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Nota di contenuto	Cover -- Contents -- 1. Databases and Database Users -- 2. Database System Concepts and Architecture -- 3. The Relational Data Model and Relational Database Constraints -- 4. Basic SQL -- 5. More SQL: Complex Queries, Triggers, Views and Schema Modification -- 6. The Relational Algebra and Relational Calculus -- 7. Data Modeling Using the Entity-Relationship (ER) Model -- 8. The Enhanced Entity-Relationship (EER) Model -- 9. Relational Database Design by ER- and EER-to-Relational Mapping -- 10. Practical Database Design Methodology and Use of UML Diagrams -- 11. Object and Object-Relational Databases -- 12. XML: Extensible Markup Language -- 13. Introduction to SQL Programming Techniques -- 14. Web Database Programming Using PHP -- 15. Basics of Functional Dependencies and Normalization for Relational Databases -- 16. Relational Database Design Algorithms and Further Dependencies -- 17. Disk Storage, Basic File Structures, and Hashing -- 18. Indexing Structures for Files -- 19. Algorithms for Query Processing and Optimization -- 20. Physical Database Design and Tuning -- 21. Introduction to Transaction Processing Concepts and Theory -- 22. Concurrency Control Techniques -- 23. Database Recovery Techniques -- 24. Database Security -- 25. Distributed Databases -- 26. Enhanced Data Models for Advanced Applications -- 27. Introduction to Information Retrieval and

Web Search -- 28. Overview of Data Warehousing and OLAP --
Appendix: Alternative Diagrammatic Notations for ER Models --
Appendix: Parameters of Disks -- Appendix: Overview of the QBE
Language -- Index.

Sommario/riassunto

Clear explanations of theory and design, broad coverage of models and real systems, and an up-to-date introduction to modern database technologies result in a leading introduction to database systems. Intended for computer science majors, this text emphasizes math models, design issues, relational algebra, and relational calculus. A lab manual and problems give students opportunities to practice the fundamentals of design and implementation. Real-world examples serve as engaging, practical illustrations of database concepts. The Sixth Edition maintains its coverage of the most popular database topics, including SQL, security, and data mining, and features increased emphasis on XML and semi-structured data.
