

Jdbc Recipes By Mahmoud Parsian

"Business analysis involves understanding how organizations function to accomplish their purposes and defining the capabilities an organization requires to provide products and services to external stakeholders. ... [This guide contains] a framework that describes the business analysis tasks that must be performed in order to understand how a solution will deliver value to the sponsoring organization." - page 3.

This book explains relational theory in practice, and demonstrates through two projects how you can apply it to your use of MariaDB and SQL Server databases. This book covers the important requirements of teaching databases with a practical and progressive perspective. This book offers the straightforward, practical answers you need to help you do your job. This hands-on tutorial/reference/guide to MariaDB and SQL Server is not only perfect for students and beginners, but it also works for experienced developers who aren't getting the most from MariaDB and SQL Server. As you would expect, this book shows how to build from scratch two different databases: MariaDB and SQL Server using Java. In designing a GUI and as an IDE, you will make use of the NetBeans tool. In chapter one, you will learn the basics of cryptography using Java. Here, you will learn how to write a Java program to count Hash, MAC (Message Authentication Code), store keys in a KeyStore, generate PrivateKey and PublicKey, encrypt / decrypt data, and generate and verify digital prints. You will also learn how to create and store salt passwords and verify them. In chapter two, you will create a PostgreSQL database, named Bank, and its tables. In chapter three, you will create a Login table. In this case, you will see how to create a Java GUI using NetBeans to implement it. In addition to the Login table, in this chapter you will also create a Client table. In the case of the Client table, you will learn how to generate and save public and private keys into a database. You will also learn how to encrypt / decrypt data and save the results into a database. In chapter four, you will create an Account table. This account table has the following ten fields: account_id (primary key), client_id (primarykey), account_number, account_date, account_type, plain_balance, cipher_balance, decipher_balance, digital_signature, and signature_verification. In this case, you will learn how to implement generating and verifying digital prints and storing the results into a database. In chapter five, you create a table named Client_Data, which has seven columns: client_data_id (primary key), account_id (primary_key), birth_date, address, mother_name, telephone, and photo_path. In chapter six, you will be taught how to create a SQL Server database, named Crime, and its tables. In chapter seven, you will be taught how to extract image features, utilizing BufferedImage class, in Java GUI. In chapter eight, you will be taught to create Java GUI to view, edit, insert, and delete Suspect table data. This table has eleven columns: suspect_id (primary key), suspect_name, birth_date, case_date, report_date, suspect_status, arrest_date, mother_name,

address, telephone, and photo. In chapter nine, you will be taught to create Java GUI to view, edit, insert, and delete Feature_Extraction table data. This table has eight columns: feature_id (primary key), suspect_id (foreign key), feature1, feature2, feature3, feature4, feature5, and feature6. In chapter ten, you will add two tables: Police_Station and Investigator. These two tables will later be joined to Suspect table through another table, File_Case, which will be built in the seventh chapter. The Police_Station has six columns: police_station_id (primary key), location, city, province, telephone, and photo. The Investigator has eight columns: investigator_id (primary key), investigator_name, rank, birth_date, gender, address, telephone, and photo. Here, you will design a Java GUI to display, edit, fill, and delete data in both tables. In chapter eleven, you will add two tables: Victim and File_Case. The File_Case table will connect four other tables: Suspect, Police_Station, Investigator and Victim. The Victim table has nine columns: victim_id (primary key), victim_name, crime_type, birth_date, crime_date, gender, address, telephone, and photo. The File_Case has seven columns: file_case_id (primary key), suspect_id (foreign key), police_station_id (foreign key), investigator_id (foreign key), victim_id (foreign key), status, and description. Here, you will also design a Java GUI to display, edit, fill, and delete data in both tables. Finally, this book is hopefully useful and can improve database programming skills for every Java/MariaDB/SQL Server programmer. If you are ready to dive into the MapReduce framework for processing large datasets, this practical book takes you step by step through the algorithms and tools you need to build distributed MapReduce applications with Apache Hadoop or Apache Spark. Each chapter provides a recipe for solving a massive computational problem, such as building a recommendation system. You'll learn how to implement the appropriate MapReduce solution with code that you can use in your projects. Dr. Mahmoud Parsian covers basic design patterns, optimization techniques, and data mining and machine learning solutions for problems in bioinformatics, genomics, statistics, and social network analysis. This book also includes an overview of MapReduce, Hadoop, and Spark. Topics include: Market basket analysis for a large set of transactions Data mining algorithms (K-means, KNN, and Naive Bayes) Using huge genomic data to sequence DNA and RNA Naive Bayes theorem and Markov chains for data and market prediction Recommendation algorithms and pairwise document similarity Linear regression, Cox regression, and Pearson correlation Allelic frequency and mining DNA Social network analysis (recommendation systems, counting triangles, sentiment analysis)

