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Titolo	Guide to Programming and Algorithms Using R / / by Özgür Ergül
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ISBN	1-4471-5328-6
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Descrizione fisica	1 online resource (185 p.)
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Soggetti	Computer programming Programming languages (Electronic computers) Algorithms R (Computer program language) Programming Techniques Programming Languages, Compilers, Interpreters Algorithm Analysis and Problem Complexity
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Loops -- Recursions -- Complexity of Programs and Algorithms -- Accuracy Issues -- Sorting -- Solutions of Linear Systems of Equations -- File Processing -- Suggested Mini Projects.
Sommario/riassunto	When encountering difficult concepts in computer programming for the first time, many students struggle to find simple explanations in their textbooks. Information can also be hard to find on common mistakes made when implementing algorithms and writing programs. This concise and easy-to-follow textbook/guide provides a student-friendly introduction to programming and algorithms. Emphasis is placed on the threshold concepts that present barriers to learning, including the questions that students are often too embarrassed to ask. The book promotes an active learning style in which a deeper understanding is gained from evaluating, questioning, and discussing the material, and practised in hands-on exercises. Although R is used as the language of choice for all programs, strict assumptions are avoided in the explanations in order for these to remain applicable to other programming languages. Topics and features: Provides exercises at the end of each chapter to test the reader’s understanding Includes three

mini projects in the final chapter that students may enjoy while programming Presents a list of titles for further reading at the end of the book Discusses the key aspects of loops, recursions, program and algorithm efficiency and accuracy, sorting, linear systems of equations, and file processing Requires no prior background knowledge in this area This classroom-tested primer is an essential companion for any undergraduate student approaching the subject of programming and algorithms for the first time, regardless of whether their courses are part of a computer science, electrical engineering, mathematics, or physics degree. Dr. Özgür Ergül is an Assistant Professor in the Department of Electrical and Electronics Engineering at the Middle East Technical University, Ankara, Turkey.