Problem Set 3

The Fibonacci numbers are a sequence of integers in which the first two elements are 1, and each following element is the sum of the two preceding elements. The mathematical definition of each kth Fibonacci number is the following:

$$F(k) = \begin{cases} F(k-1) + F(k-2) & k > 2 \\ 1 & k \leq 2 \end{cases}$$

The first 12 Fibonacci numbers are `1 1 2 3 5 8 13 21 34 55 89 144`