

Homework # 8

Due on 04/22/2020 at 1:00 pm

1. Use the annual financial data from Table 11.4. We want to do discriminant analysis to predict the last column (0 = bankrupt, 1 = solvent) based *only* on the two predictor variables $X_1 = \text{CF/TD}$ and $X_3 = \text{CA/CL}$.
 - a) Perform the Fisher *linear* discriminant analysis using the `lda` function with default priors. Plot the scatterplot with the discriminant line using the `partimat` function.
 - b) Calculate the accuracy rate of the result from part a).
 - c) Repeat part a) but after removing the influential cases #16 and #34.
 - d) Calculate the accuracy rate of the result from part c).
 - e) Repeat part a) but this time with *quadratic* discriminant analysis. No graph needed. Report accuracy rate.
 - f) What is the conclusion after comparing all your results?