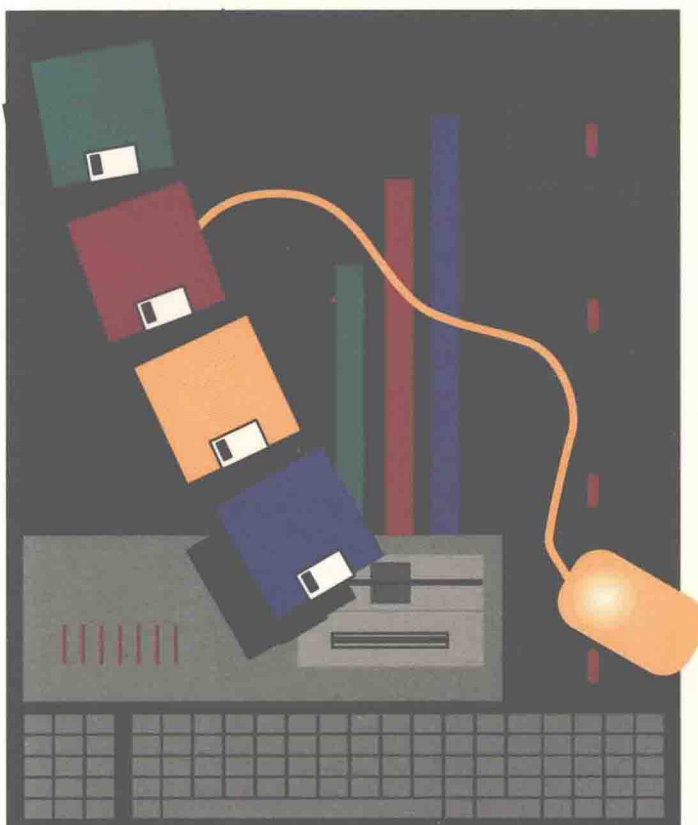


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AN INTRODUCTION TO DOS

VERSIONS 5.0 / 6.0



Harry L. Phillips

Microcomputer Applications for Business Series

AN INTRODUCTION TO

DOS

VERSIONS 5.0 / 6.0



Harry L. Phillips

Santa Rosa Junior College



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From the Publisher

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Tom Atwood, Stephen M. Bayle, Josh Bernoff, Erin Bridgeford, Ann Marie Buconjic, Jody Buttafoco, Marcia Cole, Susan Collins, John M. Connolly, David Crocco, Myrna D'Addario, Lisa D'Alessandro, Tracy Day, Howard S. Diamond, Katie Donovan, Joseph B. Dougherty, MaryJane Dwyer, Don Fabricant, Robin M. Geller, Suzanne Goguen, Eileen Gorham, Roslyn Hooley, Nicole Jones, Matt Kenslea, Wendy Kincaid, Suzanne Licht, Elizabeth Martinez, Debbie Masi, Kathleen McCann, Mac Mendelsohn, Laurie Michelangelo, Kim Munsell, Paul Murphy, Amy Oliver, Debbie Parlee, Kristin Patrick, Charlie Patsios, Darren Perl, George J. Pilla, David Smith, Kathy Sutherland, Michelle Tucker, David Upton, Mark Valentine, Mark Vodnik, Jacqueline Winspear



Preface

An Introduction to DOS Versions 5.0/6.0 acclimates students to the DOS environment. The first part, “Essential Computer Concepts,” presents an overview of computers and includes only those concepts that students need before they go into the lab. The three DOS tutorials give students step-by-step instructions on how to use DOS for file management in both diskette and hard disk environments. Both the concepts chapters and the DOS tutorials are unique in their approach. They motivate all of the concepts and skills they teach by explaining *why* students need to learn them.

The Textbook

An Introduction to DOS Versions 5.0/6.0 includes the following features in each DOS tutorial:

Objectives A list of objectives orients students to the goals of each tutorial.

Tutorial Case This case presents a business problem that students could reasonably encounter on the job. Thus, the process of solving the problem will be meaningful to students.

