Ingeniería en Sistemas Computacionales Dra. Claudia Guadalupe Gómez Santillán

UNIDAD1. Principios de Programación Paralela

Nombre del Alumno: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Resuelva el siguiente ejercicio:**

Hacer un programa que reciba m números de entrada aleatorios e imprima m, la secuencia de números generados y la cantidad de números generados.

The 3n + 1 Problem  
  
Consider the following algorithm to generate a sequence of numbers. Start with an  
integer n. If n is even, divide by 2. If n is odd, multiply by 3 and add 1. Repeat this  
process with the new value of n, terminating when n = 1. For example, the following  
sequence of numbers will be generated for n = 22:  
22 11 34 17 52 26 13 40 20 10 5 16 8 4 2 1  
It is conjectured (but not yet proven) that this algorithm will terminate at n = 1 for  
every integer n. Still, the conjecture holds for all integers up to at least 1, 000, 000.  
For an input n, the cycle-length of n is the number of numbers generated up to and  
including the 1. In the example above, the cycle length of 22 is 16. Given any two  
numbers i and j, you are to determine the maximum cycle length over all numbers  
between i and j, including both endpoints.