第一图书网, tushu007.com

<<数据库系统概念(第3版)教师指导手册>>

图书基本信息

书名：<<数据库系统概念(第3版)教师指导手册>>

13位ISBN编号：9787111067108

10位ISBN编号：711106710X

出版时间：1999-03

出版时间：机械工业出版社

作者：斯伯查兹(美)

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

第一图书网, tushu007.com

书籍目录

CONTENTS
Preface
1 Introduction
1.1 Purpose of Database Systems
1.2 ViewofData
1.3 DataModels
1.4 Database Languages
1.5 Transaction Management
1.6 Storage Management
1.7 Database Administrator
1.8 Database Users
1.9 Overall System Structure
1.10 Summary
Exercises
Bibliographic Notes
2 Entity-Relationship Model
2.1 Basic Concepts
2.2 Design Issues
2.3 Mapping Constraints
2.4 Keys
2.5 Entity-Relationship Diagram
2.6 Weak Enrity Sets
2.7 Extended E-R Features
2.8 Design of an E-R Database Schema
2.9 Reduction of an E-R Schema to Tables
1
4
7
12
13
14
15
15
16
19
20
20
23
23
28
30
34
36
37
41

第一图书网, tushu007.com
<<数据库系统概念(第3版)教师指导手册>>

47
52
2.10 Summary
Exercises
Bibliographic Notes
3 Relational Model
3.1 Structure of Relational Databases
3.2 The Relational Algebra
3.3 The Tuple Relational Calculus
3.4 The Domain Relational Calculus
3.5 Extended Relational-Algebra Operations
3.6 Modification of the Database
3.7 Views
3.8 Summary
Exercises
Bibliographic Notes
4 SQL
4.1 Background
4.2 Basic Structure
4.3 Set Operations
4.4 Aggregate Functions
4.5 Null Values
4.6 Nested Subqueries
4.7 Derived Relations
4.8 Views
4.9 Modification of the Database
4.10 Joined Relations
4.11 Data-Definition Language
4.12 Embedded SQL
4.13 Other SQL Features
4.14 Summary
Exercises
Bibliographic Notes
5 Other Relational Languages
5.1 Query-by-Example
5.2 Quel
5.3 Datalog
5.4 Summary
Exercises
Bibliographic Notes
6 Integrity Constraints
6.1 Domain Constraints
6.2 Referential Integrity
6.3 Assertions
6.4 Triggers
6.5 Functional Dependencies
6.6 Summary

第一图书网, tushu007.com

Exercises
Bibliographic Notes
Relational Database Design
7.1 Pitfalls in Relational-Database Design
7.2 Decomposition
7.3 Normalization Using Functional Dependencies
7.4 Normalization Using Multivalued Dependencies
7.5 Normalization Using Join Dependencies
7.6 Domain-Key Nonnal Fonn
7.7 Altemative Approaches to Database Design
7.8 Summary
Exercises
Bibliographic Notes
Object-Qriented Databases
8.1 New Database Applications
8.2 The Object-Oriented Data Model
8.3 Object-Oriented Languages
8.4 Persistent Programming Languages
8.5 Persistent C++ Systems
8.6 Summary
Exercises
Bibliographic Notes
Object-Relational Databases
9.1 Nested Relations
9.2 Complex Types and Object Orientation
9.3 Querying with Complex Types
9.4 Creation of Complex Values and Objects
9.5 Comparison of Object-Orientea and Object-Relational Databases
9.6 Summary
Exercises
Bibliographic Notes
Storage and File Structure
10.l Overview of Physical Storage Media
10.l Magnetic Disks
10.3 RAID
10.4 Tertiary Storage
10.5 Storage Access
10.6 File Organization
1037 Organization of Records in Files
10.8 Data-Dictionary Storage
10.9 Storage Structures for Object-Oriented Databases
1O.1O Summary
Exercises
Bibliographic Notes
Indexing and Hashing
1l.l Basic Concepts
1l.2 Ordered Indices

