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What dataset are you working with: endorsements

List 3 questions that you can ask with your dataset.

Q1: Is there a difference between the money raised by Democrats and Republicans?

Q2: Is there a correlation between the percentage of party money raised and the percentage of primary votes received?

Q3:

List the associated null hypothesis for each question:

Q1: There is no difference between the money raised by Democrats and Republicans.

Q2: There is no correlation between the percentage of party money raised and the percentage of primary votes received.  
Q3:

What statistical test(s) will you use to answer each of the questions:

Q1: test for variance, if equal t-test, if not Welch t-test

Q2: linear regression

Q3:

Make a visual plot showing the relationship that you will analyze statistically (e.g. boxplot for t-test or ANOVA; scatterplot for regression; table for chi-square).

Q1: boxplot

Q2: scatter plot with best fit line

Q3:

Do your data meet the assumptions required for the statistical test you want to run? Please state the assumptions you examined and whether or not your data meet those assumptions:

Q1: equal variance – this assumption was not met

Q2: normality of distributions – this assumption was met

Q3:

Run the statistical test! Put your results here:

Q1: Welch t-test – p = 0.4724

Q2: summary of linear model – p < 0.001

Q3:

Interpret your results!

Q1: Democrats and Republicans do not raise significantly different amounts of money for primary elections

Q2: Raising more money is correlated with winning more votes in the primaries