computer results for the first 1000 Fibonacci and Lucas numbers using bases 4 to 9 inclusive together with the theoretical expectation based on the extension to Benford's Law. Again we include a goodness-of-fit constant.

It can be seen that the distribution of initial digits in the other number bases closely resembles that predicted by this extension of Benford's Law.

In conclusion then, as far as the sequences of Fibonacci and Lucas numbers are concerned, the frequency of occurrence of the digits 1-9 as initial digits is an excellent illustration of Benford's Law. The distribution would seem to approach that given by Benford as more and more numbers are taken into account. If we choose to express them in any other base, then there is a very strong indication that the initial digits occur in a distribution given by the extension to Benford's Law proposed earlier in this paper.

REFERENCES

1. J. Wlodarski, "Fibonacci and Lucas Numbers Tend to Obey Benford's Law," Fibonacci Quarterly, Vol. 9, No. 1 (1971), pp. 87-88.
2. F. Benford, Proceedings of the American Philosophical Society, Vol. 78, No. 4, pp. 551-572 (March 31, 1938).

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REFERENCES

1. A. R. C. Bose and S. S. Shrikande, "On the Falsity of Euler's Conjecture About the Non-Existence of Two Orthogonal Latin Squares of Order 4t + 2," Proc. Nat'l. Acad. Sci., 45 (5), May 1959, pp. 734-737.

   B. E. T. Parker, "Orthogonal Latin Squares," Proc. Nat'l. Acad. Sci., 45 (6), June, 1959, pp. 859-862.
2. J. Arkin and V. E. Hoggatt, Jr., "The Arkin-Hoggatt Game and the Solution of a Classical Problem," Jour. Recreational Math., Vol. 6, No. 2 (Spring, 1973), pp. 120-122.
3. J. Arkin, "The First Solution of the Classical Eulerian Magic Cube Problem of Order Ten," Fibonacci Quarterly, Vol. 11, No. 2 (April, 1973), pp. 174-178.