Step-by-Step Methodology This unique methodology integrates concepts and key-strokes. Students are asked to press keys always within the context of solving the problem. The text constantly guides students, letting them know *why* they are pressing the keys.

Page Design Each page is designed to help students easily differentiate between what they are to *do* and what they are to *read*. In addition, the numerous screen shots include labels that direct students’ attention to what they should look at on the screen.

Exercises The tutorials conclude with meaningful, conceptual questions that test students’ understanding of what they learned in the tutorial.

Tutorial Assignments These assignments provide students with additional practice on the individual DOS skills that they learned in the tutorial. Students practice by modifying the problems that they solved in the tutorial and by working on new problems.

The Supplements

Data Disk

The Data Disk includes all the files needed to complete the tutorials and the Tutorial Assignments. It is available in 3½-inch format. (If you need a 5¼-inch diskette, see your instructor.)

Instructor's Manual

The instructor's manual is written by the author and is quality assured. It includes:

- Answers and solutions to the Exercises and Tutorial Assignments
- A 3½-inch diskette containing solutions to the Tutorial Assignments
- Transparency masters of key figures in the tutorials, selected by the author

Test Bank

This supplement contains approximately 50 questions per tutorial in true/false, multiple choice, matching, and short answer formats. Each question has been tested by students for accuracy and clarity.

Electronic Test Bank

The Electronic Test Bank allows instructors to edit individual test questions, select questions individually or at random, and print out scrambled versions of the same test to any supported printer.

Acknowledgments

I especially wish to thank the dedicated staff of Course Technology for their invaluable professional contributions to this book. Nicole Jones, Product Manager, enthusiastically managed the direction and development of this book and contributed many valuable ideas for improving its quality and focus. Joe Dougherty, Editorial Director, and Katherine Pinard, Product Manager, initiated this project and contributed to the original direction of this book. Mark Vodnik, Technical Review Specialist, directed the extensive testing of each tutorial. Mark Vodnik, Jane Dougherty, and Jim Valente thoroughly tested and evaluated the book from the standpoint of the student and offered valuable suggestions for improving and integrating the presentation of information. I thank Myrna D'Addario, Production Manager; Robin Geller, Production Editor; Kathleen Finnegan, Production Coordinator; Erin Bridgeford, Production Assistant; Debbie Masi, Desktop Publishing Supervisor; Tom Atwood and Andy Giammarco, Desktop Publishers; Andrea Goldman, Copyeditor; Jill Turnbull, Proofreader; Elizabeth Martinez, Manufacturing Manager; Charlie Patsios, Manufacturing and Package Designer; and Darci Mehall, Cover Designer, for their special expertise and contributions to the book. I thank David Crocco, Product Manager, for discussing the possibility of my participation in this project.

I wish to thank John Connolly for creating an exciting, innovative company with a strong commitment to the development of high-quality textbooks. His vision continues to have a significant impact on the education of college students throughout the United States.

The reviewers of this textbook — Jerold Jacobs of Penn Valley Community College, William Leedy of Wilmington College, Dianne Maricle of Diablo Valley College, and John Zales of Harrisburg Area Community College — offered constructive and critical ideas and suggestions on the focus and coverage of this textbook and deserve special thanks for their efforts.

Once again, I thank my many friends, colleagues, co-workers, family, and parents for their unending belief in what I have to offer and how I offer it.

Harry L. Phillips



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Essential Computer Concepts

■ ■ ■

Essential Computer Concepts

What Is a Computer?

Computers have become prominent tools in almost every type of activity in virtually every type of business (Figure 1). What exactly is this important business tool? By definition, a **computer** is an electronic device that can perform operations — such as mathematical calculations or comparisons of numbers and characters — at extremely high speeds. But this definition fails to convey the power and the influence of computers in today's society. Computers can organize and process **data** (information of any kind — numbers, words, formulas, and so forth), manage financial information, create and manipulate graphics, and perform many other tasks to help business personnel be more efficient and productive.



