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PREFACE

This manual is directed to those who have previously acquired some programming skill. The intention is to provide a means of learning Pascal without outside guidance. It is based on *The Programming Language Pascal (Revised Report)* [1]--the basic definition of Pascal and concise reference manual for the experienced Pascal programmer.

The linear structure of a book is by no means ideal for introducing a language, whether it be a formal or natural one. Nevertheless, it is recommended to follow the given organization, paying particular attention to the example programs, and then to reread those sections causing difficultes. One may wish, however, to reference chapter 12 if troubles arise concerning the input and output conventions of the programs.

The manual was prepared as a file on a computer, that is , as a sequence of characters of a single type font. This is very convenient for the purposes of updating; unfortunately, it is sometimes a bit awkward to read. The reader is asked to be indulgent with the absence of sub- and superscripts (e.g. m raised to the power n is denoted by m**n).

Chapters 0--12 define the language Pascal and serve as a standard for both the implementor and the programmer. The implementor must regard the task of recognizing Standard Pascal as the minmum requirement of his system, while the programmer who intends his programs to be transferable from one installation to another should use *only* features described as Standard Pascal. On the other hand, any implementation may (and usually does) go beyond the minimum. Chapters 13 and 14 document the implementation of Pascal on the CDC 6000 machine. Chapter 13 describes the additional features of the *language* PASCAL 6000, whereas chapter 14 is devoted to the use of the compiler and the system under the operating system SCOPE.

The efforts of many go into this manual, and we especially thank the members of the Institut fuer Informatik, ETH Zurich, and John Larmouth, Rudy Schild, Olivier Lecarme, and Pierre Desjardins for their criticism, suggestions, and encouragement. Our implementation of Pascal--which made this manual both possible and necessary--is the work of Urs Ammann, aided by Helmut Sandmayr.

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June 1974

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