

## <<数据库系统入门>>

### 图书基本信息

书名：<<数据库系统入门>>

13位ISBN编号：9787030362247

10位ISBN编号：7030362241

出版时间：2013-1

出版时间：戴特 (Date,C.J.) 科学出版社 (2013-01出版)

作者：戴特

版权说明：本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问：<http://www.tushu007.com>

## <<数据库系统入门>>

### 内容概要

《国外信息科学与技术经典图书系列:数据库系统入门(第8版)(影印版)》全面深入地介绍了数据库系统的相关理论与方法。

全书共分为6个部分：第1部分“基本概念”，讲述什么是数据库系统、数据库系统的体系结构、概述关系数据库系统并讲解了SQL语言；第2部分“关系模型”，将关系模型作为现代数据库技术的基础进行全面介绍；第3部分“数据库设计”，主要包括函数依赖、范式在内的设计理论，以及语义模型（E-R模型）两部分内容；第4部分“事务管理”，介绍事务管理相关技术；第5部分“扩展主题”，介绍其他多种数据库相关技术；第6部分“对象、关系和XML”，主要介绍了对象技术对数据库的影响。

《国外信息科学与技术经典图书系列:数据库系统入门(第8版)(影印版)》既可作为高等学校计算机及相关专业学生的教材，亦可供从事计算机应用的工程技术人员参考。

## 作者简介

作者：(英国)戴特C.J.Date is an independent author,lecturer,researcher,and consultant,specializing in relational database technology.He is based in Healdsburg,California. In 1967,following several years as a mathematical programmer and programming instructor for Leo Computers Ltd.(London,E.ngland),Mr.Date moved to the IBM(UK)Development Laboratories,where he worked on the integration of database functionality into PL/I.In 1974 he transferred to the IBM Systems Development Center in California,where he was responsible for the design of a database language known as the Unified Database Language,UDL,and worked on technical planning and external design for the IBM products SQL/DS and DB2.He left IBM in May,1983. Mr.Date has been active in the database field for well over 30 years.He was one of the first people anywhere to recognize the significance of Codd's pioneering work on the relational model.He has lectured widely on technical subjects principally on database topics,and especially on relational database--throughout North America and also in Europe,Australia,Latin America,and the Far East.In addition to the present book,he is author or coauthor of a number of other database texts,including,from Morgan Kaufmann,Temporal Data and the Relational Model(2003)and,from Addison-Wesley,Foundation for Future Database Systems:The Third Manifesto(2nd edition,2000),a detailed proposal for the future direction of the field;Database:A Primer(1983),which treats database systems from the nonspecialist's point of view;a series of Relational Database Writings books(1986,1990,1992,1995,1998),which deal with various aspects of relational technology in depth;and another series of books on specific systems and languages A Guide to DB2(4th edition,1993),A Guide to SYBASE and SQL Server(1992),A Guide to SQL/DS(1988),A Guide to INGRES(1987),and A Guide to the SQL Standard(4th edition,1997).His books have been translated into several languages,including Braille,Chinese,Dutch,French,German,Greek,Italian,Japanese,Korean,Polish,Portuguese,Russian,and Spanish. Mr.Date has also produced over 300 technical articles and research papers and has made a variety of original contributions to database theory.For several years,he was a regular columnist for the magazine Database Programming & Design.He also contributes regularly to.His professional seminars on database technology,offered both in North America and overseas,are widely considered to be second to none for the quality of the subject matter and the clarity of the exposition. Mr.Date holds an Honours Degree in Mathematics from Cambridge University,England(BA 1962,MA 1966)and the honorary degree of Doctor of Technology from De Montfort University,England(1994).

