

WILSON T. PRICE

COMPUTERS AND PRODUCTIVITY SOFTWARE

Second Edition

162

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Preface

What a difference 25 years makes! During that time, we have seen the computer come from virtually nowhere to a device having a profound influence on our lives. Mirroring that rapid change, we have also seen a wide spectrum of courses teaching about computers and how to use them. This book is another in the rapid evolution of the field; it is intended to be used in a first course on computers and information processing. The book echoes the quickly occurring changes that have taken place due to the personal computer. It has long been apparent to educators that in order for a beginner to feel the real impact of what the computer is all about, a certain amount of "hands-on" experience is necessary. To a great degree, this hands-on experience has been provided by teaching Basic or some other programming language. For the average student who needs a general knowledge of the computer and what it can do, learning a little bit about a programming language does not have much value. This course should teach "driver training" not "principles of automotive design." The best way to do this is with the powerful productivity software now widely used on personal computers: word processing, spreadsheet, and file management.

For three semesters prior to the publication of this book, I taught a general introductory course in which productivity software was an integral part. In over 20 years of teaching this course, I have never encountered such enthusiasm for the genuine value of the material being taught. Students have been impressed by the convenience of using a word processor for preparing documents. They think of many different ways in which they might set up a "database" and use a file management system. This is in contrast to days gone by when the general reaction was, "When is the final? I want to forget about Basic the day after." There is no question in my mind that the route of productivity software is the one to take in a first course.

That is, in fact, the approach taken in this book. The key to this approach is the software: where does it come from for classroom use? From a regular software vendor: THORN EMI Computer Software, Inc. For the purpose of this book, THORN EMI has provided two options: the complete commercial version of the successful Perfect Writer, Perfect Calc, and Perfect Filer systems as well as a limited educational version. The educational software includes some minor restrictions to limit its value in a production environment but which were carefully selected so as not to inhibit its value for teaching. (The software is available for the IBM PC and the Apple ## and ##c.) The primary focus of the hands-on portion of this book is this productivity software. Learning how to use the software is the most important single feature of the book; it is an integral part of the book—not simply an afterthought.

In order to provide the student with the broad understanding needed, this book is divided into two major parts.

Part 1 General Concepts of Data Processing (5 chapters)

The computer: what is it and how does it work? This portion of the book introduces the general principles that form the background for the understanding of computers in our lives. Chapter 5 focuses on personal computers.

Part 2 Productivity Software (7 chapters)

The three cornerstones of productivity software—word processing, spreadsheet, and file management—are the focus of this portion of the book. Each of these topics includes a generic chapter followed by a software specific chapter (file management includes two such chapters). The Perfect software chapters describe in detail how to use the various features of the software by means of extensive examples.

Overall, the attempt has been to make this a student's book. Some of its other important features are:

- 1. Each chapter opens with a statement of objectives and a vocabulary list, and closes with a summary and a set of exercises.
- Each chapter includes "mind-jogger" exercises within it, with answers at the end of the chapter. The intent is to provide a reinforcement vehicle for important concepts.
- Each new topic is introduced through and oriented around a simple example. Each example is described in detail, its implications are discussed, it is solved, and important features of the solution are described.
- 4. Wide use is made of illustrations, especially in Part 2 where the student must use Perfect software.

Supplementary Materials

Without a doubt, this book sets a new standard regarding supplements for improving the quality of the course. The main feature is the inclusion of Perfect software as follows:

- Diskettes containing Perfect Writer, Perfect Calc and Perfect Filer (for the IBM PC or the Apple IIe or IIc) which may be duplicated for student use at no cost.
- · A complete set of Perfect Software manuals.
- Several sets of files for Perfect Filer that can be used by the student for homework assignments.

In addition, the adoption package includes the CBS College Publishing Test Management System (TMS)—a software system for managing test banks—and a computerized test bank of nearly 2000 questions. Using TMS, it is possible to:

- Quickly prepare printed examinations by selecting questions at random from the test bank.
- Provide for interactive quizzing using questions selected from the computerized test bank.
- Modify or expand existing test banks, or create new ones.

