Ben Forta



Sams Teach Yourself

SQL



Ben Forta

Sams Teach Yourself

SQL

in 10 Minutes

Fifth Edition



SQL in 10 Minutes a Day, Sams Teach Yourself

Table of Contents

Cover

Title Page

Copyright Page

Contents at a Glance

Table of Contents

About the Author

Acknowledgments

We Want to Hear from You!

Reader Services

Introduction

Who Is the Teach Yourself SQL Book For?

DBMSs Covered in This Book

Conventions Used in This Book

1 Understanding SQL

Database Basics

What Is SQL?

Try It Yourself

Summary

2 Retrieving Data



The SELECT Statement

Retrieving Individual Columns

Retrieving Multiple Columns

Retrieving All Columns

Retrieving Distinct Rows

Limiting Results

Using Comments

Summary

Challenges

3 Sorting Retrieved Data

Sorting Data

Sorting by Multiple Columns

Sorting by Column Position

Specifying Sort Direction

Summary

Challenges

4 Filtering Data

Using the WHERE Clause

The WHERE Clause Operators

Summary

Challenges

5 Advanced Data Filtering

Combining WHERE Clauses

Using the IN Operator

Using the NOT Operator

Summary



Chal	lleng	es

6 Using Wildcard Filtering

Using the LIKE Operator

Tips for Using Wildcards

Summary

Challenges

7 Creating Calculated Fields

Understanding Calculated Fields

Concatenating Fields

Performing Mathematical Calculations

Summary

Challenges

8 Using Data Manipulation Functions

Understanding Functions

Using Functions

Summary

Challenges

9 Summarizing Data

Using Aggregate Functions

Aggregates on Distinct Values

Combining Aggregate Functions

Summary

Challenges

10 Grouping Data

Understanding Data Grouping

Creating Groups



Filtering Groups

Grouping and Sorting

SELECT Clause Ordering

Summary

Challenges

11 Working with Subqueries

Understanding Subqueries

Filtering by Subquery

Using Subqueries as Calculated Fields

Summary

Challenges

12 Joining Tables

Understanding Joins

Creating a Join

Summary

Challenges

13 Creating Advanced Joins

Using Table Aliases

Using Different Join Types

Using Joins with Aggregate Functions

Using Joins and Join Conditions

Summary

Challenges

14 Combining Queries

Understanding Combined Queries

Creating Combined Queries



Summary

Challenges

15 Inserting Data

Understanding Data Insertion

Copying from One Table to Another

Summary

Challenges

16 Updating and Deleting Data

Updating Data

Deleting Data

Guidelines for Updating and Deleting Data

Summary

Challenges

17 Creating and Manipulating Tables

Creating Tables

Updating Tables

Deleting Tables

Renaming Tables

Summary

Challenges

18 Using Views

Understanding Views

Creating Views

Summary

Challenges

19 Working with Stored Procedures



Understanding Stored Procedures
Understanding Why to Use Stored Procedures
Executing Stored Procedures
Creating Stored Procedures
Summary

20 Managing Transaction Processing

Understanding Transaction Processing Controlling Transactions
Summary

21 Using Cursors

Understanding Cursors Working with Cursors Summary

22 Understanding Advanced SQL Features

Understanding Constraints
Understanding Indexes
Understanding Triggers
Database Security
Summary

A: Sample Table Scripts

Understanding the Sample Tables
Obtaining the Sample Tables

B: SQL Statement Syntax

ALTER TABLE
COMMIT
CREATE INDEX



CREATE PROCEDURE

CREATE TABLE

CREATE VIEW

DELETE

DROP

INSERT

INSERT SELECT

ROLLBACK

SELECT

UPDATE

C: Using SQL Datatypes

String Datatypes

Numeric Datatypes

Date and Time Datatypes

Binary Datatypes

D: SQL Reserved Words

Index