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Nota di contenuto	Intro -- Table of Contents -- About the Author -- About the Technical Reviewer -- Acknowledgments -- Introduction -- Chapter 1: Introduction to Mathematica -- Why Mathematica? -- The Wolfram Language -- Structure of Mathematica -- Design of Mathematica -- Mathematica Environment -- Notebook Interface -- Text Processing -- Palettes -- Notebook Style and Features -- Expression in Mathematica -- Assigning Values -- Built-in Functions -- Dates and Time -- Strings -- Basic Plotting -- Logical Operators and Infix Notation -- Algebraic Expressions -- Solving Algebraic Equations -- Using Wolfram Alpha Inside Mathematica -- Delayed and Immediate Expressions -- Improving Code -- Code Performance -- Handling Errors -- Debugging Techniques -- How Mathematica Works -- How Computations are Made (Form of Input) -- Searching for Assistance -- Notebook Security -- Summary -- Chapter 2: Data Manipulation -- Lists -- Types of Numbers -- Working with Digits -- A Few Mathematical Functions -- Numeric Function -- Lists of Objects -- List Representation -- Generating Lists -- Arrays of Data -- Nested Lists -- Vectors -- Matrixes -- Matrix Operations -- Restructuring a Matrix --

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Sommario/riassunto

Enhance your data science programming and analysis with the Wolfram programming language and Mathematica, an applied mathematical tools suite. This second edition introduces the latest LLM Wolfram capabilities, delves into the exploration of data types in Mathematica, covers key programming concepts, and includes code performance and debugging techniques for code optimization. You'll gain a deeper understanding of data science from a theoretical and practical perspective using Mathematica and the Wolfram Language. Learning this language makes your data science code better because it is very intuitive and comes with pre-existing functions that can provide a welcoming experience for those who use other programming languages. Existing topics have been reorganized for better context and to accommodate the introduction of Notebook styles. The book also incorporates new functionalities in code versions 13 and 14 for imported and exported data. You'll see how to use Mathematica, where data management and mathematical computations are needed. Along the way, you'll appreciate how Mathematica provides an entirely integrated platform: its symbolic and numerical calculation result in a mized syntax, allowing it to carry out various processes without superfluous lines of code. You'll learn to use its notebooks as a standard format, which also serves to create detailed reports of the processes carried out. What You Will Learn Create datasets, work with data frames, and create tables Import, export, analyze, and visualize data Work with the Wolfram data repository Build reports on the analysis Use Mathematica for machine learning, with different algorithms, including linear, multiple, and logistic regression; decision trees; and data clustering Who This Book Is For Data scientists who are new to using Wolfram and Mathematica as a programming language or tool. Programmers should have some prior programming experience, but can be new to the Wolfram language.