## 书籍目录

Preface to the Eighth Edition  
 PART I PRELIMINARIES  
 Chapter 1 An Overview of Database Management 1.1  
 Introduction 1.2 What Is a Database System? 1.3 What Is a Database? 1.4 Why Database? 1.5 Data Independence 1.6  
 Relational Systems and Others 1.7 Summary Exercises References and Bibliography  
 Chapter 2 Database System Architecture 2.1 Introduction 2.2 The Three Levels of the Architecture 2.3 The External Level 2.4 The Conceptual  
 Level 2.5 The Internal Level 2.6 Mappings 2.7 The Database Administrator 2.8 The Database Management System 2.9  
 Data Communications 2.10 Client/Server Architecture 2.11 Utilities 2.12 Distributed Processing 2.13  
 Summary Exercises References and Bibliography  
 Chapter 3 An Introduction to Relational Databases 3.1  
 Introduction 3.2 An Informal Look at the Relational Model 3.3 Relations and Relvars 3.4 What Relations Mean 3.5  
 Optimization 3.6 The Catalog 3.7 Base Relvars and Views 3.8 Transactions 3.9 The Suppliers-and-Parts Database 3.10  
 Summary Exercises References and Bibliography  
 Chapter 4 An Introduction to SQL 4.1 Introduction 4.2  
 Overview 4.3 The Catalog 4.4 Views 4.5 Transactions 4.6 Embedded SQL 4.7 Dynamic SQL and SQL/CLI 4.8 SQL Is  
 Not Perfect 4.9 Summary Exercises References and Bibliography  
 PART II THE RELATIONAL MODEL  
 Chapter 5 Types 5.1 Introduction 5.2 Values vs. Variables 5.3 Types vs. Representations 5.4 Type Definition 5.5 Operators 5.6  
 Type Generators 5.7 SQL Facilities 5.8 Summary Exercises References and Bibliography  
 Chapter 6 Relations 6.1  
 Introduction 6.2 Tuples 6.3 Relation Types 6.4 Relation Values 6.5 Relation Variables 6.6 SQL Facilities 6.7  
 Summary Exercises References and Bibliography  
 Chapter 7 Relational Algebra 7.1 Introduction 7.2 Closure  
 Revisited 7.3 The Original Algebra: Syntax 7.4 The Original Algebra: Semantics 7.5 Examples 7.6 What Is the Algebra  
 For? 7.7 Further Points 7.8 Additional Operators 7.9 Grouping and Ungrouping 7.10 Summary Exercises References  
 and Bibliography  
 Chapter 8 Relational Calculus 8.1 Introduction 8.2 Tuple Calculus 8.3 Examples 8.4 Calculus  
 vs. Algebra 8.5 Computational Capabilities 8.6 SQL Facilities 8.7 Domain Calculus 8.8 Query-By-Example 8.9  
 Summary Exercises References and Bibliography  
 Chapter 9 Integrity 9.1 Introduction 9.2 A Closer Look 9.3  
 Predicates and Propositions 9.4 Relvar Predicates and Database Predicates 9.5 Checking the Constraints 9.6 Internal  
 vs. External Predicates 9.7 Correctness vs. Consistency 9.8 Integrity and Views 9.9 A Constraint Classification  
 Scheme 9.10 Keys 9.11 Triggers (a Digression) 9.12 SQL Facilities 9.13 Summary Exercises References and  
 Bibliography  
 Chapter 10 Views 10.1 Introduction 10.2 What Are Views For? 10.3 View Retrievals 10.4 View  
 Updates 10.5 Snapshots (a Digression) 10.6 SQL Facilities 10.7 Summary Exercises References and Bibliography  
 PART III DATABASE DESIGN  
 Chapter 11 Functional Dependencies 11.1 Introduction 11.2 Basic Definitions 11.3 Trivial  
 and Nontrivial Dependencies 11.4 Closure of a Set of Dependencies 11.5 Closure of a Set of Attributes 11.6  
 Irreducible Sets of Dependencies 11.7 Summary Exercises References and Bibliography  
 Chapter 12 Further  
 Normalization I: 1NF, 2NF, 3NF, BCNF 12.1 Introduction 12.2 Normal Loss Decomposition and Functional  
 Dependencies 12.3 First, Second, and Third Normal Forms 12.4 Dependency Preservation 12.5 Boyce/Codd Normal  
 Form 12.6 A Note on Relation-Valued Attributes 12.7 Summary Exercises References and Bibliography  
 Chapter 13  
 Further Normalization II: Higher Normal Forms 13.1 Introduction 13.2 Multi-valued Dependencies and Fourth  
 Normal Form 13.3 Join Dependencies and Fifth Normal Form 13.4 The Normalization Procedure Summarized 13.5  
 A Note on Denormalization 13.6 Orthogonal Design (a Digression) 13.7 Other Normal Forms 13.8  
 Summary Exercises References and Bibliography  
 Chapter 14 Semantic Modeling 14.1 Introduction 14.2 The Overall  
 Approach 14.3 The E/R Model 14.4 E/R Diagrams 14.5 Database Design with the E/R Model 14.6 A Brief  
 Analysis 14.7 Summary Exercises References and Bibliography  
 PART IV TRANSACTION  
 MANAGEMENT  
 Chapter 15 Recovery 15.1 Introduction 15.2 Transactions 15.3 Transaction Recovery 15.4 System  
 Recovery 15.5 Media Recovery 15.6 Two-Phase Commit 15.7 Savepoints (a Digression) 15.8 SQL Facilities 15.9  
 Summary Exercises References and Bibliography  
 Chapter 16 Concurrency 16.1 Introduction 16.2 Three  
 Concurrency Problems 16.3 Locking 16.4 The Three Concurrency Problems Revisited 16.5 Deadlock 16.6  
 Serializability 16.7 Recovery Revisited 16.8 Isolation Levels 16.9 Intent Locking 16.10 Dropping ACID 16.11 SQL  
 Facilities 16.12 Summary Exercises References and Bibliography  
 PART V FURTHER TOPICS  
 Chapter 17  
 Security 17.1 Introduction 17.2 Discretionary Access Control 17.3 Mandatory Access Control 17.4 Statistical

