

numbers, L_n ”). The other 16 tables deal with other recurring sequences.

The contents of the first 12 tables are as follows:

Tables 1 and 2 give the complete prime decomposition of F_n and L_n for $n \leq 150$, excerpted from a table of Jarden [1]. Table 1 is correct, except that the editor treats 1 as a prime, and the larger prime factor of F_{71} should read 46165371073. Table 2 is correct, except that the entry 2 for $n = 0$ is omitted, which leads the editor erroneously to underline the entry 2^2 for $n = 3$. The middle digits of L_{108} should be $\dots 69265847 \dots$.

Tables 3–5 consist of the squares, cubes, and fourth powers, and their sums, of F_n up to $n = 40$, 35, and 25, respectively.

Tables 6–8 give the same for L_n .

Table 9 contains the prime F_n for $n < 1000$. The last eight digits of F_{131} should be $\dots 14572169$. The indices n for which F_n is prime were taken from Jarden [1], but contrary to the acknowledgment of the editor, the decimal values of these F_n for $n > 385$ were not, since Jarden’s tables extend only to $n = 385$. Their source is consequently obscure.

Table 10 contains the prime L_n for $n < 500$, with the exception of the final entry, L_{353} , which was omitted from the reviewer’s copy. This omission is difficult to explain, since the list of values of n used in preparing this table, which includes 353, is given in Jarden. The entry 2 for $n = 0$ is also missing from Table 10.

Table 11 gives the rank of apparition (or rank), here called “entry point,” for each prime less than 10^4 , as calculated by Wunderlich [2]. In the introduction to this table, the restriction $p \neq 2$ has been omitted both in rule (1) and in the sentence beginning, “If $Z(p)$ is odd, \dots .”

Table 12 gives the rank of apparition of all numbers n , $2 \leq n \leq 1000$, and also the period of the Fibonacci sequence modulo n .

Among the remaining 30 tables, selected titles are: “Residue cycles of Fibonacci sequences,” “Fibonomial coefficients,” “Continued fraction expansion of multiples of the golden section ratio,” and “Special diagonal sums of Pascal’s triangle.”

The fact that the tables are not individually numbered, or located by an index with page numbers, makes them difficult to find. Also, the choice of an asterisk to represent the product sign makes the tables with products visually unattractive. This volume well represents the standards of taste and excellence of the Fibonacci Association.

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1. DOV JARDEN, *Recurring Sequences*, 2nd ed., Riveon Lematematika, Jerusalem, 1966. (See *Math. Comp.*, v. 23, 1969, pp. 212–213, RMT 9.) A new edition is in preparation.
2. MARVIN WUNDERLICH, *Tables of Fibonacci Entry Points*, The Fibonacci Association, San Jose, California, January 1965. (See *Math. Comp.*, v. 20, 1966, pp. 618–619, RMT 87.)

25[9].—KATHRYN MILLER, *Solutions of $\phi(n) = \phi(n + 1)$ for $1 \leq n \leq 500000$* , De Pauw University, Greencastle, Indiana, 1972. Four-page table deposited in the UMT file.

There are 56 solutions of the number-theoretic equation

$$(1) \quad \phi(n) = \phi(n + 1)$$

for $n \leq (1/2) \cdot 10^6$. A table of these is deposited in the UMT file. For $n \leq 10^5$, there are 36 solutions, in agreement with [1].

No new solution of

$$\phi(n) = \phi(n + 1) = \phi(n + 2)$$

exists in this range besides the known example $n = 5186$. Except for $n = 1, 3, 5186$ and 5187 all 56 solutions of (1) have n or $n + 1$ divisible by 15 but the next two solutions are

$$n = 525986 = 2 \cdot 181 \cdot 1453, \quad n + 1 = 3^3 \cdot 7 \cdot 11^2 \cdot 23,$$

and

$$n = 546272 = 2^5 \cdot 43 \cdot 397, \quad n + 1 = 3^2 \cdot 7 \cdot 13 \cdot 23 \cdot 29.$$

AUTHOR'S SUMMARY

1. M. LAL & P. GILLARD, "On the equation $\phi(n) = \phi(n + k)$," *Math. Comp.*, v. 26, 1972, pp. 579-583.

EDITORIAL NOTE: Equation (1) is necessary but not sufficient for the $\phi(n)$ residue classes prime to n to have the same Abelian group under multiplication (mod n) that the $\phi(n + 1)$ classes have (mod $n + 1$). Of the foregoing 58 solutions, isomorphism is present only in these cases: $n = 1, 3, 15, 104, 495, 975, 22935, 32864, 57584, 131144$, and 491535.

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26 [12].—TORGIL EKMAN & CARL-ERIK FRÖBERG, *Introduction to Algol Programming*, Oxford Univ. Press, London, 1972, 2nd ed. First published in Swedish in 1964, iii + 186 pp., 23 cm. Price \$7.95.

Within the hard covers of this 186-page book, there is a concise description of the background and historical development of the ALGOL language, together with a well-arranged comprehensive methodical treatment of the language itself. At the end of most of the chapters, there are exercises, with answers to the questions supplied at the end of the book.

There is not one superfluous word in this text which reads rather well though, at times, it is a little on the heavy side. The humorous quotations introducing each of the chapters (at least, those written in a language understood by the reviewer) served as a timely relief when the going was a little difficult.

The book is not suitable for novices and neither is it intended to be. It is much more attuned to the undergraduate or graduate student with considerable familiarity with Fortran or PL/I programming, although people in a great many different fields of interest would find the language worthy of attention.

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