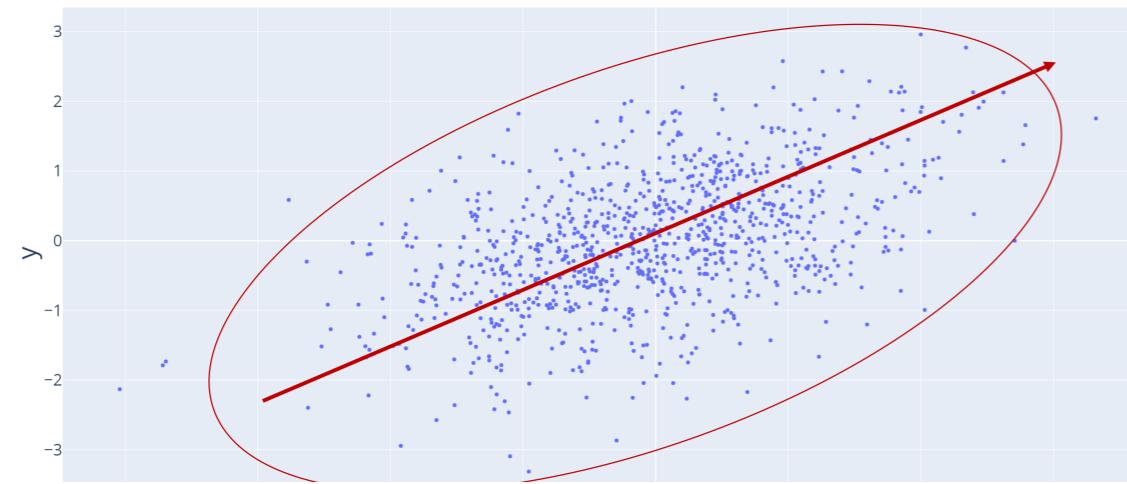
Calculating the correlation coefficient is beyond the scope of this course

