

ASSIGNMENT FOR FRIDAY, DECEMBER 5

I. A. 13.1.1 Do *not* just use the algorithm, but use the values it gives plus the considerations we have discussed in class to find reasonable values for the lambdas. Be sure to give reasons for your decisions. In particular, be sure to do a Likelihood Ratio Test to help decide that the values you decide on are suitable.

B. Based on the description of the variables, the context, and the scatterplot matrix, do you anticipate any possible multicollinearity problems with this data set? If so, where, and why?

C. 13.1.2

D. 13.1.3

E. 13.1.4

II. A. Read Section 10.4. Based on the description of the variables, the context, and the scatterplot matrix, do you anticipate any possible multicollinearity problems with this data set? If so, where, and why?

B. 11.6.1

C. 11.6.2 [*Note*: Some printings of the textbook have a misprint in this problem. The second line of 11.6.2 should read, "with $\log_2(\text{BW})$ *not* included in the mean function."]

D. 11.6.4

E. 11.6.5

F. 11.6.6

G. 11.6.7

III. A. Make a scatterplot matrix for the data in the file `select.lsp`. Also use "display data" to see the data. Based on what you see and the list of data, do you anticipate any possible multicollinearity problems with this data set? If so, where, and why?

B. 11.3 *Caution*: Use the data in the file `select.lsp`; this is not exactly the same as what is displayed in Table 11.8.

Note: The final exam will be due at 5 pm, Friday, December 12 (the end of the final exam date and time listed in the course schedule for this course). That is one week after this last homework assignment is due. Therefore I will try to hand out at least part of the final exam by Wednesday, Nov. 26 for those who would like to get a head start on it.