Research Task: To estimate a model of inheritance and test if there is a statistically significant inheritance effect.

Data Features: There are one response variable and one explanatory variables. Both response and explanatory variables are quantitative. They have a linear correlation.

Analysis Strengths: There is an obvious linear trend. It is straightforward to show the correlation.

Analysis Weaknesses: Sample is small. The model dose not explain causation.

Alternative Example: How are the average grades in the class correlated with the average time students spend on study?