Teach Yourself

dbase IV

Mary Campbell

Teach Yourself dBASE IV

Mary Campbell

Osborne McGraw-Hill

Berkeley New York St. Louis San Francisco Auckland Bogatá Hamburg London Madrid Mexico City Milan Montreal New Delhi Panama City Paris São Paulo Singapore Sydney Tokyo Toronto Osborne **McGraw-Hill** 2600 Tenth Street Berkeley, California 94710 U.S.A.

For information on translations and book distributors outside of the U.S.A., please write to Osborne **McGraw-Hill** at the above address.

dBASE, dBASE III+, and dBASE IV are trademarks of Ashton-Tate WordStar is a registered trademark of MicroPro International HP LaserJet Series II is a registered trademark of Hewlett-Packard Co.

Teach Yourself dBASE IV'"

Copyright © 1989 by McGraw-Hill, Inc. All rights reserved. Printed in the United States of America. Except as permitted under the Copyright Act of 1976, no part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of the publisher, with the exception that the program listings may be entered, stored, and executed in a computer system, but they may not be reproduced for publication.

234567890 DOCDOC 89

ISBN 881502-9

Acquisitions Editor: Cindy Hudson Copy Editor: Valerie Robbins

Word Processors: Bonnie Bozorg, Kathy Fallon Proofreaders: Juliette Anjos, Barbara Conway

Technical Illustration: Peter Hancik Production Supervisor: Kevin Shafer

Preface

dBASE IV is an exciting new product that can be used for managing all types of data. It is a major revision to the dBASE product and as such provides many new features and enhancements for existing options. Although dBASE IV is easier to use than earlier releases, its sheer size and power can cause frustration for a novice user that is uncertain where to begin and how far to explore each of its major areas. *Teach Yourself dBASE* is designed to provide you the benefits of an expert tutor to guide your learning process and point out important commands without having to leave your office.

The short easy-to-follow lessons in *Teach Yourself dBASE IV* present all the dBASE basics step by step. Each new objective builds on the skills you have already learned. You will find yourself creating databases, reports, and custom forms in a short time.

The book uses a learning-by-example approach, eliminating lengthy feature discussions. The chapters are organized by lessons, with each lesson focusing on a particular learning objective. You will master each objective by working through examples and completing exercises. Each exercise is de-signed to be accomplished in 15 minutes or less and in many cases a complete lesson can be accomplished in this time frame.

Each chapter (except the first) begins with a Skills Check. The Skills Check exercises test your readiness to begin a new chapter. The sequence of keystrokes needed to complete an exercise is provided in Appendix C, along with the number of the section where the skills were initially introduced. If you experience difficulty with an exercise, you will want to go back to the referenced section and work through the examples to improve your skill level before proceeding with the new material.

Once you have mastered the Skills Check, you are ready to tackle the first learning objective. A brief description of the skill is followed by the steps required to accomplish it and one or more practical applications. You will want to enter the keystrokes for these applications at your keyboard if at all possible, since it will provide a more effective learning experience than reading about the feature. By trying out the keystrokes you will also create the application. The examples are followed by a set of exercises that test your ability to use the feature covered in the learning objective. Answers for these exercises are in Appendix C.

Each chapter concludes with two additional sets of exercises: the Mastery Skills Check and the Integrating New Skills Check. Unlike the section exercises, which focus on one learning objective, the Mastery Skills Check tests your skill with all the chapter's objectives. The Integrating New Skills Check brings together your new skills with those mastered in earlier chapters. Appendix C provides the keystrokes and section references to the location where the material was introduced.

As you complete a chapter, you will find that you can apply these new skills to your own dBASE applications. By the time you finish the last chapter you will have a set of beginning and intermediate dBASE skills. Although hard work and repetition were needed to reach this point, you were spared the frustration normally associated with learning a new package.

How This Book Is Organized

Teach Yourself dBASE is organized into 3 parts and 19 chapters. Parts I and II are designed to be covered in sequential order. Part I covers the basic skills needed to create and use dBASE databases. Part II covers intermediate level skills that enhance your ability to work with your new databases. Part III focuses on special topics. You may choose to complete Part III in sequence or just work through a particular chapter. The topics in Part III assume that you have completed Parts I and II but are not dependent on other topics in Part III.

Appendix A covers the procedures for installation. Appendix B provides a reference to the databases used in this book. You can trace the history of a database by following all the steps from its creation to the addition of custom forms or reports. Appendix C contains the answers to all the exercises.

Conventions Used in This Book

USER INPUT—Text to be typed into the computer is shown in bold. When entering text, type continuously without pressing ENTER unless directed to do so.

KEYS—Keyboard keys are represented by SMALL CAPS. When two keys must be pressed simultaneously, they are separated by hyphens. For example, ALT-Lindicates that you should press the ALT key along with the L key.

ANSWER KEY—Appendix C provides the answers to the exercises in the form of keystroke sequences. Although other sequences may produce the same result, these are intended to provide one workable solution. The keystroke sequences may differ slightly from the ones provided for commands that require you to specify the disk drive or directory. Throughout this book, D:DBASE is used although you may elect to use another drive and directory.

Function keys and other special keys sequences are shown in [SMALL CAPS] in the answers. A set of braces {} is

used to encase descriptive information and directions. For example: {Move to the top record in the database}. Section references for the Skills Checks, Mastery Skills Checks, and Integrating New Skills Checks are found at the outer edge of the page.

