

How Sql Partition By Works

Tackle the toughest set-based querying and query tuning problems—guided by an author team with in-depth, inside knowledge of T-SQL. Deepen your understanding of architecture and internals—and gain practical approaches and advanced techniques to optimize your code’s performance. Discover how to: Move from procedural programming to the language of sets and logic Optimize query tuning with a top-down methodology Assess algorithmic complexity to predict performance Compare data-aggregation techniques, including new grouping sets Manage data modification—insert, delete, update, merge—for performance Write more efficient queries against partitioned tables Work with graphs, trees, hierarchies, and recursive queries Plus—Use pure-logic puzzles to sharpen your problem-solving skills

Troubleshooting Oracle Performance, 2nd Edition is your systematic guide to diagnosing and resolving performance problems in database-backed applications involving Oracle's database engine. Christian Antognini brings a decade and a half experience to his topic. His first edition is one of the most well-respected books in its field. This second edition has been rigorously updated to cover the latest developments in Oracle Database 11g Release 2 through Oracle Database 12c. What do you do when your database application isn't running fast enough? You troubleshoot, of course. Finding the slow part of an application is often the easy part of the battle. It's finding a solution that's difficult. Troubleshooting Oracle Performance, 2nd Edition helps by providing a systematic approach to addressing the underlying causes of poor database application performance. The author freely shares his experience while explaining the underlying foundations of how SQL statements are executed by the Oracle database

engine. You'll be able to draw a solid foundation of theory and shared experience as you face head-on the performance challenges in your daily work. Written for developers by an application developer who has learned by doing Gives a systematic approach to solving database application performance problems Helps you plan for performance as you would for any other application requirement

RMAN Recipes for Oracle Database 12c is an example-driven approach to the Oracle database administrator's #1 job responsibility: Be able to recover the database. Of all the things you are responsible for as database administrator, nothing is more important than the data itself. Like it or not, the fearsome responsibility of protecting your organization's most critical data falls squarely upon your shoulders: Lose that data and your company could fail. Lose that data and you could be out of a job. Oracle's flagship database product fortunately implements a wide-ranging feature set to aid you in the all-important task of safeguarding against data loss. Recovery Manager, or RMAN, is at the heart of that feature set, and is the tool most-often used to initiate database backup and recovery operations. In this book, well-known authors and database experts Darl Kuhn, Sam Alapati, and Arup Nanda have created a set of examples encompassing the gamut of backup and recovery tasks that you might need to perform. Sometimes, especially when the heat is on, a good example is what you need to get started towards a solution. RMAN Recipes for Oracle Database 12c delivers. It'll be the book you reach for when that dreaded call comes in at 3:00am some dreary morning. It'll be the book that lets you sleep at night knowing that no matter what transpires, that you've done your job well and can recover from any outage. RMAN Recipes for Oracle Database 12c gets right to the point with quick and easy-to-read, step-by-step solutions that can help you backup and recover your data with

confidence. What you'll learn Reliably back up and recover your database using Oracle's Recovery Manager Let Oracle Database manage your backup files via the Fast Recovery Area Automate backup and recovery tasks by writing scripts Troubleshoot RMAN problems and optimize RMAN performance Recover from the loss of a control file, loss of an online redo log, and from other unusual situations Who this book is for RMAN Recipes for Oracle Database 12c is aimed squarely at Oracle database administrators responsible for database backup and recovery operations. Table of Contents Backup and Recovery 101 Jump-Starting RMAN Using the Fast Recovery Area Using RMAN Configuring the RMAN Environment Using the Recovery Catalog Making Backups with RMAN Maintaining RMAN Backups and the Repository Scripting RMAN Restoring the Control File Performing Complete Recovery Performing Incomplete Recovery Performing Flashback Recovery Handling Online Redo Log Failures Duplicating Databases and Transporting Data Tuning RMAN Troubleshooting RMAN Implementing Oracle Secure Backup Performing Backup and Recovery with Enterprise Manager Using the Data Recovery Advisor Using RMAN on Windows DataGuard RMAN and RAC RMAN and ASM RMAN and Exadata

Describes the features and functions of Apache Hive, the data infrastructure for Hadoop.

