

CSCE 330 Fall 2011

PROGRAM 1

Assigned Thursday, 2011-09-15. Due Tuesday 2011-09-27

1. Load Euclid's algorithm (Figures 2.12 and 2.13 in Ch.2 [G&J], copied in the slides) in Simplesem and run it. Single step to understand how it works.
2. Explain carefully which Simplesem instructions translate the while loop in Euclid's algorithm.
3. Load the C3 factorial program (Figure 2.19 in [G&J], copied in the slides) in Simplesem and run it. Single step to understand how it works.
4. Modify the program, so that it is now a C4'' program. To do so, you need to add static links. Note that the modified program should have the same effect as the original program.

Turn in a paper with: a screenshot of the Simplesem interpreter executing Euclid's algorithm for part 1, a printout of the Simplesem code for Euclid's algorithm commented to show the instructions that correspond to the while loop for part 2, a screenshot of the Simplesem interpreter executing the C3 factorial program for part 3, and both a printout of the modified program and a screenshot of Simplesem executing it for part 4.