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Nota di contenuto	Cover Title Page Copyright Dedication Contents Preface Chapter 1: Introduction to Java A Very Brief Introduction to Java Downloading a Java Release (Short Version) Selecting a Version of Java (Detailed Version) Java 8 and Java 11 Java Version Numbers JRE Versus a JDK Java Distributions Java IDEs Data Types, Operators, and Their Precedence Java Comments Java Operators Creating and Compiling Java Classes "Hello World" and Working With Numbers The Java String Class Java Strings With Metacharacters The Java New Operator Equality of Strings Comparing Strings Searching for a Substring in Java Useful String Methods in Java Parsing Strings in Java Conditional Logic in Java Determining Leap Years Finding the Divisors of a Number Checking for Palindromes Working With Arrays of Strings Working With the StringBuilder Class Static Methods in Java Other Static Types in Java Summary Chapter 2: Recursion and Combinatorics What Is Recursion? Arithmetic Series Calculating Arithmetic Series (Iterative) Calculating Arithmetic Series (Recursive) Calculating Partial Arithmetic Series Calculating Geometric Series (Recursive) Factorial Values Calculating Factorial Values (Iterative)

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Sommario/riassunto	This book is a fast-paced introduction to using data structures with Java. Numerous code samples and listings are included to support myriad topics. The first chapter contains a quick introduction to Java, along with Java code samples to check for leap years, find divisors of a number, and work with arrays of strings. The second chapter introduces recursion and uses code samples to check if a positive number is prime, to find the prime divisors of a positive integer, to calculate the GCD (greatest common divisor) and LCM (lowest common multiple) of a pair of positive integers. The third chapter contains Java code samples involving strings and arrays, such as finding binary substrings of a number, checking if strings contain unique characters, counting bits in a range of numbers, and how to compute XOR without using the XOR function. Chapters 4 through 6 include Java code samples involving stearch algorithms, concepts in linked lists, and tasks involving linked lists. Finally, Chapter 7 discusses data structures called queues and stacks, along with additional Java code samples. FEATURES: Extensive topics, code samples, and scripts related to data structuresCovers strings, arrays, queues, and stacks, linked lists, computing the XOR function, checking for unique characters, and morelncludes companion files with code samples from the book (available for downloading from the publisher)