Project Euler Problem 2

Brandon Roberts

22 December 2018

Find the sum of even fibonacci numbers less than 4 million.
$S = \sum_n F_n[2|F_n][F_n < 4000000]$ where F_n is the nth fibonacci number.
Note: odd+odd=even and even+even=even, but odd+even=odd.
Looking at the small terms of fibonacci sequence we can see after $F_n = 2$ we have the pattern odd, odd, even repeating. So thus any term of the form F_{3m+2} is an even fibonacci number.
I made a program with a single for loop in this folder that adds together, after calculating, terms of the fibonacci sequence of this form.
Solution: 4613732