**Test Results**

I ran Fibonacci sequence tests of various iterations with an input value of 20. The results are summarized in the table below.

|  |  |  |
| --- | --- | --- |
| N iterations with input 20 | Time using iteration | Time using recursion |
| 100 | 0 | 0 |
| 1000 | 0 | 0 |
| 10000 | 0 | 1 |
| 100000 | 0 | 4 |
| 1000000 | 0 | 40 |
| 10000000 | 0 | 448 |

**Test Analysis**

The iteration method is so fast that even large numbers of tests create a discernable difference between the time it takes to calculate. The recursive function however, takes much longer as iteration length increases. This shows that the iteration method is a much more optimal methodology.