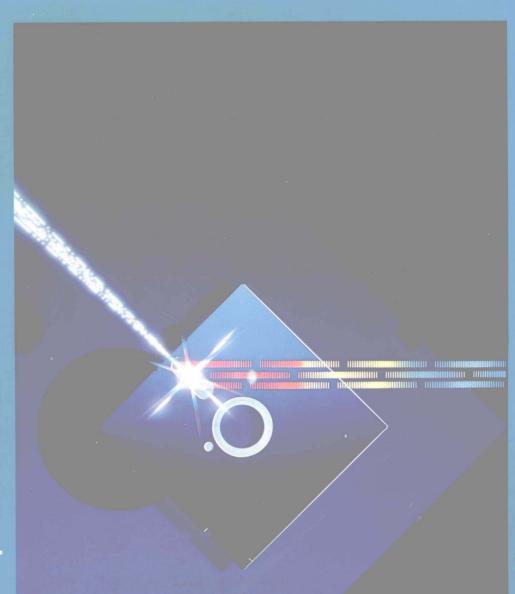
USING APPLICATION SOFTWARE

WordPerfect 4.2, Quattro, and dBASE III PLUS

Third Edition



Keiko Pitter

Using Application Software 3rd

Using the IBM PC WordPerfect 4.2 Quattro dBASE III PLUS

Keiko Pitter

Willamette University Salem, Oregon



Mitchell McGRAW-HILL

New York St. Louis San Francisco Auckland Bogotá Caracas #Hamburg Lisbon London Madrid Mexico Milan Montreal New Delhi Oklahoma City Paris San Juan São Paulo Singapore Sydney Tokyo Toronto Watsonville

Mitchell McGraw-Hill 55 Penny Lane Watsonville, CA 95076

Using Application Software, Third Edition WordPerfect 4.2. Quattro, and dBASE III PLUS

Copyright © 1992, by McGraw-Hill, Inc. All rights reserved. Printed in the United States of America. Except as permitted under the United States 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.

Disclaimer: This book and the accompanying magnetic disks are designed to help you improve your computer use. However, the authors and publisher assume no responsibility whatsoever for the uses made of this material or for decisions based on its use, and make no warranties, either expressed or implied, regarding the contents of this book or any accompanying magnetic disks, its merchantability, or its fitness for any particular purpose.

Neither the publishers nor anyone else who has been involved in the creation, production, or delivery of this product shall be liable for any direct, incidental, or consequential damages. such as, but not limited to, loss of anticipated profits or benefits resulting from its use or from any breach of any warranty. Some states do not allow the exclusion or limitation of direct, incidental, or consequential damages, so the above limitation may not apply to you. No dealer, company, or person is authorized to alter this disclaimer. Any representation to the contrary will not bind the publisher or authors.

2 3 4 5 6 7 8 9 0 DOH DOH 9 0 9 8 7 6 5 4 3 2

P/N: 050288-9

ORDER INFORMATION:

ISBN: 0-07-911210-2 (text with 51/4-inch data disk and software) 0-07-911211-0 (text with 3½-inch data disk and software)

The sponsoring editor was Roger Howell. The editorial assistant was Laurie Boudreau. The production supervisor was Betty Drury. The production assistant was Richard De Vitto. The production manager was Graphics West. The cover designer was Juan Vargas. Printer and binder was R.R. Donnelley & Sons.

Library of Congress Card Catalog No.: 91-66866

MS DOS is a registered trademark of Microsoft, Inc.

IBM, IBM PC, and PC DOS are registered trademarks of International Business Machines Corporation.

WordPerfect 4.2 is a registered trademark of WordPerfect Corporation.

Quattro is a registered trademark of Borland International.

dBASE III PLUS is a registered trademark of Ashton-Tate.

Preface

This manual was first published in 1984 as *Using Microcomputers:* An *IBM PC Lab Manual*, covering several software programs that were popular at the time — WordStar, VisiCalc, and PFS: File. As time passes, however, technology changes. By the time the manual was revised in 1986, VisiCalc had become largely a thing of the past, whereas dBASE had gained popularity. That edition, *Using IBM Microcomputers: Second Edition*, featured WordStar, dBASE II, III, and III Plus, and Lotus 1-2-3, Releases 1a and 2. Now WordPerfect has taken over the word processing market, and Ashton-Tate has introduced a new version of the dBASE program.

