**Challenge Problem I**

Abstract: In this report, I will use the method of logistic regression to make an analysis of the problem of whether a boy will be delinquent or not based on two potential factors (Social Economic Status and In Boy Scout or not). First, I will make a logistic regression based on the given data and analyze the result of estimations. Second, I will make the confidence interval. Third, I will make the hypothesis. Last, I will make the prediction.

1 EDA

1. I want to know the hidden relation between these variables. Clearly, I can use the correlation plot to show their relations