

# CSC 2310: PRINCIPLES OF COMPUTER PROGRAMMING

## Lab 7

### How to Submit

Please submit your answers to the lab instructor once you have completed.

Failure to submit will result in a **ZERO FOR THIS LAB. NO EXCEPTIONS.**

1. Consider the following method:

```
public static int mystery(int x, int y){
    if (x<y){
        return x;
    }else{
        return mystery(x-y,y);
    }
}
```

What values are returned for each of the following calls?

- a. `mystery(7,12)`
  - b. `mystery(37,8)`
  - c. `mystery(8,2)`
2. Write a recursive method called `printN()` that takes one `int` parameter and prints the number from 1 to `n`. Do not use loops to print the numbers.
  3. Write a recursive method called `fib()` that takes an `int` parameter and that prints the Fibonacci number at that location in the series. The Fibonacci sequence is a sequence of numbers in which the first two numbers are 1 and each subsequent number is sum of the previous two Fibonacci numbers. The sequence is 1,1,2,3,5,8,13,21, and so on. So `fib(4)` should print 3, `fib(6)` should print 8, `fib(8)` should print 21, `fib(10)` should print 55 and so on.