Chapter 5 Computer Exercise

1. We will be working with a data set on a job placement experiment. Subjects in the program were either in a control group, given job training, or given an actual job. The actual study monitored each subject's job history over two years, but the response for this study will be whether each subject had a job at some time during the course of the experiment. In addition to the job training treatment, the program location (three possible cities) was recorded.

2. Upload the SAS data set to SAS Studio, and change the libname statement so that it references your STAT 770 directory in SAS Studio. Look at the data set under your Files beforehand, or after importing it; it contains the variables Treatment (0=control, 1=training, 2=job), City (1=Atlanta GA, 4=Grand Rapids MI, 7=Riverside CA), coded dummy variables for treatment, T1 and T2, and Job. Job includes various codes for job status, but we quickly simplify this to a binary code.

3. Upload the SAS code for this data set from the website. The variable Employed creates a binary response from various job codes (if you wanted to save this change in a SAS data set, your data step could be, e.g., DATA JOB.UPDATE;). Run the first PROC GENMOD step The `type3` option conducts the 2 df test for Treatment; is Treatment significant? Interpret all model parameters, including the intercept.

4. The Treatment factor could be viewed as ordinal. To see results from a Cochran-Armitage trend test, skip the next three PROC GENMOD steps in the SAS code on the website and cross-tabulate the response and treatment using the PROC FREQ step with the option TREND. Is there a significant linear trend in the treatment?