My goals have always been to teach popular software packages in their latest versions, so that the student may gain a marketable skill, and to improve the method (and order) in which topics are presented. The first edition of *Using Application Software*, published in 1988, took advantage of the educational versions of WordPerfect 4.2, VP-Planner, and dBASE III Plus to produce an instructional package that combines the lessons with working versions of the software. The second edition of *Using Application Software*, published in 1990, contained revised modules for WordPerfect and dBASE III Plus and a modified spreadsheet module for use with the educational version of VP-Planner Plus. This edition presents a revised spreadsheet module for use with the educational version of Quattro. Even though it has not yet been possible to obtain educational versions of WordPerfect 5.0 or 5.1, Quattro Pro, or dBASE IV, the educational versions presented in this manual have proved more than adequate for use in teaching the basic concepts of application software.

The manual continues to follow the same philosophy of presenting an easy-to-follow, hands-on approach. However, it also recognizes the changes in student requirements in recent years resulting from their increased computer sophistication. Many of today's students are familiar with the computer and know what applications are

available; they want to learn how to use a specific software package for their particular needs. Hence, this manual gives more in-depth, business-oriented examples. In addition to the basic commands needed to gain a working knowledge of the software, some advanced features are covered. In WordPerfect, the Speller and Thesaurus features are covered in the first lesson and Mail Merge is covered in the third lesson. In Quattro, the database, graphics, and macro features are covered. The coverage of dBASE III Plus is geared to preparing the student to create programs; thus, coverage of the dot prompt is extensive.

MANUAL DESIGN

The manual answers most questions asked by students in a manner that is neither too technical not too elementary. It uses many screen displays and is written in such a way that students are either told or shown at every step what response to expect from the computer and what entries to make next. Whenever possible, the reason for the response or the entry is given. Intermittently, a "Practice Time" exercise is given to test the student's understanding of the material. Solutions to these exercises are not given. If students cannot do any one of them, they should review the material given immediately before the exercise.

SPECIAL FEATURES

The strengths of this book include:

- 1. It contains keystroke-by-keystroke instructions.
- 2. It is beginner-oriented.
- 3. It is practical, covering the latest available educational versions of popular software packages.
- 4. It has a modular format, adjustable to any course.
- 5. It is well-illustrated.
- 6. It includes interesting applications.
- 7. It contains projects for students to do.
- 8. It contains a command summary for each software package.

NEW TO THE SECOND AND THIRD EDITIONS

Many of the improvements in the second and third editions have been made as a result of feedback from instructors across the country. Among the changes are:

1. The first module contains more practical information, such as things to consider in selecting a microcomputer and care and maintenance of hardware.

- 2. Each module starts with a conceptual introduction, both to the concepts and to potential uses of the particular application being discussed.
- 3. Each lesson starts with a list of objectives.
- 4. Lessons contain various hints for working with the software.
- 5. Examples are business-oriented.
- 6. There are review questions at the end of each lesson.
- 7. Exercises have been provided at the end of each lesson.
- 8. The design and layout have been enhanced with color.
- 9. An index is included.

SOFTWARE REQUIREMENTS

For the first module in this manual, each student needs a DOS (Disk Operating System) disk, or access to DOS through a network, and a scratch disk. A scratch disk is a disk that either is blank or contains information no longer needed.

Three software packages are covered in this manual: Module 2 discusses WordPerfect 4.2 for word processing, Module 3 discusses Quattro for spreadsheet applications, and Module 4 discusses dBASE III Plus for database management. For each module, the student needs the accompanying disks that contain the educational software and at least one formatted scratch disk.

HARDWARE REQUIREMENTS

The hardware configuration required is an IBM PC or compatible (including 286 and 386 systems) with at least 256K bytes of RAM (384K if dBASE III Plus with DOS version 3.0 or higher is being used). Also required are a monochrome or color monitor, a hard disk drive or two floppy disk drives, and either a printer or access to a computer with a printer.

