## CSci 1302 Assignment 8

Due Wednesday, April 2 in class

Problem 1 (4 points). Fibonacci numbers are defined as $F_{0}=0, F_{1}=1$, and for all $k \geq 2 F_{k}=F_{k-1}+F_{k-2}$. Use strong induction to prove the following property of Fibonacci numbers: $F_{n+m-2}=F_{n} F_{m-1}+F_{n-1} F_{m-2}$. Please point out the part of the proof where you had to use strong induction.

If you haven't finished the problem set due Monday, March 31 or if you would like to redo a problem, please submit it with this problem set.

Problem 2 ( 9 points). Moved to the next problem set (due April 9): Exercises 4, 5 p. 253, exercise 9 p. 254.