Figure 1: Office workers at their computers

OBJECTIVES

In this chapter you will learn to:

- Define and describe a computer
- Distinguish among a microcomputer, minicomputer, mainframe, and supercomputer
- Describe the major components of computer hardware
- Describe the functions of common input and output devices
- List the sizes and capacities of common storage media
- Describe the major types of computer software, including systems software and applications software

Types of Computers



Figure 2: A microcomputer

Computers are often classified by their size, speed, and cost. **Microcomputers**, also called **personal computers**, are inexpensive enough — \$500 to \$15,000 — for individuals to own and small enough to fit on an office desk (Figure 2). Some microcomputers are so small they can fit comfortably on your lap; appropriately they are called **laptop computers** (Figure 3). Other microcomputers, called **notebook computers**, are small enough to fit easily into a briefcase (Figure 4).

You'll probably use microcomputers throughout college and throughout your business career. Microcomputers are used extensively in small and large businesses. But some large businesses, government agencies, and other institutions also use larger and faster types of computers. One of these larger and faster computers is the **minicomputer** (Figure 5). Minicomputers are too large and too heavy for desktops, run three to 25 times faster than microcomputers, and cost anywhere from \$15,000 to \$500,000.

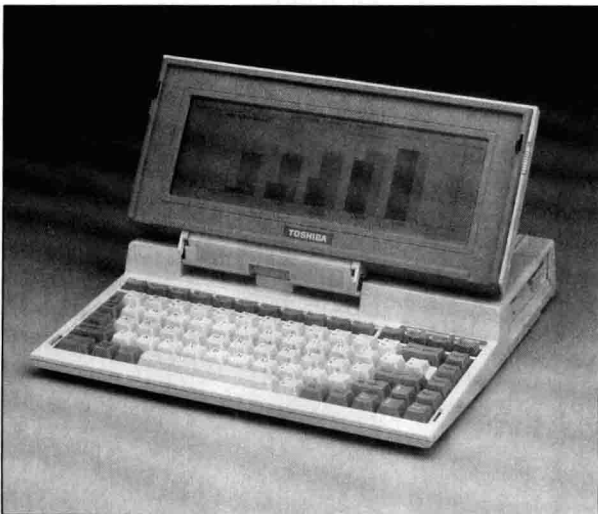


Figure 3: A laptop computer



Figure 4: A notebook computer



Figure 5: A minicomputer

A still larger and more powerful computer is the **mainframe computer** (Figure 6). Mainframes have large capacities for storing and manipulating data, run 10 to 100 times faster than a microcomputer, and cost anywhere from \$100,000 to \$2 million.



Figure 6: A mainframe computer

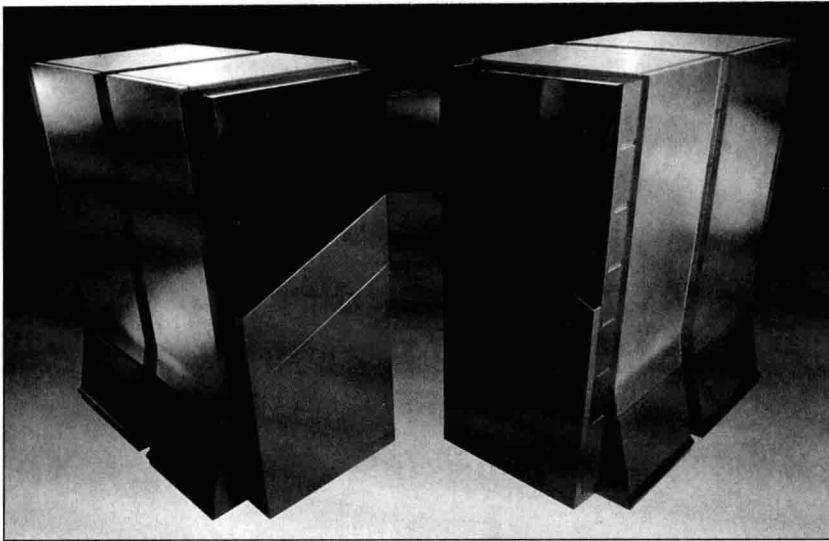


Figure 7: A Cray supercomputer

The largest and fastest computers, called **supercomputers**, are so large and expend so much energy that they require their own internal cooling systems to dissipate the heat generated during their operation (Figure 7). Supercomputers are so expensive, often costing several million dollars, that only the largest companies, government agencies, and universities can afford them. Typically supercomputers run 50 to 10,000 times faster than a microcomputer.

