

Given the following definition of Fibonacci numbers

Let $n \in \mathbb{N}$. The n -th Fibonacci number be defined by

$$F_n = 0, \text{ if } n = 0$$

$$F_n = 1, \text{ if } n = 1$$

$$F_n = F_{n-1} + F_{n-2}, \text{ otherwise}$$

The first 10 Fibonacci numbers are 0, 1, 1, 2, 3, 5, 8, 13, 21, 44.