

# CSCE 155 - Lab 11 - Encapsulation & Structures - Worksheet

Names: \_\_\_\_\_

1. Test your palindrome program on the following inputs:

- (a) abba
- (b) aaba
- (c) foobar
- (d) civic
- (e) civil
- (f) foo

2. Fill out the following table with the specified values using the `recursiveFunction` program.

Table 1: My caption

| $n$ | $f(n)$ | Time (sec) |
|-----|--------|------------|
| 0   |        |            |
| 1   |        |            |
| 2   |        |            |
| 5   |        |            |
| 10  |        |            |
| 20  |        |            |
| 30  |        |            |
| 40  |        |            |
| 42  |        |            |
| 44  |        |            |
| 46  |        |            |
| 48  |        |            |

3. Without actually running it, make a prediction on how long it would take to run the program for  $n = 50$ .  
How long would it run for  $n = 100$ ?

4. What values do you get for each of the following inputs with your Jacobsthal program?

- (a)  $n = 0$
- (b)  $n = 1$
- (c)  $n = 5$
- (d)  $n = 10$
- (e)  $n = 20$
- (f)  $n = 32$

5. Demonstrate your working programs to a lab instructor.

Lab Instructor Signature\_\_\_\_\_