1086-B5-2338 **Patricia B Humphrey*** (phumphre@georgiasouthern.edu), Department of Mathematical Sciences, PO Box 8093, Statesboro, GA 30460-8093. *Simulation Illogic Repaired.*

Simulations are becoming more important in introductory statistics courses because of new emphasis on resampling procedures (which are now included in the Common Core for high school students). There are many applets (and apps) that will perform simple simulations and resampling. Do students really understand what is being done in the (often) black box? In many cases, the answer is "No." For example, students thinking about a bootstrap confidence interval for a mean often ignore the paired nature of the data and want to randomly permute only one of the variables. More complex simulations require more thinking and capable software. At an introductory level for a probability or statistics class, R (free) or SAS (expensive) are often too complex for students to use effectively. I'll show how simple three or four line execs and macros in Minitab can do the job effectively, and further serve to eliminate the "black box" of many applets. Students who can perform these understand the situation! (Received September 25, 2012)