**In class Practice**

As a consultant for an educational institution, you are examining the impact of various factors, including Graduate Record Exam (GRE) scores, grade point average (GPA), and prestige of the undergraduate institution, on admission into graduate school. The outcome of interest, which is whether an applicant is admitted or not, is a binary variable. Data has been collected from 400 students and is stored in “admission.csv” file.

1. Build a logistic regression model to determine the chance of being admitted to graduate school based on three predictor variables: GRE scores, GPA, and Rank. The Rank variable indicates the prestige of the student's undergraduate institution, with a value of 1 being the most prestigious and 4 being the least prestigious.
2. Examine the results of the model and produce a graph showing the predicted probabilities along with 95% confidence intervals for varying values of the predictor variables.