Problem 5.1

D) (Bonus)

Based on the computation times observed while running the different methods of generating Fibonacci sequences, we can say that naive recursion is exponentially slower than the other methods which becomes very significant for large n (number of Fibonacci sequences generated). The bottom up approach is considerably slower than the matrix and closed form method while the matrix representation method is the fastest. From this we can say that the best method of generating the Fibonacci sequence is the matrix representation method because it is the fastest or has least computation time and is perfectly accurate unlike closed form for large n.