


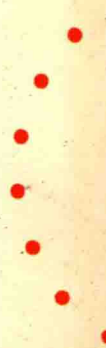
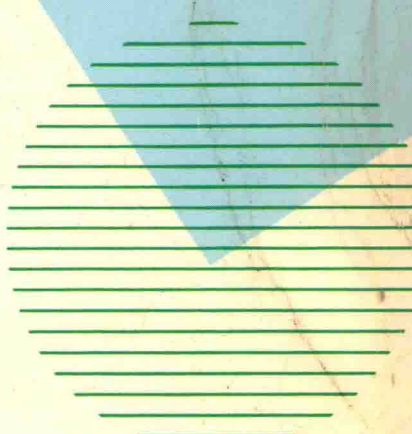
“ . . . useful programs
 . . . saved hours
 of trial and error”

—IBM PC User Group's
praise for an earlier edition



LOTUS®

123/G



Simplified

DAVID
BOLOCAN

Lotus[®] 1-2-3[®]/G Simplified

David Bolocan

 WINDCREST[®]

FIRST EDITION
FIRST PRINTING

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About the author

David Bolocan has been using 1-2-3 for over seven years and used VisiCalc before 1-2-3 was released. During those seven years, he's taught 1-2-3 to individuals and groups, and written nine books on spreadsheet software. On weekdays, he uses 1-2-3 to model business problems, perform what-if analysis, do regression analysis, manipulate databases, and generate hundreds of graphs. On weekends, he uses 1-2-3 to do his personal taxes, real estate investments, and family budgets.

David recently built a 1-2-3 model that was 3.5 megabytes in size (equivalent to about 1,800 pages of text). The model predicted a bank's monthly profit and loss statements five years into the future. It tested the effect of pricing strategies, varying interest rates, scale effects, funding strategies, and a host of other variables. Last year, he built a 1-2-3 model that determined the feasibility of setting up phone networks to compete with local companies. The model took a database of over 3,000 large companies and determined which companies, buildings, and areas could profitably be connected to the network, and how effective the network was.

The bottom line is that this book has been written by someone with experience both teaching Lotus and using it to solve business problems.

Introduction

Version G of Lotus 1-2-3 is one of the best spreadsheet software programs in the world. The program not only has limitless spreadsheet applications, but also has database management and graphics capabilities that are designed to take advantage of the OS/2 environment. It possesses tremendous potential for use in business, because it's literally three powerful programs integrated in one package.

Lotus recently released 1-2-3/G. This version is a substantial improvement over earlier versions of 1-2-3, offering many new commands and features. This new edition of *Lotus 1-2-3 Simplified* explains how to use all the 1-2-3/G enhancements, including three-dimensional spreadsheets, a keystroke recorder, the Solver and Backsolver, the Undo command, the Range Search command, new recalculation algorithms, OS/2 windows, and much more.

A total of 20 everyday, real-life spreadsheet applications are included in the book. Furthermore, there are more than a dozen handy macro command programs that illustrate the Lotus macro programming language. This book is a great plus for those who want to learn 1-2-3/G and, at the same time, pick up some useful spreadsheet applications and macro programs.

Book outline

Chapters 1–6 cover the fundamentals of building, editing, storing, printing, and manipulating spreadsheets. Chapters 7–14 show you how to create and print graphs, manage and analyze databases, and use advanced functions. Chapters

15–24 teach advanced topics, including three-dimensional spreadsheets, linked files, and networking. You should read chapters 1–6 in order, but you can read subsequent chapters in any order. Note, however, that the chapters are arranged in order of increasing difficulty.

Chapters 1, 2, and 3 teach the basics of running 1-2-3/G, entering labels, creating formulas, formatting data, and storing spreadsheets. Chapter 4 details editing entries, moving ranges, and inserting and deleting rows and columns. (Chapter 22 contains a number of spreadsheet applications that can be built after you read chapters 1 through 6. These applications will increase your familiarity with 1-2-3/G commands and functions, and should inspire you to create other applications.)

