**CSCE 155 - Lab 12 - Recursion - Worksheet**

Names:

1. Test your palindrome program on the following inputs:
   1. abba
   2. aaba
   3. foobar
   4. civic
   5. civil
   6. foo
2. Fill out the following table with the specified values using the recursiveFunction program.

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

1. 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?
2. What values do you get for each of the following inputs with your Jacobsthal program? (a) *n* = 0
   1. *n* = 1
   2. *n* = 5
   3. *n* = 10
   4. *n* = 20
   5. *n* = 32
3. Demonstrate your working programs to a lab instructor, and if you are performing this lab asynchronously due to internet issues, please submit this completed worksheet to handin.

Lab Instructor Signature

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