In the more conventional vein, there is also a comprehensive *Instructor's Manual* with reproductions of many key figures from the book that can be used as transparency masters. It also includes a large number of additional assignments for the productivity software. The assignments for the Perfect Filer chapters are coordinated with additional sample "databases" included on the distribution diskettes. The student *Study Guide* is designed to provide a truly functional and valuable learning tool.

Perfect Software

Two versions of the Perfect software required for this book are available at no charge to institutions using this book. The complete commercial versions of Perfect Writer, Perfect Calc and Perfect Filer may be obtained from CBS College Publishing. The commercial version is complete in every respect. An educational version of the same software is available from CBS College Publishing. The former is available via a site license and the latter without a site license (both at no charge).

The educational version is somewhat limited in its scope although it is adequate for almost all of the functions that are needed in a beginning course. The primary restrictions (relating to descriptions in this text) of the educational versions are as follows.

Perfect Writer

- · Maximum document size is approximately 25 pages
- No more than six documents can be stored on a disk at any one time.

Perfect Calc

- Maximum spreadsheet size is 60 rows by 30 columns.
- · Linking spreadsheets not allowed.
- Printer output to a file not allowed.
- No more than six spreadsheets can be stored on a disk at any one time

Perfect Filer

- Maximum number of records in a file is 50.
- Printer output to a file not allowed.
- No more than six files can be stored on a disk at any one time.

If you have the educational version, then be aware of these limitations when you are using the respective pieces of software.

Acknowledgments

Only one name appears on the cover as author of this book, but that is only part of the picture. Many students, fellow teachers and others have contributed immensely to the overall nature of the book. I would like to express special appreciation to the following individuals who contributed their own creativity, helped me implement my ideas, and/or kept this project going.

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I simply cannot say enough about the assistance provided. The cartoons, each of which relates to the topic that it accompanies and really adds to the flavor, were all done by Tony Cresci. The people at THORN EMI and Perfect Software were just great in making available non-fee site licenses to schools and in concurrently setting up a special educational software so that it would retain all of the important features necessary to a successful learning tool. My first exposure to database systems was while working on a project with Nancy Dickey at Merritt College. She was to have learned from me; I learned from her. This is reflected in Chapters 10 through 12. Were it not for the persistent efforts of John Woods, we might never have gotten together with THORN EMI Computer Software, Inc. The tone of the remarks and suggestions from the in-depth reviewers indicated that they were really "into" this book; their enthusiasm and comments were most appreciated. The bottom line is that a terrific collection of people contributed to the book—they all have my sincerest thanks.

Brief Contents

Preface	xv
Part 1 GENERAL CONCEPTS OF DATA PROCESSING	1
Chapter 1. The Influence of the Computer	2
BOX: Of Potato Chips and Microchips	26
Chapter 2. Computers and Computer Hardware	48
BOX: Cloak and Dagger Computers	87
Chapter 3. Computer Input/Output and Auxiliary Storage	96
BOX: Time to Reorder	121
Chapter 4. Advanced Software Systems	142
BOX: Getting Your Files: Where You Stand	191
Chapter 5. The Personal Computer	200
BOX: And Now We Have Computer Clones	214
Part 2 PRODUCTIVITY SOFTWARE	230
Prologue: An Introduction to Perfect Software	233
Chapter 6. Principles of Word Processing	242
BOX: Hello Word Processor—Goodbye Typewriter	260
Chapter 7. Perfect Writer	278
BOX: What, Electronic Publishing?	305
Chapter 8. Introduction to Spreadsheet Principles	344
BOX: Tax Time? Let The Computer Do It.	355
Chapter 9. Using Perfect Calc	366
BOX: It Couldn't Happen to a Nicer Spreadsheet	405
Chapter 10. Introduction to File Management Principles	436
BOX: And Now I Telecommunicate My Database	454
Chapter 11. Introduction to Perfect Filer	472
BOX: How to Fix a Database	494
Chapter 12. Advanced Perfect Filer Concepts	524
BOX: So You Thought You Had Database Problems	535
Appendix I. The ASCII Character Set	554
Glossary	557
Index	571

