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dBase Demystified

dBase II/III/III Plus®

Applications and Solutions to Real Problems

Lan Barnes

Microtrend Inc

dBase Demystified

dBase II/III/III Plus® Applications and Solutions to Real Problems

by

Lan Barnes Microtrend, Inc.

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Preface

The idea for this book grew out of some discussions with my publisher, Les Smith, in the summer of 1984. At the time I was completing two books on dBase II and dBase III programming, drawing on the ideas and materials I had developed while teaching dBase classes.

As valuable as books on dBase programming are, Les and I agreed that another kind of book was needed to supplement the formal texts. I had noted that whenever my old students phoned me for emergency help with a dBase programming problem, their questions were never theoretical in nature.

Nobody ever asked, "How do I use the control structures to write a limited iteration loop?" Instead, a typical question was something like, "How do I do three-across mailing labels?"—a real problem from the real world.

Out of that observation came the plan for this book, dBase Demystified: dBase II/III/III Plus Applications and Solutions to Real Problems. The title tells it all.

To Kate

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Introduction

This is a book of applications, not programming technique or theory. It's designed to meet the needs of dBase II, dBase III, and dBase III Plus users. And this is a book whose emphasis is on the practicality and usefulness of the code presented as examples. In other words, the book is not designed to be used as a primary text for learning dBase programming. It's a book for problem solving.

This is not to say that dBase Demystified cannot be used to learn programming. Indeed, one of the best methods for developing sound programming practices is to read other people's code, good and bad. The programs and program modules within these pages are offered as a rich source of programming ideas.

ORGANIZATION

The book is divided into three Parts.

Part I

Part I consists of 12 short chapters. The first is introductory material for complete newcomers to dBase and computing. The next 11 are applications chapters, each of which addresses a single, frequently asked dBase question.

This part presents dBase II- and dBase III- or III Plus-oriented programs. Some of the programs apply to all versions of dBase as well.

Part II

Computer languages are like human languages in many ways. In order to learn the language, you have to read it and speak it for a while. Part II consists

of eight chapters that discuss a complete program created for this book. By including a complete and working dBase program, I hope to give the reader a comprehensible reference for how a dBase program is organized and tied together.

In keeping with the spirit of the book—that the reader is justifiably interested in applications, rather than theory—the program presented in Part II is a practical one. It's a "client manager" program for a self-employed individual offering professional services. At this writing the program is in use at several sites and (with some customization) is passing the test of use.

Part III

A book such as this couldn't succeed without giving the reader a comprehensive listing of the dBase commands and functions. Part III does this.

While this section has many examples of command and function use, I encourage the reader also to read the similar command section of the dBase documentation for its excellent examples.

CODING CONVENTIONS

As most readers will be aware, there are significant differences between the two major versions of dBase. Although they may be viewed as two dialects of the same programming language, a dBase II program will rarely run under dBase III, and vice versa. The major difference between dBase III and dBase III Plus lies in the networking capabilities of the latter. The programs and techniques developed in this book for dBase III apply to dBase III Plus as well. Hence, our references to dBase III refer to both versions.

Furthermore, some valid programming challenges in dBase II are trivial in dBase III—writing a mailing label program, for instance. Other program modules utilize dBase commands that are unavailable in the II version and would be nonsense if coded in dBase II commands. For this reason, the code examples in Section I of this book must necessarily move back and forth between dBase II and III syntax.

So that the reader won't get lost, I've adopted the following conventions:

- 1. dBase II code appears only in the chapters in Part I.
- 2. Each chapter heading in the first part contains a parenthetical note that tells which version the code applies to, as in:

Since creating mailing labels has been automated in dBase III, it's reasonable to present this chapter in dBase II code only.

- Chapters in which the code solves a problem that's equally troublesome in both versions will be marked as "(II/III)" and will be programmed in dBase III code.
- The commands and functions in Part III are listed in dBase III, and all examples in the part are in dBase III code. However, synonomous dBase II commands and functions are listed, as in:

EOF() dBase II: EOF

All of these organizational divisions and coding conventions are designed so the reader can enter the book at any chapter and expect to understand the explanation of the problem at hand with a minimum of cross referencing. Taken together, the techniques disclosed in these chapters can be used to construct countless dBase II and III or III Plus programs useful across the entire spectrum of microcomputer data base applications.

Part I

dBASE APPLICATIONS