T-SQL insiders help you tackle your toughest queries and query-tuning problems Squeeze maximum performance and efficiency from every T-SQL query you write or tune. Four leading experts take an in-depth look at T-SQL's internal architecture and offer advanced practical techniques for optimizing response time and resource usage. Emphasizing a correct understanding of the language and its foundations, the authors present unique solutions they have spent years developing and refining. All code and techniques are fully

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updated to reflect new T-SQL enhancements in Microsoft SQL Server 2014 and SQL Server 2012. Write faster, more efficient T-SQL code: Move from procedural programming to the language of sets and logic Master an efficient top-down tuning methodology Assess algorithmic complexity to predict performance Compare data aggregation techniques, including new grouping sets Efficiently perform data-analysis calculations Make the most of T-SQL's optimized bulk import tools Avoid date/time pitfalls that lead to buggy, poorly performing code Create optimized BI statistical queries without additional software Use programmable objects to accelerate queries Unlock major performance improvements with In-Memory OLTP Master useful and elegant approaches to manipulating graphs About This Book For experienced T-SQL practitioners Includes coverage updated from Inside Microsoft SQL Server 2008 T-SQL Querying and Inside Microsoft SQL Server 2008 T-SQL Programming Valuable to developers, DBAs, BI professionals, and data scientists Covers many MCSE 70-464 and MCSA/MCSE 70-461 exam topics

The Microsoft Azure cloud is an ideal platform for data-intensive applications. Designed for productivity, Azure provides pre-built services that make collection, storage, and analysis much easier to implement and manage. Azure Storage, Streaming, and Batch Analytics teaches you how to design a reliable, performant, and cost-effective data infrastructure in Azure by progressively building a complete working analytics system. Summary The Microsoft Azure cloud is an ideal platform for data-intensive applications. Designed for productivity, Azure provides pre-built services that make collection, storage, and analysis much easier to implement and manage. Azure Storage, Streaming, and Batch Analytics teaches you how to design a reliable, performant, and cost-effective data infrastructure in Azure by

progressively building a complete working analytics system. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Microsoft Azure provides dozens of services that simplify storing and processing data. These services are secure, reliable, scalable, and cost efficient. About the book Azure Storage, Streaming, and Batch Analytics shows you how to build state-of-the-art data solutions with tools from the Microsoft Azure platform. Read along to construct a cloud-native data warehouse, adding features like real-time data processing. Based on the Lambda architecture for big data, the design uses scalable services such as Event Hubs, Stream Analytics, and SQL databases. Along the way, you'll cover most of the topics needed to earn an Azure data engineering certification. What's inside

Configuring Azure services for speed and cost
Constructing data pipelines with Data Factory
Choosing the right data storage methods
About the reader
For readers familiar with database management. Examples in C# and PowerShell. About the author
Richard Nuckolls is a senior developer building big data analytics and reporting systems in Azure.

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SQL Server T-SQL Recipes is an example-based guide to the Transact-SQL language that is at the core of SQL Server. This edition has been lightly updated for SQL Server 2014 and provides ready-to-implement solutions to common

programming and database administration tasks. Learn to create databases, create in-memory tables and stored procedures, insert and update data, generate reports, secure your data, and more. Tasks and their solutions are broken down into a problem/solution format that is quick and easy to read so that you can get the job done fast when the pressure is on. Solutions in this book are divided into chapters by problem domain. Each chapter is a collection of solutions around a single facet of the language such as writing queries, managing indexes, error handling, and query performance. Each solution is presented code-first, giving you a working code example to copy from and implement immediately in your own environment. Following each example is an in-depth description of how and why the given solution works. Tradeoffs and alternative approaches are also discussed. Focused on solutions: Look up what you need to do. Learn how to do it. Do it. Current: Lightly updated for SQL Server 2014 Comprehensive: Covers all common T-SQL problem domains

SQL Server 2012 T-SQL Recipes is an example-based guide to the Transact-SQL language that is at the core of SQL Server 2012. It provides ready-to-implement solutions to common programming and database administration tasks. Learn to create databases, insert and update data, generate reports, secure your data, and more. Tasks and their solutions are broken down into a problem/solution format that is quick and easy to read so that you can get the job done fast when the pressure is on. Solutions in this book are divided into chapters by problem domain. Each chapter is a collection of solutions around a single facet of the language such as writing queries, developing triggers, and applying aggregate functions. Each solution is presented code-first, giving you a working code example to copy from and implement immediately in your own environment. Following

each example is an in-depth description of how and why the given solution works. Tradeoffs and alternative approaches are also discussed. Focused on solutions: Look up what you need to do. Learn how to do it. Do it. Current: Newly updated for SQL Server 2012 Comprehensive: Covers all common T-SQL problem domains