第一图书网, tushu007.com

11.3 B+Tree Index Files
1l.4 B-Tree Index Files
1l.5 Static Hashing
1l.6 Dynamic Hashing
11.7 Comparison of Ordered Indexing and Hashing
11.8 Index Definition in SQL
11.9 Multiple-Key Access
1l.lO Summary
Exercises
Bibliographic Notes
12 Query Processing
12.1 Overview
12.2 Catalog Information for Cost Estimation
12.3 Measures of Query Cost
12.4Selection Operation
12.5 Sorting
12.6 Join Operation
12.7Other Operations
12.8 Evaluation of Expressions
12.9 Transformation of Relational Expressions
12.10 Choice of Evaluation Plans
12.11 Summary
Exercises
Bibliographic Notes
13 Transactions
13.1 Transaction Concept
13.2 Transaction State
13.3 Iimplementation of Atomicity and Durability
13.4 Concurrent Executions
13.5 Serializability
13.6 Recoverability
13.7 Implementation of Isolation
13.8 Transaction Definition in SQL
13.9 Testing for Serializability
13.10 Summary
Exercises
Bibliographic Notes
14 Concurrency Control
14.1 Lock-Based Protocols
14.2 Timestamp-Based Protocols
14.3 Validation-Based Protocols
14.4 Multiple Granularity
14.5 Multivcrsion Schemes
14.6 Deadlock Handling
14.7 Insert and Delete Operations
14.8 Concurrency in Index Structures
14.9 Summary

第一图书网, tushu007.com

Exercises
Bibliographic Notes
Recovery System
15.1 Failure Classification
15.2 Storage Structure
l5.3 Recovery and Atomicity
15.4 Log-Based Recovery
15.5 Shadow Paging
15.6 Recovery with Concurrent Transactions
15.7 Buffer Management
15.8 Failure with Loss of Nonvolatile Storage
l5.9 Advanced Recovery Techniques
15.10 Summary
Exercises
Bibliographic Notes
Database System Architectures
16.1 Centralized Systems
l6.2 Client-Server Systems
16.3 Parallel Systems
l6.4 Distributed Systems
16.5 Network Types
l6.6 Sununary
Exercises
Bibliographic Notes
Parallel Databases
17.1 Introduction
17.2 I/O Parallelism
17.3 Interquery Parallelism
17.4 Intraquery Parallelism
17.5 Intraoperation Parallelism
17.6 Interoperation Parallelism
17.7 Design of Parallel Systems
17.8 Summary
Exercises
Bibliographic Notes
Distributed Databases
18.1 Distributed Data Storage
18.2 Network Transparency
18.3 Distributed Query Processing
18.4 Distributed Transaction Model
18.5 Commit Protocols
18.6 Coordinator Selection
18.7 Concurrency Control
18.8 Deadlock Handling
18.9 Multidatabase Systems
18.10 Summary
Exercises

第一图书网, tushu007.com

Bibliographic Notes
19 Special Topics
19.1 Security and Integrity
19.2 Standardization
19.3 Perfonnance Benchmarks
19.4 Perfonnance Tuning
19.5 Time in Databases
19.6 User Interfaces
19.7 Active Databases
19.8 Summary
Exercises
Bibliographic Notes
20 Advanced Transaction Processing
20.1 Remote Backup Systems
20.2 Transaction-Processing Monitors
20.3 High-Performance Transaction Systems
20.4 Long-Duration Transactions
20.5 Real-Time Transaction Systems
20.6 Weak Levels of Consistency
20.7 Transactional Workflows
20.8 Summary
Exercises
Bibliographic Notes
21 New Applications
21.1 Decision-Support Systems
21.2 Data Analysis
21.3 Data Mining
21.4 Data Warehousing
21.5 Spatial and Geographic Databases
21.6 Multimedia Databases
21.7 Mobility and Personal Databases
21.8 Infonnation-Retrieval Systems
21.9 Distributed Information Systems
21.10 The World Wide Web
21.11 Summary
Exercises
Bibliographic Notes
A Network Model
A.1 Basic Concepts
A.2 Data-Structure Diagrams
A.3 The DBTG CODASYL Model
A.4 Implementation Techniques
A.5 Discussion
B Hierarchical Model
B.l Basic Concepts
B.2 Tree-Stmcture Diagrams
B.3 Implementation Techniques

第一图书网, tushu007.com

B.4 The IMS Database System
B.5 Discussion

第一图书网, tushu007.com
<<数据库系统概念(第3版)教师指导手册>>

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