Detailed Contents

Preface	X
Part 1 GENERAL CONCEPTS OF DATA PROCESSING	i
Chapter 1. The Influence of the Computer Objectives	2
Section 1. Concepts of Data Processing	4
Introduction to PQR Wholesale Grocery Basic Concepts 4 The Nature of Business 5	4
The Customer Accounting System Data Input 8 Customer Master Record and File 12 The Account Undating Proceedings 12	7
The Account Updating Procedure 12 Data Processing Aspects of This Case Study Basic Terminology 16 Data Collection and Recording 17 Sorting 18 Merging 18 Calculating and Summarizing 18 Report Generation 18 Master-Detail Processing 19	16
Section 2. Computers in Our Lives	20
The Computer in the Supermarket The Nature of Inventions 20 Records and Files in the Computer 21 Evolution of the Universal Product Code 22 The Automated Checkstand 22 Reactions to the System 28	20
The Automated Checkstand 22 Reactions to the System 28 Analysis of Complaints Pet Projects Were Dropped 29 The Computer Is Impersonal and Dehumanizing 30 Everything is Chaos 31 It Will Put People Out of Work 31 Errors Made by the Computer 33 The Computer Can Be Outsmarted 34	29
Section 3. Using the Computer in Business	37
A Typical Processing Cycle Generating an Order 37 The Sequence of Events 38 Order Processing 39 Invoicing 40 Receiving the Ordered Goods at the Supermarket 41 Processing the Payment 42 System Design In Retrospect Answers to Preceding Exercises Additional Exercises	42 43 44 45
Chapter 2. Computers and Computer Hardware Objectives	48 48
Section 1. Evolution of Computing Devices	50
Section 2. What Is a Computer?	57
Introduction	57
A Human Computer System 57 What Can a Computer Do? 59 Logical Components of the Computer Computer Logical Structure 60 Input/Output 63 The Arithmetic/Logic Unit 63 The Control Unit 65	60

Computer Memory 68 Auxiliary Storage 71	
Computer Systems	73
The Concept of a Computer Family 73	
Mainframe Computers 73 The Minicomputer 75	
The Microcomputer 77 The Small Business Computer 80	
Section 3. Technical Aspects of Computer Memory	82
Internal Codes	82
The Nature of Binary Numbers 82 The Extended Binary-Coded	52
Decimal Interchange Code 83 The American Standard Code for	
Information Interchange 85	
Fields Within the Computer	89
Variable-Length Fields in the Computer 89 Fixed-Word-Length	
Concepts 89 Characteristics of Modern Computers 90	
In Retrospect	91
Answers to Preceding Exercises	92
Additional Exercises	93
Chapter 3. Computer Input/Output and Auxiliary Storage	96
Section 1. Input to the Computer Basic Data-Entry Concepts	98
	98
The Punched Card 98 Offline Data Entry and the Punched Card 100 Magnetic-Tape Encoder 102 Disk-Oriented	
Data-Entry Systems 103	
Terminals	106
Online Data Entry 106 Basic Characteristics 107 Data Entry	100
with CRT Terminals 108 Microcomputers and Mainframes 110	
Bar Codes for Data Entry	110
Coding Data with Bar Codes 110	110
Bar Code Processing Devices 111	
Specialized Input Devices	112
Magnetic-Ink Character Recognition (MICR) 112	112
Optical Readers 114	
Section 2. Output from the Computer	116
Printed Output	116
Impact and Nonimpact Printers	117
Impact Printers 117 Nonimpact Printers 119	117
Serial, Line, and Page Printers	120
Serial Printers 120 Line Printers 122 Page Printers 122	120
Computer Output Microfilm (COM)	123
Micrographics 124 COM Systems 124	
Soft-Copy Output	125
Section 3. Auxiliary Storage	127
Magnetic Tape	127
Basic Concepts of Tape 127 Tape Processing 129 Using a	
Tape for Data Backup 130	
Magnetic-Disk Storage	131
The Need for Direct Access 131 Addressability of Auxiliary	
Storage Devices 131 The Magnetic-Disk Concept 132	
File Processing on Direct-Access Devices 136	
Answers to Preceding Exercises	137
Additional Exercises	130