LAB LESSON STRUCTURE

Everyone using the manual should go through Module 1 first. Its purpose is to acquaint the student with the microcomputer and give him or her confidence in its use. After that, it is up to each individual (or instructor) to decide which modules to study and in what order. Each module contains lessons, with review questions and exercises at the end of each. Modules are completely independent of one another.

In Quattro, the first three lessons contain the basic information. Lessons 4 through 6 contain more advanced information: Lesson 4 covers the use of Quattro as a database, Lesson 5 covers graphics, and Lesson 6 covers macros. It is up to the individual or instructor to decide whether to cover or skip these lessons.

ACKNOWLEDGE-MENTS

I extend much gratitude to the staff at Mitchell Publishing, Inc., especially my editors, Jim Hall and Roger Howell. Ralph Moore of Modesto Junior College, Jane Ewing of Independence Community College, and Les Hays of Pima Community College reviewed the first edition of the manual and gave me suggestions for changes. Don Myers of Vincennes University, Raj Gill of Anne Arundel Community College, and Claudia Duncan of Heald Business College reviewed the manuscript of the second edition and made many thoughtful suggestions. I thank you all very much. I thank Rich Pitter for assistance with the third edition. Moreover, I extend much gratitude to all those instructors from across the country who were in my classes at the National Computer Educator's Institute at James Madison University in the summer of 1988, at Central State University in the summer of 1989 and at Western Washington College in the summer of 1990 for giving me ideas on ways to improve the manual.

As always, I thank my children, Greg and Jackie, for their understanding of me and my deadlines. They have both been wonderful sources of fun and comfort to me. Last but not least, I thank Scott Fisher of Recognition Concept, Inc., for keeping me straight on my priorities and giving me support and friendship.

Keiko Pitter Salem, Oregon

Brief Contents

Preface xvii

Module 1 Using the IBM PC 1

Introduction 1

LESSON 1 Components of the IBM PC 3

LESSON 2 Disk Operating System 26

LESSON 3 Some Advanced DOS Features 44

Module 2 WordPerfect 53

Introduction 53

LESSON 1 Creating Documents 56

LESSON 2 Formatting Documents 82

LESSON 3 Editing Documents 109

Projects 132

Command Summary 136

Module 3 Quattro 139

Introduction 139

LESSON 1 Creating a Simple Spreadsheet 143

LESSON 2 Enhancing the Simple Spreadsheet 164

LESSON 3 Modifying the Screen Layout 186

LESSON 4 Using a Worksheet as a Database 202

LESSON 5 Creating Business Graphics 220

LESSON 6 Introducing Macros 243

Projects 256

Command Summary 259

Module 4 dBASE III Plus 267

Introduction 267

LESSON 1 Creating Files 272

LESSON 2 Manipulating the Data 300

LESSON 3 Creating Labels and Reports 333

Projects 359

Command Summary 360

Index 367

Detailed Contents

Preface xvii

Module 1 Using the IBM PC 1

Introduction 1

```
LESSON 1 Components of the IBM PC 3
           OBJECTIVES 3
           SUPPLIES NEEDED 3
           Function of a Computer 3
           Processing Components 5
               MPU 5
               Main Memory 6
           Output Components 7
               Monitor and Printer 7
               Disk Drive and Modem 10
           Input Components 10
               Keyboard 10
               Mouse 10
               Disk Drive and Modem 11
           Starting the Computer 11
           The Keyboard 13
           Keyboard Features 14
               Characters 14
               SPACE BAR 15
               ENTER 15
               Control Characters 15
               Function Keys 15
               ALT 15
               Numeric Keyboard 16
               ESC 16
               TAB 16
               PRTSC 16
               BACKSPACE 16
               INS and DEL 17
```