## &lt;&lt;数据库系统入门&gt;&gt;

Databases17.5 Data Encryption17.6 SQL Facilities17.7 SummaryExercisesReferences and BibliographyChapter 18 Optimization18.1 Introduction18.2 A Motivating Example18.3 An Overview of Query Processing18.4 Expressic Transformation18.5 Database Statistics18.6 A Divide-and-Conquer Strategy18.7 Implementing the Relational Operators18.9 SummaryExerclsesReferences and BibliographyChapter 19 Missing Information19.1 Introduction19.2 An Overview of the 3VL Approach19.3 Some Consequences of the Foregoing Scheme19.4 Nulls and Keys19.5 Outer Join(a Digression)19.6 Special Values19.7 SQL Facilities19.8 SummaryExercisesReferences and BibliographyChapter 20 Typ e Inheritance20.1 Introduction20.2 Type Hierarchies20.3 Polymorphism and Substitutabilitv20.4 Variables and Assignments20.5 Specialization by Constraint20.6 Compansons20.7 Operators, Versions,and Signatures20.8 Is a Circle an Ellipse?20.9 Specialization by Constraint Revisited20.10 SQL Facilities20.11 SummaryExercisesReferences and BibliographyChapter 21 Distributed Databases21.1 Introduction21.2 Some Preliminaries21.3 The Twelve Objectives21.4 Problems of Distributed systems21.5 Client/Server Systems2 1.6 DBMS Independence21.7 SQL Facilities21.8 SummaryExercisesReferences and BibliographyChapter 22 Decision Support22.1 Introduction22.2 Aspects of Decision Support22.3 Database Design for Decision Support22.4 Data Preparation22.5 Data Warehouses and Data Marts22.6 Online Analytical Processing22.7 Data Mining22.8 SQL Facilities22.9 SummaryExercisesReferences and BibliographyChapter 23 Temporal Databases23.1 Introduction23.2 What Is the Problem?23.3 Intervals23.4 Packing and Unpacking Relations23.5 Generalizing the Relational Operators23.6 Database Design23.7 Integrity Constraints23.8 SummaryExercisesReferences and BibliographyChapter 24 Logic-Based Databases24.1 Introduction24.2 Overview24.3 Propositional Calculus24.4 Predicate Calculus24.5 A Proof-Theoretic View of Databases24.6 Deductive Database Systems24.7 Recursive Query Processing24.8 SummaryExercisesReferences and BibliographyPART VI OBJECTS,RELATIONS,AND XMLChapter 25 Object Databases25.1 Introduction25 12 Objects,Classes,Methods,and Messages25.3 A Closer Look25.4 A Cradle-to-Grave Example25.5 Miscellaneous Issues25.6 SummaryExercisesReferences and BibliographyChapter 26 object/Relational Databases26.1 Introduction26.2 The First Great Blunder26.3 The Second Great Blunder26.4 Implementation Issues26.5 Benefits of True Rapprochement26.7 SQL FacilitiesSummaryExercisesReferences and BibliographyChapter 27 The World Wide Web and XML27.1 IntrOduction27.2 The Web and the Internet27.3 An Overview of XML27.4 XML Data Definition27.5 XML Data Manipulation27.6 XML and Databases27.7 SQL Facilities27.8 SummaryExercisesReferences and BibliographyAPPENDIXESAppendix A The TransRelationalTM ModelA.1 IntroductionA.2 Three Levels of AbstractionA.3 The Basic IdeaA.4 Condensed ColumnsA.5 Merred ColumnsA.6 Implementing the Relational OperatorsA.7 SummaryReferences and BibliographyAppendix B SQL ExpressionsB.1 IntroductionB.2 Table ExpressionsB.3 Boolean ExpressionsAppendix C Abbreviations,Acronyms,and SymbolsIndex

## <<数据库系统入门>>

### 编辑推荐

戴特等编著的《数据库系统入门》全面深入地介绍了数据库系统的相关理论与方法。全书共分为6个部分：第1部分“基本概念”，讲述什么是数据库系统、数据库系统的体系结构、概述关系数据库系统并讲解了SQL语言；第2部分“关系模型”，将关系模型作为现代数据库技术的基础进行全面介绍；第3部分“数据库设计”，主要包括函数依赖、范式在内的设计理论，以及语义模型(E—R模型)两部分内容；第4部分“事务管理”，介绍事务管理相关技术；第5部分“扩展主题”，介绍其他多种数据库相关技术；第6部分“对象、关系和XML”，主要介绍了对象技术对数据库的影响。

<<数据库系统入门>>

版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:<http://www.tushu007.com>