Expert tabular modeling techniques for building and deploying cutting-edge business analytical reporting solutions About This Book Build and deploy Tabular Model projects from relational data sources Leverage DAX and create high-performing calculated fields and measures Create ad-hoc reports based on a Tabular Model solution Useful tips to monitor and optimize your tabular solutions Who This Book Is For This book is for SQL BI professionals and Architects who want to exploit the full power of the new Tabular models in Analysis Services. Some knowledge of previous versions of Analysis services would be helpful but is not essential. What You Will Learn Learn all about Tabular services mode and how it speeds up development Build solutions using sample datasets Explore built-in actions and transitions in SSAS 2016 Implement row-column, and role-based security in a Tabular Data model Realize the benefits of in-memory and DirectQuery deployment modes Get up to date with the new features added to SQL Server 2016 Analysis Services Optimize Data Models and Relationships Usage In Detail SQL Server Analysis Service (SSAS) has been widely used across multiple businesses to build smart online analytical reporting solutions. It includes two different types of modeling for analysis services: Tabular and Multi

Dimensional. This book covers Tabular modeling, which uses tables and relationships with a fast in-memory engine to provide state of the art compression algorithms and query performance. The book begins by quickly taking you through the concepts required to model tabular data and set up the necessary tools and services. As you learn to create tabular models using tools such as Excel and Power View, you'll be shown various strategies to deploy your model on the server and choose a query mode (In-memory or DirectQuery) that best suits your reporting needs. You'll also learn how to implement key and newly introduced DAX functions to create calculated columns and measures for your model data. Last but not least, you'll be shown techniques that will help you administer and secure your BI implementation along with some widely used tips and tricks to optimize your reporting solution. By the end of this book, you'll have gained hands-on experience with the powerful new features that have been added to Tabular models in SSAS 2016 and you'll be able to improve user satisfaction with faster reports and analytical queries. Style and approach This book takes a practical, recipe-based approach where each recipe lists the steps to address or implement a solution. You will be provided with several approaches to creating a business intelligence semantic model using analysis services. As data floods into your company, you need to put it to work right away—and SQL is the best tool for the job. With the latest edition of this introductory guide, author Alan Beaulieu helps developers get up to speed with SQL fundamentals for writing database applications,

performing administrative tasks, and generating reports. You'll find new chapters on SQL and big data, analytic functions, and working with very large databases. Each chapter presents a self-contained lesson on a key SQL concept or technique using numerous illustrations and annotated examples. Exercises let you practice the skills you learn. Knowledge of SQL is a must for interacting with data. With Learning SQL, you'll quickly discover how to put the power and flexibility of this language to work. Move quickly through SQL basics and several advanced features Use SQL data statements to generate, manipulate, and retrieve data Create database objects, such as tables, indexes, and constraints with SQL schema statements Learn how datasets interact with queries; understand the importance of subqueries Convert and manipulate data with SQL's built-in functions and use conditional logic in data statements

Direct from Microsoft, these Exam Refs are the official study guides for the new Microsoft 70-767 Implementing a SQL Data Warehouse and the new Microsoft 70-768 Developing SQL Data Models certification exams. Exam Ref 70-767 Implementing a SQL Data Warehouse , the first book in this bundle (ISBN 978150936473), offers professional-level preparation that helps candidates maximize their exam performance and sharpen their skills on the job. It focuses on the specific areas of expertise modern IT professionals need to successfully build modern data warehouses to support advanced business intelligence solutions. Written by Microsoft Data Platform MVP Stacia Varga, Exam Ref 70-768 Developing SQL Data Models , the second book in this

bundle (ISBN 9781509305155), offers professional-level preparation that helps candidates maximize their exam performance and sharpen their skills on the job. It focuses on the specific areas of expertise modern database and business intelligence professionals need to succeed with SQL Server 2016 Analysis Services. SQL Server 2008 introduces many new features that will change database administration procedures; many DBAs will be forced to migrate to SQL Server 2008. This book teaches you how to develop the skills required to successfully administer a SQL Server 2008 database; no prior experience is required. The material covers system installation and configuration/architecting, implementing and monitoring security controls, configuring and managing network communications, automating administration tasks, disaster prevention and recovery, performance monitoring, optimizing and ensuring high availability, as well as major SQL Server 2008 components including Integration Services, Reporting Services, Analysis Services, and Service Broker. This book follows the newest iterations of the Microsoft Official Academic Course (MOAC) program for database administration courses using SQL Server 2005 and SQL Server 2008. It provides the information and resources needed to prepare students for the Microsoft Certified Information Technology Professional (MCITP) 70-444 exam for SQL Server 2005, and the 70-432 Microsoft Certified Technology Specialist (MCTS) exam for SQL Server 2008. Hands On Exercises and Certification Ready features are integrated with the accompanying Lab Manual throughout the chapters that enable them to

reinforce what they've learned by completing various exercises. Business cases are presented to provide a real world perspective on how the information is used in the field. The book also includes a CD that enables students with exam practice and instant feedback. By following the exercises in this book, students will learn how to install and configure SQL Server, manage databases, implement security, troubleshoot SQL activity, and more.