	Keys to Keep Distinct 17 Wraparound 17 Auto-Repeat 17 Learn to Use the Software 17 Function of a Disk 18 Characteristics of Disks 18 Care and Handling of 51/4-Inch Disks 20 Care and Handling of 31/2-Inch Disks 21 Hard Disks 21 Care of Disk Drives 22 Identifying Disk Drives 22 End of Lesson 1 23 SUMMARY 23 REVIEW QUESTIONS 23 Configuration of My Computer 24
LESSON 2	Disk Operating System 26 OBJECTIVES 26 SUPPLIES NEEDED 26 Orientation 26 Starting Up 27 Default Disk Drive 27 Changing the Default Drive 27 DOS Commands 27 VER 29 FORMAT 29 CHKDSK 31 DIR 31 COPY 33 RENAME 34 ERASE 35 TYPE 35 COMP 35 DISKCOPY 36 DISKCOPY 36 DISKCOMP 36 MKDIR 37 CHDIR 38 TREE 39 RMDIR 40 Executing Programs 40 End of Lesson 2 40 SUMMARY 40 REVIEW QUESTIONS 42
LESSON 3	Some Advanced DOS Features 44 OBJECTIVES 44 SUPPLIES NEEDED 44 Orientation 44 Starting Up 44

Batch Files 45
PATH Command 46
AUTOEXEC.BAT File 47
CONFIG.SYS 50
End of Lesson 3 51
SUMMARY 51
REVIEW QUESTIONS 51

Module 2 WordPerfect 53

Introduction 53 Starting WordPerfect 4.2 55

LESSON 1 Creating Documents 56 OBIECTIVES 56 Starting Off 57 Entering Text 58 Correcting Errors 58 Uppercase Letters 58 WordPerfect Commands 59 Cursor Movement 60 Deleting Text 62 Restoring Deleted Text 65 Rewrite the Screen 66 Moving Text 66 Inserting Text 68 Spelling Checker (Speller) 69 Thesaurus 72 Saving Your Work 73 Printing Text 76 Ending the Session 76 SUMMARY 76 **REVIEW QUESTIONS** 78 EXERCISES 79 Exercise 1 79 Exercise 2 80 Exercise 3 80

LESSON 2 Formatting Documents 82
OBJECTIVES 82
Starting Off 82
Default Format for Printing 83
Line Format 83
Setting Tabs 84
Display Ruler Line 85
Margin Settings 86
Line Spacing 87
Page Format 87
Page Length 88

Top and Bottom Margins 88 Paging 89 Page Numbering 90 Print Format 91 Characters/Lines per Inch 91 Justification 92 Revealing Codes 93 Switch Screen 94 Line Indentation 95 Saving a File 95 Paragraph Indentation 96 Centering Text 98 Underline 100 "Hanging" Paragraph Format 101 End of Lesson 2 103 SUMMARY 103 **REVIEW QUESTIONS** 105 EXERCISES 106 Exercise 1 106 Exercise 2 106 Exercise 3 107

LESSON 3 Editing Documents 109

OBJECTIVES 109

Starting Off 109

Moving a Block of Text Between Documents 110

Splitting the Window 110

Copying a Block Between Two Documents 111

Entering Text Flush Right 111

Including the Current Date 112

Tab Alignment 113

Creating a Form 115

Tab Align 116

Finding Text 117

Replacing Words 118

Mail Merge 121

Secondary File 122

Primary File 123

Merging 126

Ending the Session 126

SUMMARY 127

REVIEW QUESTIONS 128

EXERCISES 129

Exercise 1 129

Exercise 2 129

Exercise 3 130

PROJECTS 132

Project 1 132

Project 2 133 COMMAND SUMMARY 136

Module 3 Quattro 139

Introduction 139 Starting Quattro 141 Using a Printer 142

LESSON 1 Creating a Simple Spreadsheet 143

OBJECTIVES 143 Starting Off 143 Worksheet 143 Cell Selection 145 Worksheet Size 146 GOTO Key (F5) 147 Command Structure 148 Erasing an Entry (/BE) 150 Erasing the Whole Worksheet (/EY) 151 Labels and Values 152 Characters Designating Values 152 Characters Designating Labels 152 Entering Labels 152 Uppercase 153 Correcting Errors 153 Entering Values 153 Preparing the Worksheet 153 Entering Formulas (Expressions) 154 File Commands (/F) 157 Specifying Directory (/FD) 158 Saving a File (/FS) 158 Printing Files (/P) 159 End of Lesson 1 161 SUMMARY 161 **REVIEW QUESTIONS** 162

