

Question:

Why is it a bad idea to use recursion for Fibonacci sequence?

Answer:

The Fibonacci Sequence:

A Fibonacci sequence is a type of sequence that the nth term is function of the summation the two previous terms in the sequence.

$$X(n) = X(n - 1) + X(n - 2)$$

It is an infinite sequence.

Recursion:

A recursion is a function that execute repeatedly for a given, n, number of times.

Why it is a bad idea:

It is a totally bad idea because Fibonacci sequence is a sequence that tend to infinity, so using a recursion to calculate an infinite sequence will create an infinite loop.

But nevertheless, we can use a recursion to find the nth term of a Fibonacci sequence. That I feel is the only application of recursion to the Fibonacci sequence. The proof of this attached to this file.