Expert Oracle SQL: Optimization, Deployment, and Statistics is about optimizing individual SQL statements, especially on production database systems. This Oracle-specific book begins by assuming you have already identified a particular SQL statement and are considering taking steps to improve its performance. The book describes a systematic process by which to diagnose a problem statement, identify a fix, and to implement that fix safely in a production system. You'll learn not only to improve performance when it is too slow, but also to stabilize performance when it is too variable. You'll learn about system statistics and how the Cost-Based Optimizer uses them to determine a suitable execution plan for a given statement. That knowledge provides the foundation from which to identify the root cause, and to stabilize and improve performance. Next after identifying a problem and the underlying root cause is to put in place a solution. Expert Oracle SQL: Optimization, Deployment, and Statistics explains how to apply various remedies such as changing the SQL statement, adding hints, changing the physical design, and more, and how they can be brought to bear on fixing a problem once

and for all. Rolling a change out smoothly is an important topic when dealing with tuning and optimization. Expert Oracle SQL: Optimization, Deployment, and Statistics does not let you down in this critical area. The book contains two chapters of good information from an experienced professional on how to safely deploy changes into production so that your systems remaining running and available throughout the deployment process. Describes a systematic approach to tuning Oracle SQL Explains how things are supposed to work, what can go wrong, and how to fix it Takes you through the steps needed to stabilize performance in your production systems

Pro Oracle Spatial for Oracle Database 11g shows you how to take advantage of Oracle Database's built-in feature set for working with location-based data. The book addresses the special nature of spatial data and its role in professional and consumer applications. It also details issues in spatial data management and covers how spatial information is used to understand business and support decisions, to manage customer relations, and to better serve private and corporate users. When you read this book, you're learning from the very best, the authors are key players on the team that develops the Oracle Spatial feature set.

T-SQL Window Functions Microsoft Press

When used with the MDX query language, SQL Server Analysis Services allows developers to build full-scale database applications to support such business functions as budgeting, forecasting, and market analysis. Shows readers how to build data

warehouses and multi-dimensional databases, query databases, and use Analysis Services and other components of SQL Server to provide end-to-end solutions Revised, updated, and enhanced, the book discusses new features such as improved integration with Office and Excel 2007; query performance enhancements; improvements to aggregation designer, dimension designer, cube and dimension wizards, and cell writeback; extensibility and personalization; data mining; and more

As organizations strive to do more with less, DB2 Enterprise Server Edition V9 for Linux, Unix, and Windows contains innovative features for delivering information on demand and scaling databases to new levels. The table partitioning, newly introduced in DB2 9, and the database partitioning feature provide scalability, performance, and flexibility for data store. The multi-dimension clustering table enables rows with similar values across multiple dimensions to be physically clustered together on disk. This clustering allows for efficient I/O and provides performance gain for typical analytical queries. How are these features and functions different? How do you decide which technique is best for your database needs? Can you use more than one technique concurrently? This IBM Redbooks publication addresses these questions and more. Learn how to set up and administer database partitioning. Explore the table partitioning

function and how you can easily add and remove years of data on your warehouse. Analyze your data to discern how multi-dimensional clustering can drastically improve your query performance.

Best practices and invaluable advice from world-renowned data warehouse experts In this book, leading data warehouse experts from the Kimball Group share best practices for using the upcoming “Business Intelligence release” of SQL Server, referred to as SQL Server 2008 R2. In this new edition, the authors explain how SQL Server 2008 R2 provides a collection of powerful new tools that extend the power of its BI toolset to Excel and SharePoint users and they show how to use SQL Server to build a successful data warehouse that supports the business intelligence requirements that are common to most organizations. Covering the complete suite of data warehousing and BI tools that are part of SQL Server 2008 R2, as well as Microsoft Office, the authors walk you through a full project lifecycle, including design, development, deployment and maintenance. Features more than 50 percent new and revised material that covers the rich new feature set of the SQL Server 2008 R2 release, as well as the Office 2010 release Includes brand new content that focuses on PowerPivot for Excel and SharePoint, Master Data Services, and discusses updated capabilities of SQL Server Analysis, Integration, and Reporting Services Shares detailed

case examples that clearly illustrate how to best apply the techniques described in the book. The accompanying Web site contains all code samples as well as the sample database used throughout the case studies. The Microsoft Data Warehouse Toolkit, Second Edition provides you with the knowledge of how and when to use BI tools such as Analysis Services and Integration Services to accomplish your most essential data warehousing tasks.

