**Recursion Algorithm in Computing Fibonacci Number**

Usually, in computing the nth number in a Fibonacci sequence, two implementations exist for the wide number of programming languages, the recursion method and iteration method. The recursion method involves computation of a final result which is dependent on bits of previously computed results. Thus, the recursion method usually involves a function written with an instance of itself within its body. However, the iteration method involves iterating through a predefined range of values for which a set of commands are run for each value in the iteration. Usually, this method involves implementation of loops.

While the recursion method has been thought to have a much more compact and easily understandable syntax, compared to the iteration method, the time interval taken up for a recursive computation is usually great considering the logarithmic range of the function for large number of recursions.

The two methods could find importance in various applications and languages, but the recursive is usually left behind based on the need for time and resource management.

In all, the recursion method takes up a linear space in memory ie space size increasing for as much n being computed. The recursion method also takes up exponential time for computation because of the need to repeat the computations of the same preceding value to be used for the nth value.