Correlation coefficient and scatter plots

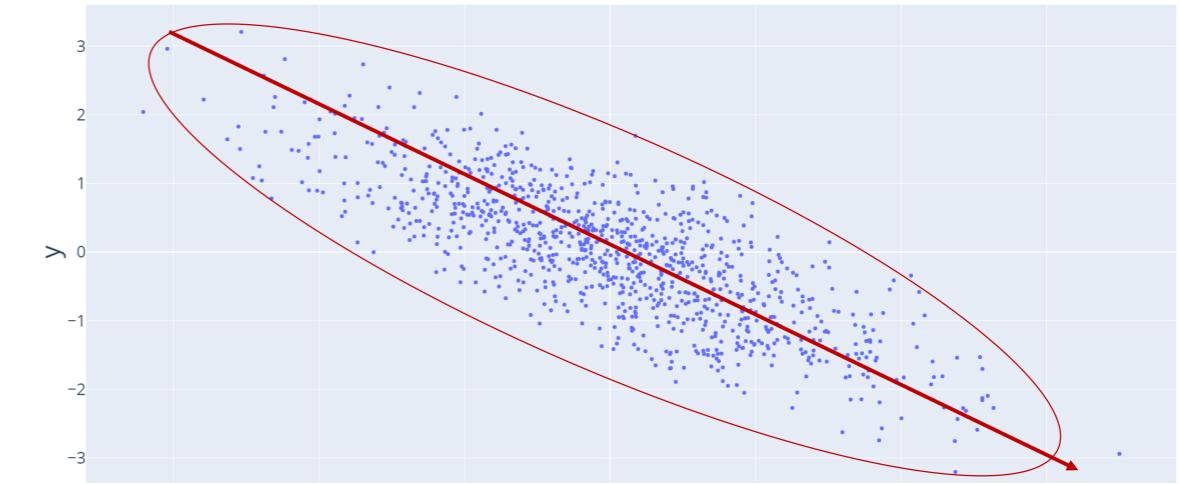
Strong-positive $r=0.9$



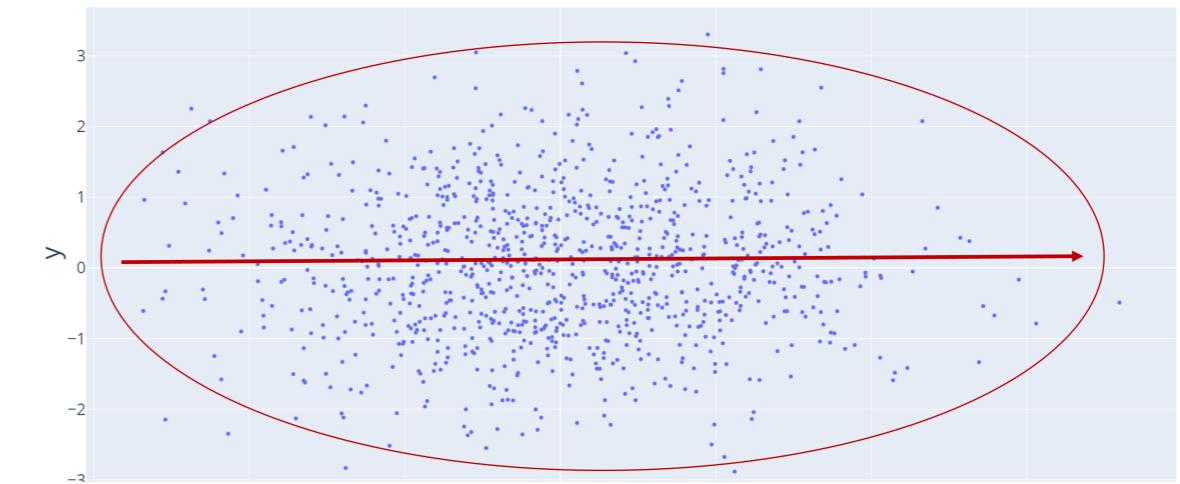
Weak-positive $r=0.35$



Strong-negative $r=-0.9$

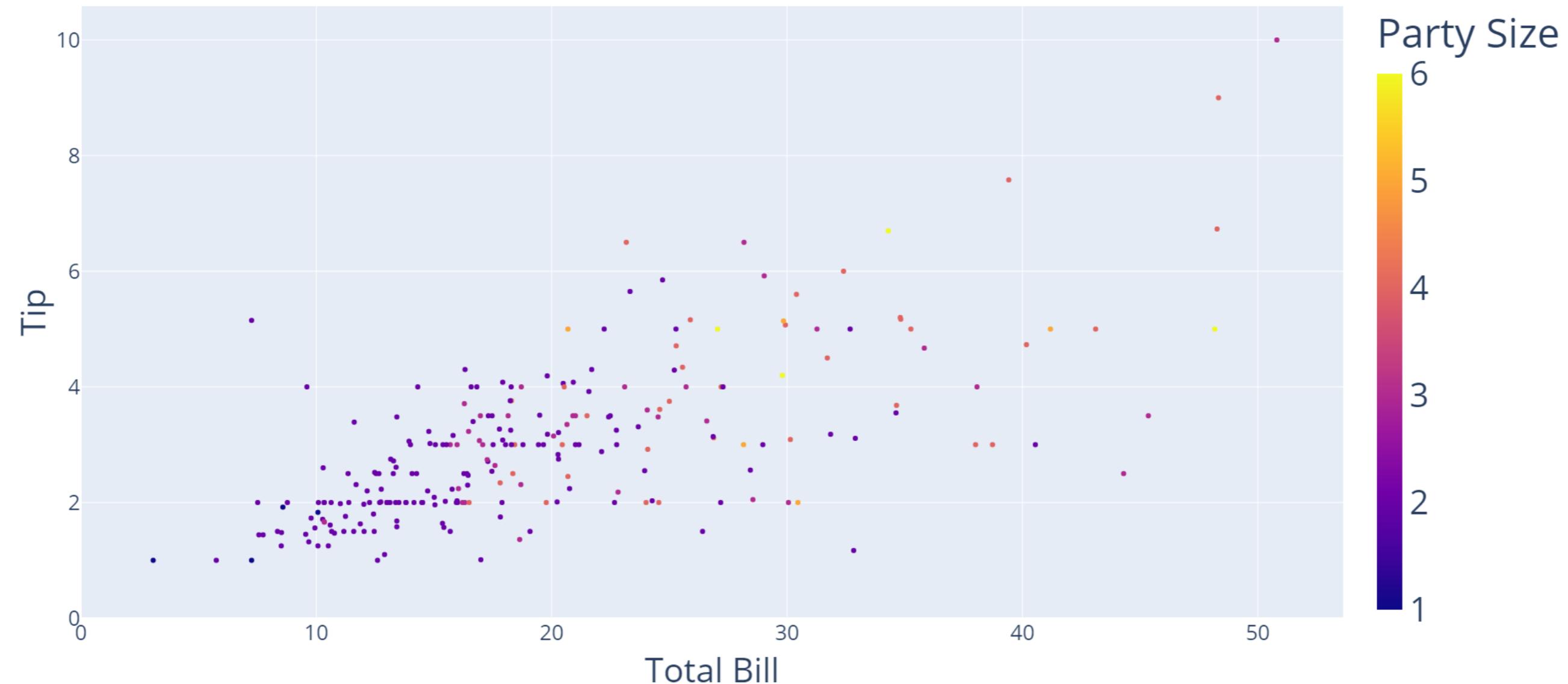


No relationship $r=0.0$



Adding context to a scatter plot

Tip Amount vs. Total Bill



Let's practice!

EXPLORATORY DATA ANALYSIS IN POWER BI

Exploring AirBnB listings with scatter plots

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Let's practice!

EXPLORATORY DATA ANALYSIS IN POWER BI

Congratulations!

EXPLORATORY DATA ANALYSIS IN POWER BI



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Your first steps with EDA

- Identifying and imputation of missing data
- Address outliers
- EDA with categorical variables
- EDA with continuous variables
- Histograms
- Box plots
- Scatter plots

What's next?

- Trend Analysis in Power BI
 - Time series
 - Decomposition trees
 - Key influencers

Let's practice!

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