Homework 1. Due Wednesday September 1.

1. Using the Matlab program `Main_HW1.mlx` program posted, simulate and estimate a probit model (you need to write and insert the likelihood function).

2. Use the program from question 1. and still simulate the same model using normal draws, but now estimate the parameters using a logit model.

3. Verify (do the derivations) the formula for the density in the bivariate Normal (starting from the multivariate) that is in the handout.

4. Using the notation from question 3, write down the formula for the conditional mean in the two dimensional case.