

**Vanderbilt University**

**Leadership, Policy and Organizations**

**Class Number 9952**

**Spring 2016**

**Part 1**

Write a program that does the following:

1. Takes a variable list (assumed to be each a factor) as its argument
2. Converts each factor variable to a series of dummy variables
3. Returns dummy variables that are appropriately labeled (both as variables and values)

**Part 2**

Following the logic we went over in class, generate a simple mean of your dependent variable, followed by the conditional mean of your dependent variable over the levels of a continuous or ordinal independent variable. Use 2,4, and 10 categories. Then run a regression and predict the dependent variable from your independent variable. Generate a mean squared error for each type of prediction (unconditional and conditional means, regression) and describe what you find.

Submit the results of part 1 and 2 as a do file, with appropriate comments.

Naming convention for this semester will be: <yourlastname>'\_assignment<#>.do. Therefore, if I was turning in this assignment, I would call it doyle\_assignment1.do.