Research Task: estimate the effect of GPA and test if the effect is statistically significant

Data Features:

Response variable: whether pass or not pass the Exam P (Categorical)

Explanatory variables: GPA(Quantitative)

There are one response variable and one explanatory variable. Response variables is Categorical

Analysis Strengths: There is obvious correlation between whether or not passing and GPA. Possibility is also a better measurement of the effect of GPA.

Analysis Weaknesses: The model dose not explain causation. More factors are needed to determine the causation.

Alternative Example:

Response Variable: whether or not to get educated (Categorical)

Explanatory Variable: Family income (Quantitative)

<https://www.debate.org/opinions/does-low-income-affect-school-education>

People who come from poor family tend to receive less education or no education at all. Wealthy people tend to get more educated.