COMP 2355
Winter 2012
Lab #12
February 19, 2013

This lab should be submitted to your course SVN by noon on February 20 in a folder named "Lab12".

In this lab you are going to write a multi-threaded program. Your program will attempt to calculate the first 5 or 6 perfect numbers through exhaustive search. A perfect number is one where the factors of the number add up to the number itself. The first two perfect numbers are 6 (factors 1, 2, 3) and 28 (factors 1, 2, 4, 7, 14). (It is conjectured that there are no odd perfect numbers.)

Write a thread function which will test if a number is a perfect number and return the number if it is perfect, and 0 otherwise. Then, in your main function you will continually spawn threads and join with them to get the result of the computation. Your program should run continuously until you kill it.

Be sure to limit the number of threads spawned. Test your program with different limits to see how the performance of the program varies. (Use the `time()` function to measure time elapsed in seconds.)