**Fibonacci, Tribonacci and friends**

51989% of 280327 of2,227[GiacomoSorbi](http://www.codewars.com/users/GiacomoSorbi)[4 Issues Reported](http://www.codewars.com/kata/556e0fccc392c527f20000c5/discuss#label-issue)

* C#

Instructions

Output

* If you have completed the [Tribonacci sequence kata](http://www.codewars.com/kata/tribonacci-sequence" \o "Tribonacci sequence" \t "_blank), you would know by now that mister Fibonacci has at least a bigger brother. If not, give it a quick look to get how things work.

Well, time to expand the family a little more: think of a Quadribonacci starting with a signature of 4 elements and each following element is the sum of the 4 previous, a Pentabonacci (well *Cinquebonacci* would probably sound a bit more italian, but it would also sound really awful) with a signature of 5 elements and each following element is the sum of the 5 previous, and so on.

Well, guess what? You have to build a Xbonacci function that takes a **signature** of X elements *- and remember each next element is the sum of the last X elements -* and returns the first **n** elements of the so seeded sequence.

Xbonacci([1,1,1,1],10)==[1,1,1,1,4,7,13,25,49,94]

Xbonacci([0,0,0,0,1],10)==[0,0,0,0,1,1,2,4,8,16]

Xbonacci([1,0,0,0,0,0,1],10)==[1,0,0,0,0,0,1,2,3,6]

FUNDAMENTALS

SEQUENCES

ARRAYS

LISTS

DATA STRUCTURES

ARITHMETIC

MATHEMATICS

ALGORITHMS

NUMBERS

<http://www.codewars.com/kata/fibonacci-tribonacci-and-friends/train/csharp>

public static double[] xbonacci(double[] signature, int n)

{

// hackonacci me

if (n == 0) return new double[] { };

double[] fib = new double[n];

double sum = 0.0;

for (int i = 0; i < n && i < signature.Length; i++)

{

fib[i] = signature[i];

sum += signature[i];

}

if (signature.Length >= n) return fib;

int lastIndex = 0;

for (int i = signature.Length; i < n; i++)

{

fib[i] += sum;

sum = sum +sum - fib[ lastIndex];

//sum += fib[i];

lastIndex++;

}

return fib;

}