Chapter 4. Advanced Software Systems	142
Objectives	142
Section 1. Principles of Operating Systems	144
The Operating System Concept	144
Classification of Software 144 Basic Concepts of an Operating System 144 Computer Libraries 145 Supervisor Program 146 Automatic Job Control 148	
Multiprogramming	149
Improving System Efficiency 149 What Is Multiprogramming? 150 Online Processing and Multiprogramming 152 Timesharing	154
The Concept of Timesharing 154 The Timesharing System 155	
Section 2. Data Management Principles	158
Concepts of File Management	158
The Concept of the Key Field 158 File Management	
Systems 159 Sequentially Organized Files 159 Direct-Access Fi Organization 160 Random Files 161 Indexed Files 162	
Database Management Systems	163
An Example Application 163 The Concept of a Database 166 A Database Example 166	
Distributed Data Processing	167
Distributed Access to a Central Computer 167 Distributing the	
Processing Load 168 Distributing the Database 171	
Section 3. Data Communications	173
Principles of Data Communication Introduction 173 What Is Data Communication? 173 Data Transmission 175	173
Data Communication Services	177
Data Transmission Modes 177 Transmission Speed 178	1,,
The Standard Interface 179	
Section 4. Other Topics	181
Computer Networks in Our Lives	181
Electronic Funds Transfer 181 A Conventional Checking Transaction 181 An Electronic Transaction 182	101
Electronic Message Systems 183	40=
Data Security	185
File Protection 185 Security of Information from Misuse 186 Security Measures for Protection of Data 188	100
Personal Privacy	189
In Retrospect	192
Answers to Preceding Exercises Additional Exercises	193
Additional Exercises	195
Chapter 5. The Personal Computer Objectives	200 200
Basic Components of the Personal Computer	201
Introduction 201 The Microprocessor 204 The Keyboard 206 The Video Display 207	
Peripheral Devices	208
Auxiliary Storage 208 Winchester Disk Drives and Tape Backup 209 The Printer 212 Expansion Slots 216	= 00

Software	218
Operating Systems 218 Booting Up Under an Operating System 219 Disk Files 220 Toward More Efficiency 221 Other Software 221	
Microcomputers and Networks Microcomputers Operating in Conjunction with Mainframes 223	223
Local Area Networks 225 Answers to Preceding Exercises	227
Additional Exercises	228
Part 2 PRODUCTIVITY SOFTWARE	230
	233
Objectives Basic Principles	233 234
Introduction 234 Computers and Computer Keyboards 235 Disk Files 237	254
Using Menus	238
The Concept of Menus 238 Getting Out of a Menu 241 The REPEAT Command 241 Getting Help—IBM Only 241	
- 1	242
Objectives	242 243
Processing a Document Preparing a Letter 243 Categorizing Corrections 246	243
Preparing the Final Document 247 Document Planning 250 Summarizing the Overall Task 252	
What Is a Word Processor?	252
How Does a Word Processor Work?	254
A Crude Word Processor 254 A Sample Document 256 Using Commands 258 Margins and Line Filling 258 Starting a New Paragraph 262 Line Breaks 263 The Final Document 264	
Common Features of Word Processors	267
About Commands 267 Formatting 268 Viewing a Document or the Screen 270 Word Wrap 271 Editing 272 Searching a Document 273	
In Retrospect	274
Answers to Preceding Exercises	275
Additional Exercises	276
· · · · · · · · · · · · · · · · · · ·	278
Objectives	278
Section 1. Basic Principles Getting Started	280 280
The Main PSI Menu 280 The Screen 280 Entering Text 282	200
Simple Deletions 284 Cursor Movement and Making Minor Corrections 286	
Cursor Movement Using Commands	288
Key Sequence for Commands 288 Summarizing Cursor Movement Commands 290	