The book follows a tutorial-based approach, covering all the best practices for backup and recovery. The book starts by introducing readers to the world of backup and recovery, then moves on to teach them the new features offered by Oracle 12c. The book is full of useful tips and best practices that are essential for any DBA to perform backup and recovery operations in an organization. This book is designed for Oracle DBAs and system administrators. The reader will have a basic working experience of administering Oracle databases. This book is designed for Oracle DBAs and system administrators. This book will become a reference guide and will also help you to learn some new skills, and give you some new ideas you never knew about, helping you to easily find the solution to some of the most well-known problems you could encounter as DBAs.

New Oracle database administrators can get off the ground running. This book helps you develop the

ability to think on your feet and move focus in an instant from arcane syntax details to broad, corporate issues. Along the way, you will see how to create your first database and implement best practices to ensure a well-running database system. What makes Oracle DBA Mentor different is that it also teaches you how to obtain answers that are not found in this or other books. Focus is given to creating a test bed and running test cases to examine hypotheses and prove out solutions so you can be sure they work in production. Attention is given to navigating product documentation and networking in forums and social media to build your skills and a network to draw on when solving problems under pressure. There are chapters of step-by-step technical content as well as coverage of essential skills to succeed as a DBA no matter which database engine you administer. By the time you are done reading this book, you will have confidence to face many of the situations thrown in your direction. You will know where to go for the answers you don't yet know that you need. You'll be able to work and troubleshoot under pressure. You'll know how to create a database, institute backup and recovery procedures, secure the database and its valuable corporate data, and acquire more knowledge as needed so you can run a database to meet the needs of your organization. What You'll Learn Install Oracle Database with best practices Implement

backup and recovery procedures Understand the fundamentals of databases and data security Find answers to technical problems using Oracle documentation, Oracle Support, and other resources Patch and upgrade an Oracle database Who This Book Is For The novice database administrator who wants help getting off the ground with their DBA career, and in building the skills to let that career flourish in the long term. Mid-level DBAs will also find the book helpful as they try to grow their career to the next level. While the book is geared toward the Oracle platform, database administrators from other platforms can benefit from the soft skills covered in this book.

Understand Microsoft's dramatically updated new release of its premier toolset for business intelligence The first major update to Microsoft's state-of-the-art, complex toolset for business intelligence (BI) in years is now available and what better way to master it than with this detailed book from key members of the product's development team? If you're a database or data warehouse developer, this is the expert resource you need to build full-scale, multi-dimensional, database applications using Microsoft's new SQL Server 2012 Analysis Services and related tools. Discover how to solve real-world BI problems by leveraging a slew of powerful new Analysis Services features and capabilities. These include the new DAX language,

which is a more user-friendly version of MDX; PowerPivot, a new tool for performing simplified analysis of data; BISM, Microsoft's new Business Intelligence Semantic Model; and much more. Serves as an authoritative guide to Microsoft's new SQL Server 2012 Analysis Services BI product and is written by key members of the Microsoft Analysis Services product development team Covers SQL Server 2012 Analysis Services, a major new release with a host of powerful new features and capabilities Topics include using the new DAX language, a simplified, more user-friendly version of MDX; PowerPivot, a new tool for performing simplified analysis of data; BISM, Microsoft's new Business Intelligence Semantic Model; and a new, yet-to-be-named BI reporting tool Explores real-world scenarios to help developers build comprehensive solutions Get thoroughly up to speed on this powerful new BI toolset with the timely and authoritative Professional Microsoft SQL Server 2012 Analysis Services with MDX.

This book comprehensively covers the technology, the people, the process, and the real-world best practices for planning, deploying, administering, and maintaining highly available SQL Server 2005 instances. It provides in-depth, detailed advice on what it takes to assure SQL Server high availability for businesses of any size. It covers both availability and performance, from the perspective of high

availability, and addresses the crucial needs of enterprise-class, 24x7 SQL Server 2005 implementations. The book is based on real-world experience. It gives sound guidance to DBAs and system administrators on how to really get the job done.

Assuming only basic knowledge of C# 3.0, *Beginning C# 3.0 Databases* teaches all the fundamentals of database technology and database programming readers need to quickly become highly proficient database users and application developers. It explains and demonstrates how to create database objects and program against them in both T-SQL and C#. Full of practical, detailed examples, it's been fully revised and updated for C# 3.0 and offers the most complete, detailed, and gentle introduction to database technology for all C# programmers at any level of experience.

