CSCE 330 Fall 2006

PROGRAM 1

Assigned Tuesday, 2006-10-17. Due Thursday 2006-10-26

1. Load Euclid's algorithm (Figures 2.12 and 2.13 in the textbook) 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. Write a proof of correctness of Euclid's algorithm. You may use the version in which integer division is done directly, instead of by repeated subtraction, if you find that more convenient.
4. Turn in a screen dump of Simplesem running Euclid's algorithm, the explanation of how the while loop is translated, and the proof of correctness.