The Fibonacci numbers are a series of numbers where the next number is found by adding up the two numbers before it and can be generally written as $x_n = x_{n-1} + x_{n-2}$

The Fibonacci numbers can be calculated by recursion method. This method or algorithm invokes itself one or more times with different arguments. This is a bad idea for a couple of reasons, one of which is that it repeats the same calculations many time. For instance,

F(5) = F(4)+F(3) = F(3)+F(2)+F(3) = F(2)+F(1)+F(2) + F(3) = F(2)+F(1)+F(2)+F(2)+F(1)

**This shows that the recursion method is time consuming, expensive and uses a lot of computational resources which in turn makes the process very inefficient.**