With the accelerated development of new and better computers, the guidelines for classifying types of computers have become fuzzy. For example, some recently developed microcomputers run at higher speeds than some minicomputers. Since this

book focuses on microcomputers, subsequent discussions will deal primarily with microcomputers. Most of the concepts, however, apply equally well to larger, more powerful computers.

Computer Hardware

The components of a computer that you can see and touch are often collectively called **hardware**. They include the monitor (the TV-like screen), the keyboard, the disk drives, the printer, and the part of the computer that does most of the work.

Computer hardware typically is divided into four categories: input devices, processing hardware, output devices, and storage media (Figure 8). These categories reflect the activities that the computer hardware performs. Suppose, for example, that you wanted to use the computer to write a letter. You would use the keyboard (an input device) to put the words of your letter into the processing hardware, which is found inside the main computer. Once inside the processing hardware, your words would be manipulated to form lines of the appropriate width and pages of the appropriate length and be centered, underlined, or italicized according to your instructions. After you finished your letter, you would use the printer (an output device) to reproduce the letter on paper. Finally, you would save a copy of your letter on a disk (a storage medium) for future reference.

Since you have to use input devices, processing hardware, and output devices for every task you want to perform on a computer, let's discuss each of these components in more detail.

Input Devices

Data entered into the computer are called **input**. The hardware involved in sending input to the computer is called an **input device**. The two most common microcomputer input devices are a **keyboard** and a **mouse**.

