

Timing Basic Fibonacci(40pts)

The next goal is to see how long it takes to compute Fibonacci numbers using the basic recursive formulation.

Step 1. Compile `TimeFibonacci.java`

Step 2. Run the code for successively larger even values of n and record the first value of n for which the time is greater than 100 milliseconds. (24 is a good place to start your search.)

FIRST EVEN VALUE OF N FOR WHICH THE TIME OF BASIC FIBONACCI IS GREATER THAN 100 MILLISECONDS	X = 38
---	--------

Step 3. Fill in the values for n in the following table. Run the program and fill in the times. Stop timing when the time is longer than 100,000 milliseconds (about 2 minutes).

N	TIME IN MILLISECONDS TO COMPUTE F(N) USING THE BASIC FIBONACCI RECURSION
X = 38	243
X+ 2 = 40	590
X+ 4 = 42	1463
X+ 6 = 44	3676
X+ 8 = 46	9432
X+ 10 = 48	24140
X+ 12 = 50	64608
X+ 14 = 52	165712
X+ 16 = 54	
X+ 18 = 56	
X+ 20 = 58	
X+ 22 = 60	
X+ 24 = 62	
X+ 26 = 64	
X+ 28 = 66	
X+ 30 = 68	