Changing the Appearance of a Document	293
Using the Fill Command 293 Invisible Characters 296	
Using the Documents Command for Output	298
Saving a Document to Disk 298 Reading a Document from	
	04
Section 2. Advanced Concepts	306
Cut-And-Paste Operations	306
The Cut Command 307 Summarizing the Cut Command	_
Options 308 The Cut-Save Area 309 The Paste Command 30	9
Marking Text 310 Search and Search/Replace	212
The Search Command 313 The Replace Command 315	313
More on Editing—The Appearance Command More on Editing—The Appearance Command	317
TAT 1.00 Adm	317
Word Operations 317 Centering a Line 319 Justifying a Paragraph 319 Underlining Text (IBM Only) 319 Changing	
Margin Settings 320 Formatting a Document—An Example 321	
Using Two Windows	323
The Basic Concept of Using Two Windows 323 Creating and	0_0
Using Two Windows 325	
Disabling the Wrap Feature	328
USING PERFECT SPELLER AND THESAURUS	329
Perfect Speller	329
Introduction 329 Checking Spelling 331 Making	
Corrections 334	
Perfect Thesaurus	336
Introduction 336 Using the Thesaurus 336	
Answers to Preceding Exercises	339
Additional Exercise	341
Word-Processing Assignments	341
Chapter 8. Introduction to Spreadsheet Principles	344
Objectives	344
A Problem of the Budget	345
Introduction 345 The Nature of the Spreadsheet 347 Using	
the Spreadsheet as a Planning Tool 347 Formalizing Spreadsheet	
Concepts 349 Introduction 349 Characteristics of the Electronic	:
Spreadsheet Concept 350 Formulas 352 Simulating an	
Electronic Spreadsheet 354 A Spreadsheet Template 354 Characteristics of an Electronic Spreadsheet	256
General Features 356 The Basic "Programming" Tools of	356
Electronic Spreadsheets 358 The Electronic Window 362	
Answers to Preceding Exercises	364
Additional Exercises	365
	505
Chapter 9. Using Perfect Calc	366
Objectives	366
Section 1. Basic Principles	
The Spreadsheet Screen	368 368
The Perfect Calc Spreadsheet 368 Moving the Cursor 370	<i>5</i> 00
Scrolling the Window 371	
Entering Information to the Spreadsheet	373
Entering Labels 373 About the Cell Width 375	

Entering Numbers 376 More About Entering Labels 378 Formulas	250
	379
Entering Formulas 379 Rules for Building Formulas 382	202
Changing the Entries in Cells	383
Changing Labels 383 Changing Numbers 384	
Changing Formulas 386 Getting Out of Trouble 387	207
Using the Datasheets Command for Output	387
Saving a Spreadsheet to Disk 387 Reading a Spreadsheet	
from Disk 390 Determining What Is Stored on a Disk 390	
The Print Command 392 The Exit PC Command 393 Modifying the Spreadsheet	20.4
	394
Deleting an Entry 394 Using the Text Marking Command 395 The Save Area 397 The Copy Command 398 Using the Paste	
The Save Area 397 The Copy Command 398 Using the Paste Command for Numbers 398	
The Principle of Replication	401
Relative and Absolute Cell Address References 401	401
Replicating a Formula 402 Completing the Budget Spreadsheet	40.4
Section 2. Advanced Concepts	404
Using the Appearance Command	406
	406
The Justify Command 406 The Format Command 407 Changing the Column Widths 408	
Changing the Column Widths 408 Changing the Size of a Spreadsheet	440
The Open Command 410 Clasina Page 201 and 410	410
The Open Command 410 Closing Rows or Columns 412 The Effect of Opening and Closing on Formulas 413	
Editing Cell Entries	410
The Use of Functions	413
Introduction 416 Some Typical Perfect Calc Functions 417	416
Maintaining Statistics with a Spreadsheet 418	
Sorting Entries on a Spreadsheet (IBM Only)	419
Using Multiple Worksheets	419 421
USING PERFECT WRITER AND PERFECT CALC TOGETHER	421 424
Including a Spreadsheet in a Document	
• · • · · · · · · · · · · · · · · · · ·	424
Introduction 424 Preparing the Spreadsheet 425 Inserting the Spreadsheet into a Document 426 Further Document	
Editing 428 Printing the Letter 431	
Answers to Preceding Exercises	400
Additional Exercises	433
Spreadsheet Assignments	434
r	435
Chapter 10. Introduction to File Management Principles	407
Objectives	436
Principles of Files	436
	437
Example Definition 437 Managing Data Within Files 443 Basic Features of Data Management Systems	4.45
	44 5
Record Format Definition 445 User Software Tools 448 A Simple Example	440
File Definition 449 Data Types 450	448
Records in the File	4E1
A Manual System 451 Using the File 455	451
Computerized Concepts	457
-	1 0/

