

# COSC 201 – Lab #5

## Time to break Java

Purpose: see how fast you can break Java and play with command line args.

Tasks:

- 1.) Open Eclipse and start a new Java Project called Broken Project
- 2.) Add a new class called BreakJava.
- 3.) For this lab, you will need three methods:
  - a. SubSum – the method to determine the maximum contiguous subsequence sum for an integer array passed in as a parameter. Implement the  $n^3$  algorithm from your book.
  - b. fib - the normal recursive Fibonacci algorithm. As a reminder, here's the pseudocode for the algorithm:

```
int fib(int a){
    if a equals 0 or 1, return a
    return fib(a-1) + fib(a-2);
}
```
  - c. main - this will take in two arguments via command line. The first argument (`args[0]`) should indicate which algorithm to run ("f" for fib, "s" for SubSum), and the second will be an integer *i*. In the case of fib, the integer will be passed in as the parameter for the method. In the case of SubSum, you should create an array of random integers of size *i*, then pass that array to SubSum.
- 4.) Your task: determine at what size ints your algorithms break Java, meaning, at what point does Eclipse cease to function, or crash.
- 5.) Turn in your code, with size answers in comments via the Digital Dropbox in Blackboard by 11:59 Wednesday.