Week 13 Homework

April 13, 2016

Create a R **markdown** file that does the following:

1. Loads the `mtcars` data set (you can also use your own data set, but it should be one that you can create fuzzy sets from).

2. Calibrate the mpg variable into a fuzzy set for high MPG. Justify your cut-off points either before or after the code chunk that calibrates the outcome set.

3. Calibrates three condition sets, at least one of which is a fuzzy set. Justify your cut-off points either before or after the code chunk.

4. Produce a truth table sorted by consistency scores. The truth table should have at least one row coded as having the outcome in order to produce the reduced solution. If yours does not, either lower the consistency threshold or try different conditional sets or calibrations.

5. Produce a complex, a parsimonious, and an intermediate solution. Justify your directional expectations for the intermediate solution.