Chapters 7 and 8 teach you how to create and print graphs. Chapters 9 and 10 explain how to create and manage databases in 1-2-3/G. Chapters 11 through 13 use spreadsheet applications to introduce numerous advanced functions, including lookup, net present value, standard deviation, logic, date, and others. Chapter 14 shows you how to use the Fill, Distribution, and Table commands to analyze databases and spreadsheet models.

Chapters 15 and 16 cover 1-2-3/G's three-dimensional features and multiple file handling. Chapters 17 and 20 cover networking and protecting spreadsheet data. Chapters 18 and 19 explain how to write macro programs. Chapter 21 shows you how to manage memory usage and control OS/2 windows. Chapter 23 covers the new Solver and Backsolver commands that enable you to maximize complex multivariable equations with constraints. Finally, chapter 24 shows you how to use matrices and linear regressions with 1-2-3/G.

Conventions

I developed several conventions to guide you through this book. They are as follows:

- All commands for you to type in are set in sans serif type.
- Although commands will most often appear in lowercase, 1-2-3/G doesn't distinguish between uppercase and lowercase. Use whatever is easier for you.
- Special keys, like Enter and Esc, are capitalized. Directional keys, like left arrow, are lowercase.
- Macro commands and function commands, or keys, are set in {braces}.
- 1-2-3 messages appear in *italics*.

The book's philosophy

This book offers you a chance to master 1-2-3/G by learning the essentials. Lotus 1-2-3/G contains over 300 commands, subcommands, functions, and macro com-

mands. Such an avalanche of commands is intimidating, not only for computer novices, but for computer experts as well. This book, unlike the manual, presents commands in a logical manner. Commands that are essential for the basic use of 1-2-3/G are presented first, while infrequently used commands are presented only after you've mastered the basics.

In addition, I'll give you numerous real-life applications to illustrate how commands work together to build complex spreadsheets. In this way, you can familiarize yourself with 1-2-3/G features while learning how to build spreadsheet applications.

This book is designed for readers of all levels. If you're a beginner, the book will guide you through the very first steps of using 1-2-3/G. If you already know how to run 1-2-3/G and can do simple tasks like editing data, then you can skip over the first few chapters and begin to learn 1-2-3/G's more advanced features. If you're a spreadsheet veteran, you can read about 1-2-3/G's advanced features and examine the spreadsheet applications proposed in the book.

Lotus 1-2-3/G Simplified makes it easy to learn 1-2-3/G because I show you the fundamental commands first, and leave the complex, rarely used commands for last. Finally, this book includes many spreadsheet applications that show you how to combine 1-2-3/G commands to build sophisticated, real-life applications to use for your own purposes.

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1

CHAPTER

1-2-3/G basics

Once you've installed Lotus 1-2-3/G, launching the program is a straightforward process. Before you can design spreadsheets to calculate the world's GNP, however, you must go through the basics of spreadsheet use. These fundamentals are similar for all spreadsheet programs; so if you've used spreadsheets in the past you might want to skim this section. Spreadsheet basics involve moving across the spreadsheet, entering data into the spreadsheet, designing formulas for the spreadsheet, saving and retrieving files, getting help, and ending a 1-2-3/G session.

Running 1-2-3

1-2-3/G is started from the OS/2 Icon menu. If you've installed 1-2-3/G properly, the 1-2-3/G icon will be displayed on the Icon menu. To start, simply load OS/2 and double-click the 1-2-3/G icon. If you're not familiar with using a mouse, see appendix B or your OS/2 manual.

This spreadsheet program can also be started from the OS/2 window by entering the 123G directory and typing 123G. Thus, if your 1-2-3/G program files are on the C: drive in the 123G directory, type CD C:\123G and an Enter to change directories, and then 123G to start the program.