

11[12].—ALLEN FORTE, *SNOBOL3 Primer*, The Massachusetts Institute of Technology, Cambridge, Mass., 1967, ix + 107 pp., 21 cm. Price \$3.95.

SNOBOL is the most powerful string-processing language which is at present widely available. In its most recent form, SNOBOL4, it permits data which are character strings, patterns, real numbers, and arrays, as well as a facility for programmer-defined structures. It has sophisticated and convenient facilities for string assignment, concatenation, pattern matching, and substitution, and permits compilation and execution of statements computed during execution. This short paperback book describes an earlier and less powerful version, SNOBOL3. It is directed at the nonscientist and nonprogrammer, and is written in a simplified and informal style, with a tendency to be cute. A total of 86 pages are used to describe the language, compared with 48 in the original paper introducing SNOBOL3.

The material presented is interspersed with a number of exercises and their solutions. The author uses the notion of assigning a name to a string, rather than the usual and more accurate one of assigning a value to a name, and fails to point out explicitly that statements are executed sequentially in the absence of branches. The combination of a typographical error on p. 65 and a further error at the top of p. 66 renders the explanation of the interpretive CALL function highly confusing. This reviewer thinks that an introductory book such as this should teach mainly by example, giving explanations as they are necessary. The author does this very effectively in describing indirect referencing by showing successive simplifications and generalizations of a simple program. Perhaps this should have been done earlier in the book.

A more serious objection is that SNOBOL3 is not upward compatible with SNOBOL4. However, the book does provide a *less* intimidating introduction to programming for the linguist or musician, and could serve excellently as either incidental reading for courses in the humanities or as a path to the more stimulating and informative reference papers on SNOBOL.

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