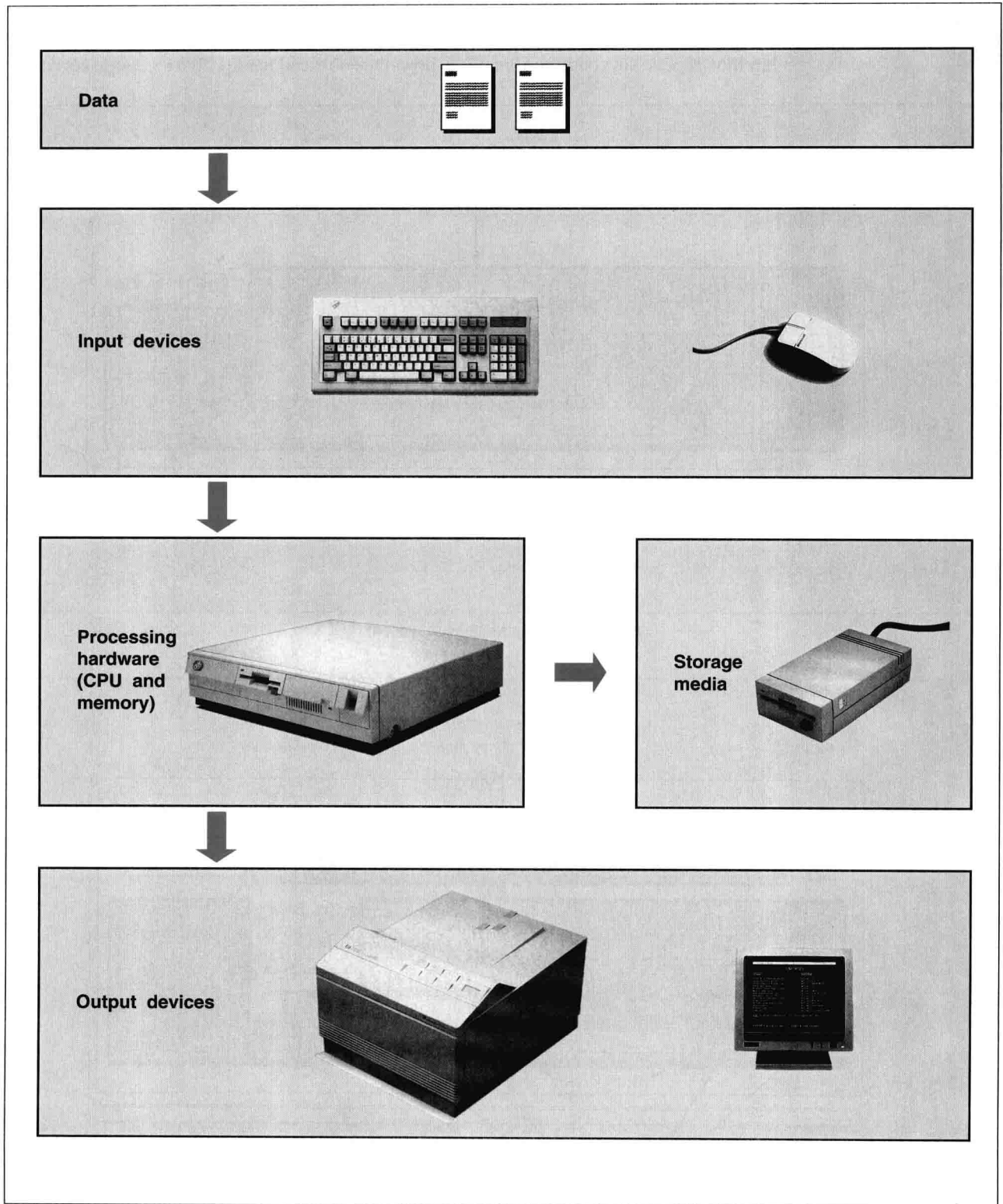


Figure 8: The relationship among input devices, processing hardware, output devices, and storage media

Most of the keys on your computer keyboard work just like the keys on a typewriter. Some features of a computer keyboard, however, are unique to computers. Figure 9 shows the standard 83-key IBMPC-style keyboard, and Figure 10 shows the enhanced 101-key IBMPS/2-style keyboard.

