

- 34 [Z].**—PHILIP M. SHERMAN, *Programming and Coding Digital Computers*, John Wiley and Sons, Inc., New York, 1963, xiv + 444 p., 24 cm. Price \$11.00.

This is an elementary text on digital computer programming. The author's intent is that "no prior knowledge of digital computers and no mathematical background beyond that which is ordinarily a part of the high school curriculum" is required of the student. By and large, his presentation achieves this objective. The style is crisp, clear, and direct. The topics are treated in simple terms. As in similar texts, machine language programming is explained by introducing a hypothetical "typical" computer. An assembler language is discussed and "coding fundamentals" such as loops, use of index registers, branching, use of subroutines, and input-output operations are explained. Finally, there is a discussion of algebraic languages (Fortran and Algol are treated briefly), non-numerical problems, macro-instructions, and program debugging.

Each chapter contains a fairly complete set of exercises.

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- 35 [Z].**—H. L. COLMAN & C. SMALLWOOD, *Computer Language*, McGraw-Hill Book Co., Inc., New York, 1963, xiv + 196 + 14 p., 23 cm. Price \$5.95.

This is an elementary autoinstructional text designed to teach FORTRAN programming to students "of almost any background or professional interest," to quote from the foreword. Considerable effort has evidently gone into the auto-instructional aspect of the text. The layout is quite different from the usual text and, according to the preface, it also differs from "traditional autoinstructional texts." Each page resembles a flow chart and consists of brief statements enclosed in boxes connected by arrows. Presumably, in the theory of autoinstruction it is shown that this method of guiding the reader's eye and mind is superior to the traditional page layout. The reviewer is unable to comment on this.

The table of contents is informative. There are eight parts to this booklet as follows: 1. Introduction, 2. Program Structure, 3. Variables and Constants, 4. Input Statements, 5. Arithmetic Expressions, 6. Arithmetic Statements, 7. Control Statements, and 8. Output Statements. The ordering of these eight parts is somewhat surprising. For example, one wonders at the presentation of the notion of subroutine in part 2, almost at the outset. However, the style throughout is clear and concise and, autoinstructional or not, it is a good brief introductory text.

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- 36 [Z].**—JAMES A. SAXON, *Programming the IBM 7090: A Self-Instructional Programmed Manual*, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1963, xiv + 210 p., 24 cm. Price \$6.75.

This book calls itself a "Self-Instructional Programmed Manual". It is a workbook that attempts to instruct the beginner in some of the rudiments of coding, using the question-answer technique of "programmed" instruction. The author tells the reader that by the time he has worked through the book "... you should feel confident in being able to pull your weight as a fledgeling programmer."