

3. the serial connection of  $M_{\phi'}$  and  $M_{\phi/\psi}$  is a machine  $M_{\psi'}$  for cover  $\psi'$  with function  $\lambda^*$  mapping the states of  $M_{\psi'}$  onto the set  $\psi'$ .

(Thus  $M_{\psi'}$  replaces  $M_{\psi}$  and,  $\psi'$  replaces  $\psi$  in the definition of  $\lambda^*$ .)

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1. K. B. KROHN & J. L. RHODES, *Algebraic Theory of Machines*, Proc. Sympos. Math. Theor. Automata, New York, April 25-26, 1962, *Microwave Research Institute Symposium Series*, Vol. XII, Polytechnic Press, Brooklyn, New York, 1963.

2. H. P. ZEIGER, *Loop-free Synthesis of Finite State Machines*, Ph.D. Thesis, Massachusetts Institute of Technology, Cambridge, 1964.

3. ANN PENTON, *Algebraic Study of Sequential Machine Decomposition*, Master's Thesis, Wesleyan University, Middletown, Conn., 1967.

25 [12].—FRANK BATES & MARY L. DOUGLAS, *Programming Language/One*, Prentice-Hall, Inc., Englewood Cliffs., N. J., 1967, viii + 375 pp., 25 cm. Price \$5.95.

This book is a welcome addition to the literature of PL/I. It is written in a clear and concise style covering a wide field. In spite of the uncertainties about how the PL/I language will finally be implemented (witness the frequently changing specifications used by the manufacturer); this book manages to convey an idea of the power of the PL/I language and to develop in the reader a facility for writing clear, efficient PL/I code.

The examples are easily understood and to the point. Several of the problems provide good practice in the fine art of debugging. The answers seem to be correct and complete.

A very fortunate feature of this book is that technical points (e.g., the inaccuracy caused by representing a decimal fraction in a base other than ten) are reserved until the end of the appropriate chapter, where they appear in sets of notes. This is commendable, since it provides the reader with useful technical information without disturbing the flow of the more basic material.

The book contains several useful appendices, including PL/I character sets, keywords and abbreviations, built-in functions, conditions and format specifications. These tables, combined with a thorough index, make this book valuable as a reference work for the experienced programmer as well as useful as an introductory text to the subject.

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26 [12].—CHARLES R. BAUER, ANTHONY P. PELUSO & WILLIAM S. WORLEY, JR., *IITran/360: Self-Instructional Manual and Text*, Addison-Wesley Publishing Co., Reading, Mass., 1967, xi + 212 pp., 28 cm. Price \$4.95.

This book is an introduction to a new breed of computer languages called IITRAN, an acronym for Illinois Institute of Technology Translator, a language