With the release of SQL Server 2005, Microsoft is introducing a new multi-exam certification program. The Microsoft SQL Server 2005 Implementation and Maintenance exam (70-431) is the first step for everyone entering this new certification track, and serves as both a single exam certification as well as the entry exam for the MCITP-level certifications. This book provides an introduction to the development and administrative aspects of SQL Server 2005 and features practical guidance for all aspects of the exam. Get a great start in your certification process today with this comprehensive guide which includes: Hundreds of challenging practice

questions plus two bonus exams Leading-edge exam preparation software, including a test engine Authoritative coverage of all key exam objectives, including: Installing and Configuring SQL Server 2005 Implementing High Availability and Disaster Recovery Supporting Data Consumers Maintaining Databases Monitoring and Troubleshooting SQL Server Performance Creating and Implementing Database Objects Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

This two volume set LNCS 10177 and 10178 constitutes the refereed proceedings of the 22nd International Conference on Database Systems for Advanced Applications, DASFAA 2017, held in Suzhou, China, in March 2017. The 73 full papers, 9 industry papers, 4 demo papers and 3 tutorials were carefully selected from a total of 300 submissions. The papers are organized around the following topics: semantic web and knowledge management; indexing and distributed systems; network embedding; trajectory and time series data processing; data mining; query processing and optimization; text mining; recommendation; security, privacy, sensor and cloud; social network analytics; map matching and spatial keywords; query processing and optimization; search and information retrieval; string and sequence processing; stream data processing; graph and network data processing; spatial databases; real time data processing; big data; social networks and graphs.

Apache Spark is amazing when everything clicks. But if you haven't seen the performance improvements you

expected, or still don't feel confident enough to use Spark in production, this practical book is for you. Authors Holden Karau and Rachel Warren demonstrate performance optimizations to help your Spark queries run faster and handle larger data sizes, while using fewer resources. Ideal for software engineers, data engineers, developers, and system administrators working with large-scale data applications, this book describes techniques that can reduce data infrastructure costs and developer hours. Not only will you gain a more comprehensive understanding of Spark, you'll also learn how to make it sing. With this book, you'll explore: How Spark SQL's new interfaces improve performance over SQL's RDD data structure The choice between data joins in Core Spark and Spark SQL Techniques for getting the most out of standard RDD transformations How to work around performance issues in Spark's key/value pair paradigm Writing high-performance Spark code without Scala or the JVM How to test for functionality and performance when applying suggested improvements Using Spark MLlib and Spark ML machine learning libraries Spark's Streaming components and external community packages

As your essential guide to Microsoft's new SQL Server 2005 certification (exam 70-442), this book offers you practical and in-depth coverage. Full coverage of all exam objectives is presented in a systematic approach so you can be confident you're getting the instruction you need for the exam. Plus, practical hands-on exercises reinforce critical skills and real-world scenarios put what you've learned in the context of actual job

roles. Finally, challenging review questions in each chapter prepare you for exam day.

"Most T-SQL developers recognize the value of window functions for data analysis calculations. But they can do far more, and recent optimizations make them even more powerful. In *T-SQL Window Functions*, renowned T-SQL expert Itzik Ben-Gan introduces breakthrough techniques for using them to handle many common T-SQL querying tasks with unprecedented elegance and power. Using extensive code examples, he guides you through window aggregate, ranking, distribution, offset, and ordered set functions. You'll find a detailed section on optimization, plus an extensive collection of business solutions -- including novel techniques available in no other book."--provided by publisher.

Apply powerful window functions in T-SQL—and increase the performance and speed of your queries Optimize your queries—and obtain simple and elegant solutions to a variety of problems—using window functions in Transact-SQL. Led by T-SQL expert Itzik Ben-Gan, you'll learn how to apply calculations against sets of rows in a flexible, clear, and efficient manner. Ideal whether you're a database administrator or developer, this practical guide demonstrates ways to use more than a dozen T-SQL querying solutions to address common business tasks. Discover how to: Go beyond traditional query approaches to express set calculations more efficiently Delve into ordered set functions such as rank, distribution, and offset Implement hypothetical set and inverse distribution functions in standard SQL Use strategies for improving sequencing, paging, filtering,

and pivoting Increase query speed using partitioning, ordering, and coverage indexing Apply new optimization iterators such as Window Spool Handle common issues such as running totals, intervals, medians, and gaps This brilliant new book gives readers the lowdown on the most important new features in the latest release of Oracle's flagship database product. Authors Sam Alapati and Charles Kim are experienced database administrators who go beyond regurgitating Oracle's new feature documentation to report on "what's new that really matters." Readers whose careers are bound up in Oracle's database system need to know what's new. Sam and Charles deliver with a rigor and candor that will help readers choose the best of the new features to apply in their own environments.

This book is an anthology of effective database management techniques representing the collective wisdom of the OakTable Network. With an emphasis upon performance—but also branching into security, national language, and other issues—the book helps you deliver the most value for your company's investment in Oracle Database technologies. You'll learn to effectively plan for and monitor performance, to troubleshoot systematically when things go wrong, and to manage your database rather than letting it manage you.