LESSON 2 Enhancing the Simple Spreadsheet 164

EXERCISES 163

OBJECTIVES 164
Starting Off 164
Retrieving a File (/FR) 165
Row Insertion Command (/RI) 165
Block Copy Command (/BC) 167
Repeating Labels (\) 170
Column Width Command (/CW) 170
Sum Function (@SUM) 173
Default Format Command (/DF) 175
Block Display Format Command (/BD) 178

Saving a File for the Second Time 179
Printing the Spreadsheet in Sections 180
End of Lesson 2 182
SUMMARY 182
REVIEW QUESTIONS 183
EXERCISES 184

LESSON 3 Modifying the Screen Layout 186 OBJECTIVES 186 Starting Off 186 Layout Titles Commands (/LT) 187 Layout Windows Commands (/LW) 189 Jumping Between Windows (F6) 190 Column Hide Command (/CH) 191 Block Move Command (/BM) 193 Row Delete Command (/RD) 194 Column Delete Command (/CD) 195 Edit Kev (F2) 196 Text Display 196 Cell Formulas Printout 198 End of Lesson 3 199 SUMMARY 199 **REVIEW QUESTIONS 200** EXERCISES 201

Data Management 202

An Inventory Application 203

Sort Command (/ADS) 204

Query Command (/ADQ) 208

Formula Criterion for Numeric Field 209

Formula Criterion for Text Field 211

Output Block 212

Frequency Command (/AF) 214

End of Lesson 4 216

LESSON 5 Creating Business Graphics 220
OBJECTIVES 220
Starting Off 220
Graphics 220
Pie Charts 223
Naming a Graph 227
Printing a Graph 228

REVIEW QUESTIONS 217

SUMMARY 217

EXERCISES 218

Printing a Graph 228
Bar Graph 228

Stacked-Bar Graph 232

Line Graph 233 End of Lesson 5 240 SUMMARY 240 REVIEW QUESTIONS 240 EXERCISES 241

LESSON 6 Introducing Macros 243

OBJECTIVES 243 Starting Off 243 Macros 243 Types of Macros 244 Entering Macros as Labels 244

Interactive Macros 247
Recording Macros 248
Multiple-Line Macros 250
Recording versus Writing Macros

Recording versus Writing Macros 253

End of Lesson 6 253 SUMMARY 253

REVIEW QUESTIONS 254

EXERCISES 255 PROJECTS 256

Project 1 256 Project 2 257

Functions 264

COMMAND SUMMARY 259

Cell Selector Movement 259 Correcting Mistakes 259 Selecting a Menu Option 259 Help Key 259 Command Structure 259 Function Keys 264

> Mathematical Functions 264 Logical Functions 265 Date/Time Functions 265 Statistical Functions 266 Financial Functions 266

Module 4 dBASE III Plus 267

Introduction 267
Starting dBASE III Plus 269
Installing dBASE III Plus 269
To Start dBASE III Plus 270
Using a Printer 271

Creating Files 272
OBJECTIVES 272
Starting Off 272
Database Files in dBASE III Plus 275

Creating a File from ASSIST 278

Entering Data 282

BROWSE Command 285

Screen Printouts 288

SUM, AVERAGE 288

COUNT 289

Working from the Dot Prompt 289

Using Another Database File on the Disk 293

From the Dot Prompt 293

Using ASSIST 293

End of Lesson 1 294

From ASSIST 294

From the Dot Prompt 294

SUMMARY 294

REVIEW QUESTIONS 295

EXERCISES 296

Exercise 1 296

Exercise 2 297

Exercise 3 298

LESSON 2 Manipulating the Data 300

OBJECTIVES 300

Starting Off 300

Directory 301

From ASSIST 301

From the Dot Prompt 301

Opening a File 302

From ASSIST 302

From the Dot Prompt 302

The DISPLAY/LIST Commands 302

From ASSIST 303

From the Dot Prompt 305

The HELP Command (F1) 305

Record Pointer 307

The GOTO Command 308

From ASSIST 308

From the Dot Prompt 308

Displaying Selected Fields 309

From ASSIST 309

From the Dot Prompt 311

Displaying Selected Records 311

From ASSIST 311

From the Dot Prompt 313

The DISPLAY/LIST STRUCTURE Command 313

From ASSIST 313

From the Dot Prompt 313

The SORT Command 314

From ASSIST 315

From the Dot Prompt 316