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dBASE™ IV 1.5 PROGRAMMING

- Write, maintain, & customize dBASE applications
- By a founding member of Borland dBASE Round Table

Cary N. Prague
and James E. Hammitt

PROGRAMMING

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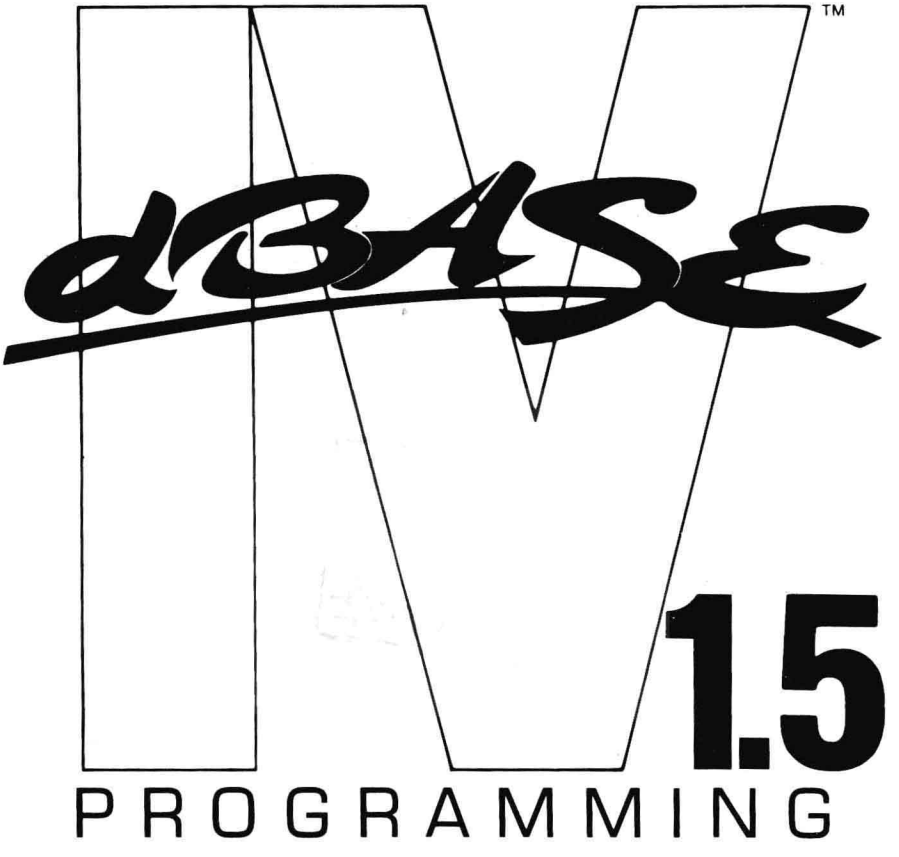
dBASE
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This book is dedicated to
my Father, Burton Prague,
for his bravery, courage,
and conviction. I love you, Dad.

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About This Book

dBASE IV is a very powerful database language. It features the choice of a completely menu-driven interface to create database structures and to add, change, and delete data items or a set of easy to learn commands. dBASE IV also allows the searching, selecting, and displaying of records in the database. Screens can easily be created with the screen painter. Reports can easily be designed and printed. A new advanced query system and view files let the user link as many as ten database files together to produce the most sophisticated reports imaginable. For many users, these commands are sufficient to provide them with simple database queries and reports. Other users, however, would like to unlock the power of dBASE IV as a programming language.

In the ever expanding world of microcomputers today, dBASE IV has gained popularity as a programming language. For many people, it has replaced BASIC or PASCAL. In big business, it is even used as a replacement for COBOL, FORTRAN, and PL/1. dBASE IV has a "full" programming language that is capable of solving almost any data processing problem.

Because of its use of database techniques, dBASE IV makes programming easier than with traditional languages. All normal programming techniques can be used with dBASE IV—decision making, looping, sorting, searching, selecting, displaying, data manipulation, and custom reporting. Full screen selection and data entry menus are simple to design and implement. Many database programming commands can also be integrated into dBASE IV programs. These include setting the programming environment or housekeeping with very simple commands. If a record description needs to be changed after the program is substantially complete, it is a simple task to change the program. It would not be as complicated a task as it is with non-database languages.

Database query commands used to sort, search, and select records are also used as programming commands to replace many programming statements found in traditional languages.

dBASE IV also features a complete Application Generator that can create complete programs or be used as a stepping stone to create your own programs. Reports are simplified by a very powerful report generator, and creating data entry screens is just as simple with the dBASE forms generator. Add this to dBASE's own word processor for creating your program code, and you can program faster than you ever thought possible.

dBASE IV is truly the fourth generation programming generator for the 1990s. This book is written for the computer novice as well as the experienced programmer wishing to add a new language to their toolbox. The book will help both the weekend hacker and the businessman.

It is expected that the reader is a novice and has not even created a database or produced simple reports. The novice will find this book a good introduction to programming concepts and database techniques. The use of dBASE IV is explained in depth with each of these topics. The experienced programmer will find the book a complete guide to making the transition from whatever languages they already know to dBASE IV.

The book is organized into four main parts: PROGRAMMING FUNDAMENTALS, DATABASE WITHOUT PROGRAMMING, PROGRAMMING WITH dBASE IV and THE CASE STUDY. In each part, you will learn dBASE IV through concepts and practical exercises. You will see how the Ajax Appliance Company creates an order entry system that includes both inventory and customer systems. These examples will help you learn to program. PROGRAMMING FUNDAMENTALS covers a complete introduction to programming along with comparisons of how dBASE IV differs from traditional programming languages. DATABASE WITHOUT PROGRAMMING explains what a database is and how to efficiently and effectively design and use the databases. You will see how to create an entire application without any programming.

All the database commands are fully explained from both the point of view of the dot prompt and the Control Center. The third part, PROGRAMMING WITH dBASE IV, is subdivided into several chapters. Each shows how to use the appropriate dBASE IV commands taught in each chapter. Each chapter presents the topic as a stand-alone subject and also integrates it with the previously discussed topics. This allows the reader to break down the programming topics into individual subjects and understand how they come together to form the complete program. The Custom System Study links the programs together to form a working, integrated system.

After reading this book, both novice and expert will be prepared to design, code, and implement any problem with the dBASE IV solution.

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Part One

Programming Fundamentals

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