Workflow is Oracle's E-Business Suite tool for modeling business processes. Workflow combines procedures performed by the computer with a system of notifications that allow humans to better direct the computer how to proceed. This book

provides a very thorough explanation of the various components of Workflow. You'll learn step by step how to develop and test custom Workflows, and how to administer Workflow using OAM, the Workflow Management screens, and Oracle Diagnostics. This book also explains how the underlying tables store the data generated by Workflow, and how to perform the setups required for a few of the most commonly used Oracle Workflows. The book also includes SQL scripts and sample procedures that we use at Solution Beacon to assess and solve Workflow problems, as well as DBA topics like cloning considerations and partitioning Workflow objects. Start developing with Oracle SQL. This book is a one-stop introduction to everything you need to know about getting started developing an Oracle Database. You'll learn about foundational concepts, setting up a simple schema, adding data, reading data from the database, and making changes. No experience with databases is required to get started. Examples in the book are built around Oracle Live SQL, a freely available, online sandbox for practicing and experimenting with SQL statements, and Oracle Express Edition, a free version of Oracle Database that is available for download. A marquee feature of Beginning Oracle SQL for Oracle Database 18c is the small chapter size. Content is divided into easily digestible chunks that can be read and practiced in very short intervals of time, making this the ideal

book for a busy professional to learn from. Even just a 15-20 minute block of free time can be put to good use. Author Ben Brumm begins by helping you understand what a database is, and getting you set up with a sandbox in which to practice the SQL that you are learning. From there, easily digestible chapters cover, point-by-point, the different aspects of writing queries to get data out of a database. You'll also learn about creating tables and getting data into the database. Crucial topics such as working with nulls and writing analytic queries are given the attention they deserve, helping you to avoid pitfalls when writing queries for production use.

What You'll Learn

- Create, update, and delete tables in an Oracle database
- Add, update, delete data from those database tables
- Query and view data stored in your database
- Manipulate and transform data using in-built database functions and features
- Correctly choose when to use Oracle-specific syntax and features

Who This Book Is For

Those new to Oracle who are planning to develop software using Oracle as the back-end data store. The book is also for those who are getting started in software development and realize they need to learn some kind of database language. Those who are learning software development on the side of their normal job, or learning it as a college student, who are ready to learn what a database is and how to use it also will find this book useful.

Write SQL statements that are more powerful, simpler, and faster using Oracle SQL and its full range of features. This book provides a clearer way of thinking about SQL by building sets, and provides practical advice for using complex features while avoiding anti-patterns that lead to poor performance and wrong results. Relevant theories, real-world best practices, and style guidelines help you get the most out of Oracle SQL. Pro Oracle SQL Development is for anyone who already knows Oracle SQL and is ready to take their skills to the next level. Many developers, analysts, testers, and administrators use Oracle databases frequently, but their queries are limited because they do not have the knowledge, experience, or right environment to help them take full advantage of Oracle's advanced features. This book will inspire you to achieve more with your Oracle SQL statements through tips for creating your own style for writing simple, yet powerful, SQL. It teaches you how to think about and solve performance problems in Oracle SQL, and covers advanced topics and shows you how to become an Oracle expert.

What You'll Learn

- Understand the power of Oracle SQL and where to apply it
- Create a database development environment that is simple, scalable, and conducive to learning
- Solve complex problems that were previously solved in a procedural language
- Write large Oracle SQL statements that are powerful, simple, and fast
- Apply coding styles to

make your SQL statements more readable Tune large Oracle SQL statements to eliminate and avoid performance problems Who This Book Is For Developers, testers, analysts, and administrators who want to harness the full power of Oracle SQL to solve their problems as simply and as quickly as possible. For traditional database professionals the book offers new ways of thinking about the language they have used for so long. For modern full stack developers the book explains how a database can be much more than simply a place to store data. Build agile and responsive Business Intelligence solutions Analyze tabular data using the BI Semantic Model (BISM) in Microsoft SQL Server 2012 Analysis Services—and discover a simpler method for creating corporate-level BI solutions. Led by three BI experts, you'll learn how to build, deploy, and query a BISM tabular model with step-by-step guides, examples, and best practices. This hands-on book shows you how the tabular model's in-memory database enables you to perform rapid analytics—whether you're a professional BI developer new to Analysis Services or familiar with its multidimensional model. Discover how to:

- Determine when a tabular or multidimensional model is right for your project
- Build a tabular model using SQL Server Data Tools in Microsoft Visual Studio 2010
- Integrate data from multiple sources into a single, coherent view of company information
- Use

the Data Analysis eXpressions (DAX) language to create calculated columns, measures, and queries Choose a data modeling technique that meets your organization's performance and usability requirements Optimize your data model for better performance with xVelocity storage engine Manage complex data relationships, such as multicolumn, banding, and many-to-many Implement security by establishing administrative and data user roles Without Transact-SQL, there is nothing. Developers and database administrators using Microsoft SQL Server 2008 are highly-motivated to learn Transact-SQL, because that language enables them to store and retrieve data, to move business logic into the database, and to interface with advanced SQL Server features. The recipe format facilitates just-in-time learning, showing readers immediately how to perform their assigned tasks, and is sure to be a hit with today's busy professional.