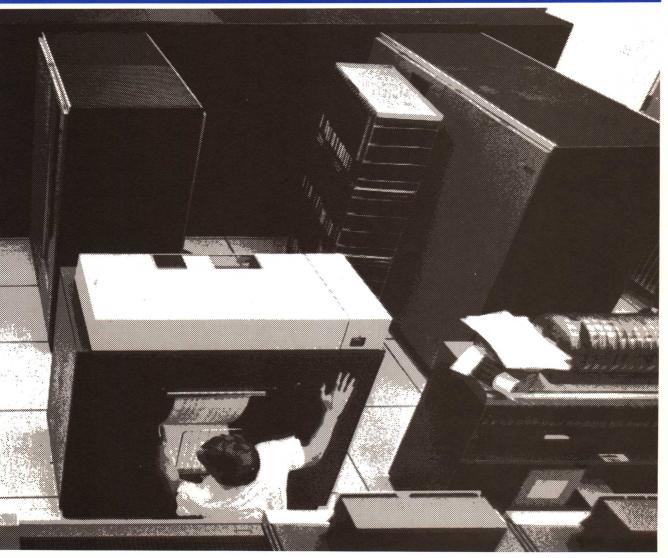
Indexing a File 457 Sort Pointer Files 459 Record Selection	
by Comparison 460 Record Selection by Matching 462	
Report Generation 463	
Features of Database Management Systems	466
Linking Files 466 Performing Calculations 469	
Answers to Preceding Exercises	469
Additional Exercises	471
Chapter 11. Introduction to Perfect Filer	472
Objectives	472
Basic Principles of Displaying Records	473
Introduction 473 Reviewing Records in a Data File 474	
Generating a List 477	
Sorting	482
Multiple-Field Sort 485	
Record Selection by Matching	487
Single Criterion 487 Multiple Criteria 490	
Correcting Errors 493	
Record Selection by Comparison	495
Simple Comparisons 495 Combining Matching and Comparison	
497 Saving a Selection (Group) Definition 498 Combining Selection	
with Sorting 500 Summarizing Report Generation with Grouping	
and Sorting 501	
Generating Form Letters	502
Field Names 502 An Example of a Form Letter 505	
Generating a Listing Report	508
A Sample Report 508 Format Commands 508 An Alternate	
Formatting Method 511 Preparing a Format File with	
Perfect Writer 512	
Other Report Formatting Features	513
Additional Commands 513 Improving the Appearance	
of Reports 514 The Header Command 515 Including a	
Perfect Filer Report in a Perfect Writer Document 518	
Answers to Preceding Exercises	518
Additional Exercises	520
File Management Problems	521
Chapter 12. Advanced Perfect Filer Concepts	524
Objectives	524
Changing the Contents of a File	525
Editing Records 525 Removing Records from a File 529	
Adding Records 530	
Defining a New Data File	532
Example Definition 532 Field Names 533 Defining the	
Record Form 536 Defining Field Names 540 The First Field	
of the Screen Record Form 541	
Group Entries	542
Introduction 542 The Name Group Entry 544 The Date	
Group Entry 546 The Money Group Entry 547 The Record ID	

Group Entry 548 The Yes/No Group Entry	549	Summarizing	
Group Entries 550		_	
In Retrospect			550
Answers to Preceding Exercises			551
File Management Problems			552
Appendix I. The ASCII Character Set			554
Glossary			557
Index			571

This part is designed to provide a broad insight into the general field of data processing. It includes topics such as the following.

- Examples to illustrate the basic nature of data processing and some of the terminology commonly used
- Descriptions of computer hardware (the actual machines themselves) and a variety of devices for getting information into and out of the computer
- The nature of computer software (programs that make the computer work)

Many of the topics described will serve as the basis for learning how to use computers, the topics of Part 2.



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