Please send me the disks that accompany *Teach Yourself dBASE IV*. My payment of \$8.95 (\$12.95 for 3 1/4 disk or foreign orders) is enclosed. All foreign orders must be payable in U.S. dollars.

Name		
Address		
City	State	ZIP
Send payment to:		
Campbell & Associates		
Box 358		
Gates Mills, OH 44040		

Acknowledgments

I would like to extend my thanks to the many people who contributed to producing this book:

Gabrielle Lawrence, for all her work on the project. Her ideas, many long hours exploring all the features of the new product, and for her organization of all details of database changes throughout this book were an immense help.

Cindy Hudson, for her idea to do the series and achieving what at first seemed to be an impossible ship date.

Kevin Shafer and his staff for their excellent copy edit and production work. Kevin managed to produce page drafts that seemed to be as clean as finals in what must have been record time.

Matt Chenelle and Dan Fingerman who both doublechecked the answer keys to ensure a letter-perfect copy. Scott Kissinger who checked the manuscript for technical accuracy.

CHAPTER OBJECTIVES

After completing this chapter you should be able to

- 1.1 Define a database
- 1.2 Define a field
- 1.3 Define a record

\bullet Contents \bullet

	Preface	xi	
Data	abase Concept	1	1
1.1	Define a database	2	
1.2	Define a field	9	
1.3	Define a record	17	
dBA	SE IV Overview	27	2
2.1	Start a dBASE session	29	
2.2	End a dBASE session	32	
2.3	Describe the Control Center options	33	
2.4	Select and cancel menu options	37	
2.5	Create a catalog entry	42	

	2.6	Access help features	45
	2.7	Review related help topics	48
	2.8	Print help information	51
_			
3	Crea	ate a dBASE File Structure	57
	3.1	Plan design components	59
	3.2	Enter field names and length	64
	3.3	Save the file design	69
	3.4	Use different field types	73
4	Ente	er and Edit Data	83
	4.1	Use the display feature	85
	4.2	Switch the display format	93
	4.3	Change database records	100
	4.4	Abandon changes	102
	4.5	Mark a record for deletion	104
	4.6	Blank a record	106
	4.7	Position on a specific record	108
	4.8	Search for a specific entry	111

Display and Print Data		121	5
5.1	Create a quick report	122	
5.2	Print the report on your printer	128	
5.3	Control the printer	130	
5.4	Change report dimensions	134	
5.5	Change the output options	137	
5.6	Save and use print forms	142	
Mod	difying the Data Structure	147	6
6.1	Add a field	149	
6.2	Change a field name	156	
6.3	Delete fields	158	
6.4	Change field types	160	
6.5	Change field lengths	166	
6.6	Print the database structure	169	
Crea	ating Basic Queries	177	7
7.1	Display a query screen and move around it	179	
7.2	Query a field for a character entry	185	
7.3	Save and use queries	190	

	7.4	Query Numeric fields	193
	- 7.5	Query Date fields	195
	7.6	Query Logical fields	196
	7.7	Add and remove fields from a view	197
8	Buil	ding a Simple Custom Report	207
	8.1	Create and save a custom report	209
	8.2	Add and remove lines from the various bands	221
	8.3	Add a line or box	224
	8.4	Move fields in a report	229
	8.5	Change the ruler	234
	8.6	Change style options	241
0			
9	Add	itional Query Features	247
	9.1	Create conditions involving multiple fields	249
	9.2	Sort query records	257
	9.3	Use group and summary operators	262
	9.4	Use calculated fields	266
	9.5	Hide duplicate records	270

9.6	Create update queries	273	
Crea	ting Simple Forms	281	10
10.1	Create and save a quick form	283	
10.2	Add descriptive information	290	
10.3	Add and delete fields	294	
10.4	Move existing fields	300	
10.5	Add boxes and lines	305	
10.6	Make display and position changes	309	
Mor	e on Forms Design	317	11
11.1	Modify templates	320	
11.2	Use picture functions	327	
11.3	Use edit options	334	
Con	trolling Records and Fields	343	12
12.1	Sort a database	347	
12.2	Index a database	351	
12.3	Lock database fields	358	
12.4	Freeze database fields	361	

	12.5	Pack a database to remove records marked for deletion	363
13	Adv	anced Report Design	371
	13.1	Create report intro band and page footer entries	374
	13.2	Add group bands	377
	13.3	Add calculated fields	384
	13.4	Add summary fields	388
14	Creating Labels		397
	14.1	Create and save a label file	399
	14.2	Print labels	408
	14.3	Add calculated fields	412
	14.4	Change label dimensions	416
15	File	Commands	423
	15.1	Create and change directories	425
	15.2	Mark files and perform file operations	434
	15.3	List and sort directories	440

Cata	log Options	447	16
16.1	Modify catalog names and descriptions	450	
16.2	Add and change file descriptions	455	
16.3	Add files to and remove files from a catalog	457	
Wor	king with Multiple Files	465	17
17.1	Create and use a view of multiple files	469	
17.2	Create and use a limited link	477	
Cust	omizing dBASE	487	18
18.1	Set general options	489	
18.2	Set database options	494	
18.3	Make permanent changes to the defaults	497	
Mak	ing Dot-Prompt Entries	507	19
19.1	Switch between the dot prompt and the Control Center	509	

		Enter simple dot-prompt re- Juests	510
	19.3 I	Jse memory variables	518
A	Installi	ng dBASE	525
В	dBASE	IV File Reference	535
C	Answe	rs	549
	ī	ndov	660