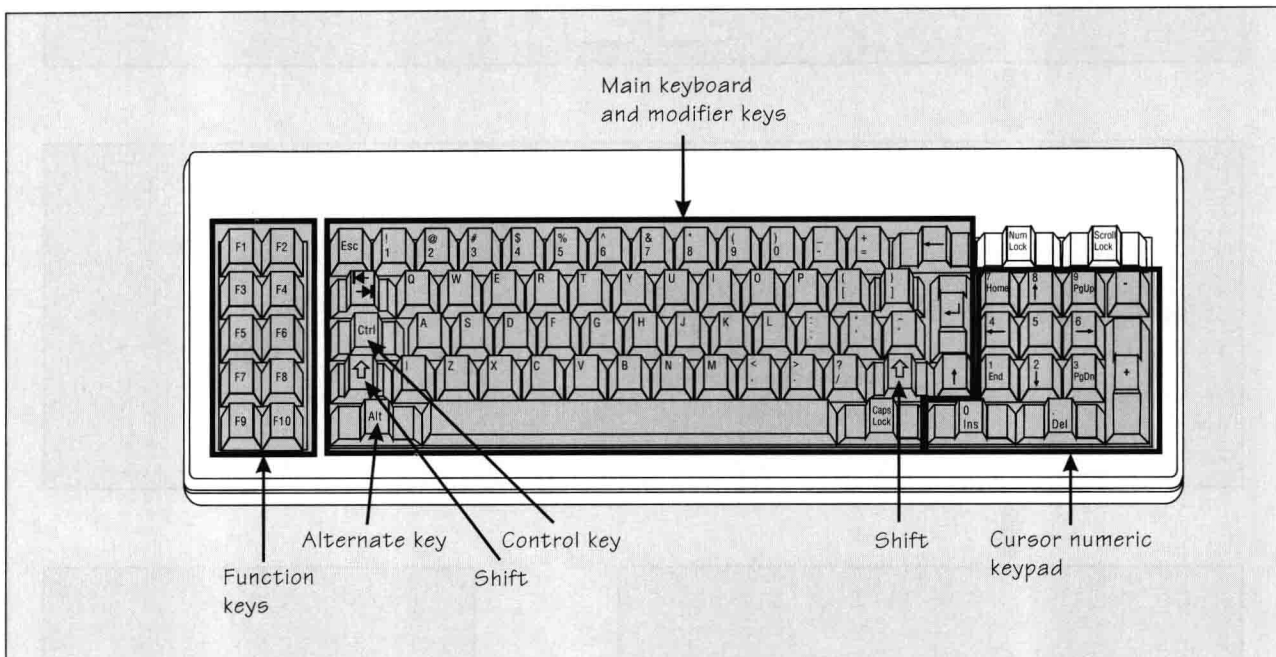


Figure 9: Standard 83-key keyboard

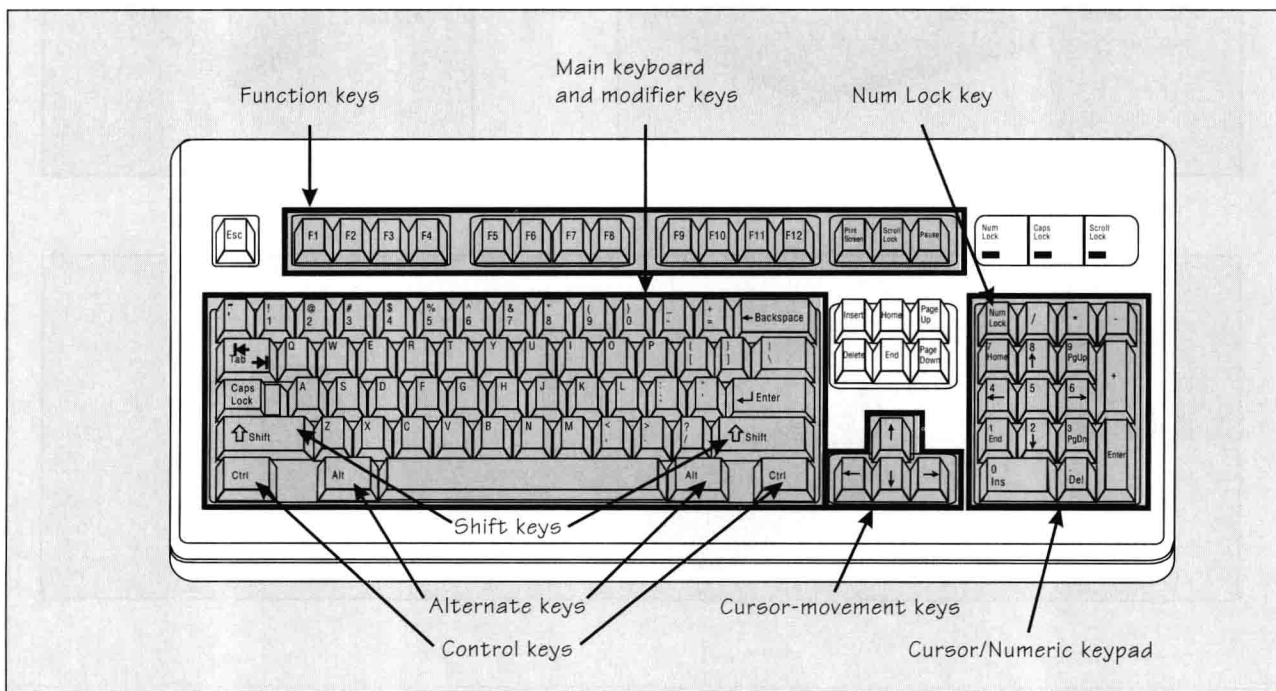


Figure 10: Enhanced 101-key keyboard