MA578 Final Project Proposal

Problem Background:

Each student will have a different performance in the Probability and statistics course, which is specifically reflected in their grade. In this final project, I want to explore which of the usual exams (The dataset has three usual exams), attendance, and homework indicators have the greatest impact on students’ final exams.

The Significance of The Question:

Since this course is so relevant to us, I thought it would be interesting to study this topic. At the same time, I think all students care about their scores.

In addition, studying this issue has certain pedagogical implications. For example, eventually, we can build a Bayesian regression model or other models. To determine which indicators, have a greater impact on students' final grades. This way, students can draw attention when they find themselves with low values on these indicators.

Dataset:

The dataset is the Probability and Statistics course from Kaggle ([Probability and Statistics Course Performance (kaggle.com)](https://www.kaggle.com/datasets/indikawickramasinghe/probability-and-statistics-course-performance/data)), which includes students’ performance in a college-level course in Probability and Statistics from 2016 to 2022. Also, the dataset has nine features, which are Exam1, Exam2, Exam3, Homework, Attendance, FinalExam, FinalGrade.

Work Plan:

I did a regression and the results are as follows