Prepare for Microsoft Exam 70-767—and help demonstrate your real-world mastery of skills for managing data warehouses. This exam is intended for Extract, Transform, Load (ETL) data warehouse developers who create business intelligence (BI) solutions. Their responsibilities include data cleansing as well as ETL and data warehouse implementation. The reader should have experience installing and implementing a Master Data Services (MDS) model, using MDS tools, and creating a

Master Data Manager database and web application. The reader should understand how to design and implement ETL control flow elements and work with a SQL Service Integration Services package. Focus on the expertise measured by these objectives:

- Design, and implement, and maintain a data warehouse
- Extract, transform, and load data
- Build data quality solutions

This Microsoft Exam Ref:

- Organizes its coverage by exam objectives
- Features strategic, what-if scenarios to challenge you
- Assumes you have working knowledge of relational database technology and incremental database extraction, as well as experience with designing ETL control flows, using and debugging SSIS packages, accessing and importing or exporting data from multiple sources, and managing a SQL data warehouse.

Implementing a SQL Data Warehouse About the Exam Exam 70-767 focuses on skills and knowledge required for working with relational database technology. About Microsoft Certification Passing this exam earns you credit toward a Microsoft Certified Professional (MCP) or Microsoft Certified Solutions Associate (MCSA) certification that demonstrates your mastery of data warehouse management Passing this exam as well as Exam 70-768 (Developing SQL Data Models) earns you credit toward a Microsoft Certified Solutions Associate (MCSA) SQL 2016 Business Intelligence (BI) Development certification. See full

details at: microsoft.com/learning

The Easy, Visual Way to Master IBM® DB2 for Linux®, UNIX®, and Windows®—Fully Updated for Version 9.5 IBM DB2 9 and DB2 9.5 provide breakthrough capabilities for providing Information on Demand, implementing Web services and Service Oriented Architecture, and streamlining information management. Understanding DB2: Learning Visually with Examples, Second Edition, is the easiest way to master the latest versions of DB2 and apply their full power to your business challenges. Written by four IBM DB2 experts, this book introduces key concepts with dozens of examples drawn from the authors' experience working with DB2 in enterprise environments. Thoroughly updated for DB2 9.5, it covers new innovations ranging from manageability to performance and XML support to API integration. Each concept is presented with easy-to-understand screenshots, diagrams, charts, and tables. This book is for everyone who works with DB2: database administrators, system administrators, developers, and consultants. With hundreds of well-designed review questions and answers, it will also help professionals prepare for the IBM DB2 Certification Exams 730, 731, or 736. Coverage includes

- Choosing the right version of DB2 for your needs
- Installing and configuring DB2
- Understanding the DB2 environment, instances, and databases

Establishing client and server connectivity Working with database objects Utilizing breakthrough pureXML™ technology, which provides for nativeXML support Mastering administration, maintenance, performance optimization, troubleshooting, and recovery Understanding improvements in the DB2 process, memory, and storage models Implementing effective database security Leveraging the power of SQL and XQuery

This is not an ordinary SQL Server Book. SQL Server MVP Deep Dives brings together the world's most highly-regarded SQL Server experts to create a masterful collection of tips, techniques, and experience-driven best practices for SQL Server development and administration. These SQL Server MVPs-53 in all-each selected a topic of great interest to them, and in this unique book, they share their knowledge and passion with you. SQL Server MVP Deep Dives is organized into five parts: Design and Architecture, Development, Administration, Performance Tuning and Optimization, and Business Intelligence. Within each part, you'll find a collection of brilliantly concise and focused chapters that take on key topics like mobile data strategies, Dynamic Management Views, or query performance. The range of subjects covered is comprehensive, from database design tips to data profiling strategies for BI. Additionally, the authors of this book have generously donated 100% of their royalties to

support War Child International. War Child International is a network of independent organizations, working across the world to help children affected by war. War Child was founded upon a fundamental goal: to advance the cause of peace through investing hope in the lives of children caught up in the horrors of war. War Child works in many different conflict areas around the world, helping hundreds of thousands of children every year. Visit www.warchild.org for more information. Purchase of the print book comes with an offer of a free PDF, ePub, and Kindle eBook from Manning. Also available is all code from the book.

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