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Nota di contenuto	Intro -- Table of Contents -- About the Authors -- About the Technical Reviewer -- Chapter 1: Introduction -- Cryptography and Cryptanalysis -- Book Structure -- Conclusion -- References -- Chapter 2: JDK 17: New Features -- Conclusion -- References -- Chapter 3: Roadmap and Vision for Jakarta EE 10 -- Conclusion -- References -- Chapter 4: Java Cryptography Architecture -- Architecture and Design Principles -- JCA Classes and Algorithms -- Algorithms and Engine Classes -- Interfaces and Main Classes -- Data Encryption -- Hash Functions -- Signatures -- Generating Signatures -- Verifying the Signature -- Conclusion -- References -- Chapter 5: Classical Cryptography -- Caesar Cipher -- Implementation -- Cryptanalysis -- Vigenère Cipher -- Implementation -- Cryptanalysis -- Hill Cipher -- Implementation -- Cryptanalysis -- Conclusion -- References -- Chapter 6: Formal Techniques for Cryptography -- Definitions -- Probabilities and Statistics -- Conditional Probability -- Random Variables -- Entropy -- A Little Algebra -- Elliptic Curves -- Conclusion -- References -- Chapter 7: Pseudorandom Number Generators -- Examples of PRNGs -- Linear Congruential PRNGs -- Blum-Blum-Shub PRNG -- Linear Circuit PRNGs

Sommario/riassunto

Here is your in-depth guide to cryptography and cryptanalysis in Java. This book includes challenging cryptographic solutions that are implemented in Java 17 and Jakarta EE 10. It provides a robust introduction to Java 17's new features and updates, a roadmap for Jakarta EE 10 security mechanisms, a unique presentation of the "hot points" (advantages and disadvantages) from the Java Cryptography Architecture (JCA), and more.