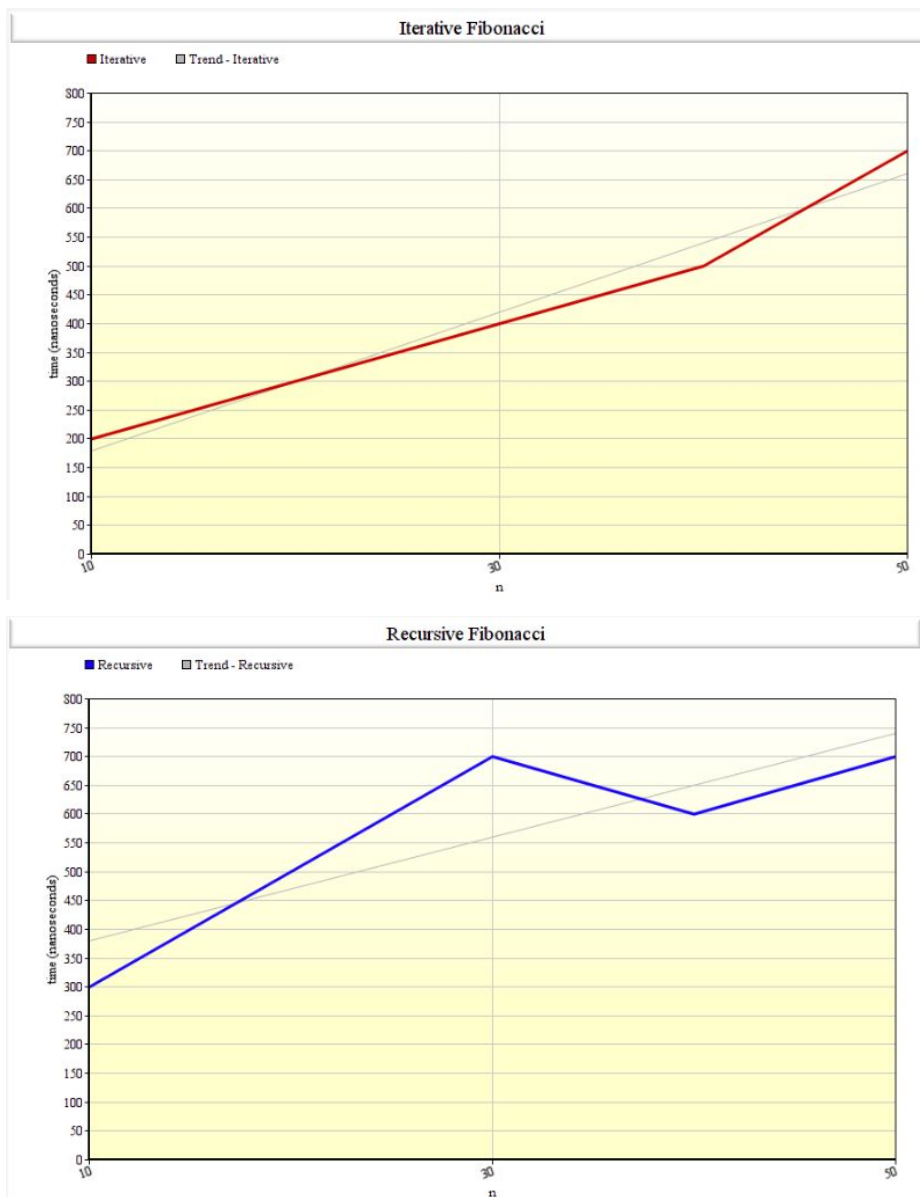


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Fibonacci Graphs, COIS 2240H : Assn 1

As seen on the graphs, the iterative approach to deriving the Fibonacci series is quicker and more efficient. When $n = 10$, the iterative approach is 33% faster. When $n = 20$, the iterative approach is 40% faster. When $n = 30$, it is 40% faster. When $n = 40$, it is 15% faster. When $n = 50$, they are the same. The iterative approach is faster as it utilizes a for loop rather than having to call itself multiple times to repeat an instruction. The for loop is predefined and simpler, while having a method call itself creates an inefficiency in memory. However, we can see that with larger data sets, the difference in efficiency is slimmer.



Charts made on www.onlinecharttool.com, with data from Screenshot pdf.