Given the triangle of consecutive odd numbers:

1

3 5

7 9 11

13 15 17 19

21 23 25 27 29 ...

Calculate the row sums of this triangle from the row index (starting at index 1) e.g.:

rowSumOddNumbers(1); // 1 rowSumOddNumbers(2); // 3 + 5 = 8

using System;

public static class Kata

{

public static long rowSumOddNumbers(long n)

{

// TODO

if(n < 1)

return 0;

else if(n == 1)

return 1;

else

{

long firstElement = n\*(n-1)+1;

long lastElement = firstElement + 2\*(n-1);

long sum = 0;

for(long i = firstElement; i <= lastElement; i += 2)

{

sum += i;

}

return sum;

}

}

}

note: after I submitted this, it turns out that the easy solution, which I couldn’t figure out, is

return n\*n\*n; (i.e. the sum of the nth row is n cubed)