

PRINT  $A$  SUM  $I$  2 DIFF  $J$  3

does not. Prefix notation is not used for certain special operators, so that

$$\text{SET } A = B + \text{LOG} \cdot (C + D)$$

is a valid statement, and can be used to process either scalars, vectors, or arrays. This flexible treatment of arguments is the core of OPS-3, and details of its implementation are given. One interesting trick used by the system to determine whether an operator wants its arguments evaluated is to examine its transfer vector for certain routines, and to evaluate them if not found.

The over-all impression given is that OPS-3 evolved by addition of new facilities to earlier versions. The resulting system appears something of a patchwork, with very little structure. However, it does contain a number of features which will be useful in future systems.

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**82[Z].**—THE STAFF OF COMPUTER USAGE COMPANY, ASCHER OPLER, Editor, *Programming the IBM System/360*, John Wiley & Sons, Inc., New York, 1966, xii + 316 pp., 24 cm. Price \$7.50.

This book is intended chiefly for experienced programmers who wish to program in assembly language. For the programmer who is thoroughly familiar with the System/360 assembly language instruction set, the book provides a concise, tightly written account of the applications of the instructions and provides techniques for the accomplishment of a large number of tasks. The book is thus an excellent reference.

The book contains very little explanation of the specific functions and effects of the instructions, and for this reason it is essential to have a publication such as *The IBM System/360: Principles of Operation* available, as the preface suggests.

For the programmer who is not familiar with the instruction set, much time is spent referring to *Principles of Operation*, and therefore the book is somewhat inefficient as a text.

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**83[Z].**—MARIO V. FARINA, *Fortran IV Self-Taught*, Prentice-Hall, Inc., Englewood Cliffs, N. J., 1966, xi, 426 pp. 28 cm. Price \$5.95.

Of the many Fortran IV instructional books which have recently appeared this self-educational introduction by Mario V. Farina is one of the best I have seen to date. It assumes no previous knowledge whatever on the part of the reader. He is exposed to the many facets of the Fortran IV language and repertoire in a gradual and well planned manner. There are over 400 pages to this work but the examples and explanations are carefully placed and spaced so that the reader does not have

to fight his way through a mire of complicated diagrams and descriptions. All of the fundamentals of Fortran IV are present but little of the programming techniques. Perhaps one would seek such techniques elsewhere. There is a slight bias in the presentation towards the GE 625 computer, but this is to be expected since the author works for the General Electric Company's Telecommunications and Information department.

Included in the text are 30 so-called "think questions" which are to be found scattered in the various exercises. In view of their irrelevance to programming I would have thought twice about including them.

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