When creating complex Java enterprise applications, do you spend a lot of time thumbing through a myriad of books and other resources searching for what you hope will be the API that's right for the project at hand? Java Database Best Practices rescues you from having to wade through books on each of the various APIs before figuring out which method to use! This comprehensive guide introduces each of the dominant APIs (Enterprise JavaBeans, Java Data Objects,

the Java Database Connectivity API (JDBC) as well as other, lesser-known options), explores the methodology and design components that use those APIs, and then offers practices most appropriate for different types and makes of databases, as well as different types of applications. Java Database Practices also examines database design, from table and database architecture to normalization, and offers a number of best practices for handling these tasks as well. Learn how to move through the various forms of normalization, understand when to denormalize, and even get detailed instructions on optimizing your SQL queries to make the best use of your database structure. Through it all, this book focuses on practical application of these techniques, giving you information that can immediately be applied to your own enterprise projects. Enterprise applications in today's world are about data-- whether it be information about a product to buy, a user's credit card information, or the color that a customer prefers for their auto purchases. And just as data has grown in importance, the task of accessing that data has grown in complexity. Until now, you have been left on your own to determine which model best suits your application, and how best to use your chosen API. Java Database Practices is the one stop reference book to help you determine what's appropriate for your specific project at hand. Whether it's choosing between an alphabet soup of APIs and technologies--EJB, JDO, JDBC, SQL, RDBMS, OODBMS, and more on the horizon, this book is an indispensable resource you can't do without.

Oracle PL/SQL Recipes is your go to book for PL/SQL programming solutions. It takes a task-oriented approach to PL/SQL programming that lets you quickly look up a specific task and see the pattern for a solution. Then it's as simple as modifying the pattern for your specific application and implementing it. And you're done and home for dinner. Oracle PL/SQL Recipes is another in Apress' ongoing series of recipe books aimed at Oracle practitioners. The recipe format is ideal for the busy professional who just needs to get the job done. Covers the most common PL/SQL programming problems Presents solutions in ready-to-use format Stays short and to-the-point

Expert Oracle Application Express brings you groundbreaking insights into developing with Oracle's enterprise-level, rapid-development tool from some of the best practitioners in the field today. Oracle Application Express (APEX) is an entirely web-based development framework that is built into every edition of Oracle Database. The framework rests upon Oracle's powerful PL/SQL language, enabling power users and developers to rapidly develop applications that easily scale to hundreds, even thousands of concurrent users. The 13 authors of Expert Oracle Application Express build their careers around APEX. They know what it takes to make the product sing—developing secure applications that can be deployed globally to users inside and outside a large enterprise. The authors come together in this book to share some of their deepest and most powerful insights into solving the difficult problems surrounding scalability, globalization, configuration and lifecycle management, and more.

You'll learn about debugging and performance, deep secrets to customizing your application user interface, how to secure applications from intrusion, and about deploying globally in multiple languages. Expert Oracle Application Express is truly a book that will move you and your skillset a big step towards the apex of Application Express development. Presents best-practices and development insights from leading experts in the field Addresses globalization, scalability, security, and other concerns of enterprise-level development Shows how to customize APEX for your own application needs

First book to market on metadata specific recipes related to JDBC and its use with MySQL and Oracle, databases standard to Java. Compliant with the new Java EE 5. Provides cut and paste code templates that can be immediately customized and applied in each developer's application development.

Data is bigger, arrives faster, and comes in a variety of formats—and it all needs to be processed at scale for analytics or machine learning. But how can you process such varied workloads efficiently? Enter Apache Spark. Updated to include Spark 3.0, this second edition shows data engineers and data scientists why structure and unification in Spark matters. Specifically, this book explains how to perform simple and complex data analytics and employ machine learning algorithms. Through step-by-step walk-throughs, code snippets, and notebooks, you'll be able to: Learn Python, SQL, Scala, or Java high-level Structured APIs Understand Spark operations and SQL Engine Inspect, tune, and debug Spark operations with Spark configurations and Spark UI Connect to data sources: JSON, Parquet, CSV, Avro, ORC, Hive, S3, or Kafka Perform analytics on batch and streaming data using Structured Streaming Build reliable data pipelines with open source Delta Lake and Spark Develop machine learning pipelines with MLlib and productionize models using MLflow

This book comes as an answer for students, lecturers, or the general public who want to learn Java GUI programming starting from scratch. This book is suitable for beginner learners who want to learn Java GUI programming from the basic to the database level. This book is also present for JAVA learners who want to increase their level of making GUI-based database applications for small, medium, or corporate businesses level. The discussion in this book is not wordy and not theoretical. Each discussion in this book is presented in a concise and clear brief, and directly to the example that implements the discussion. Beginner learners who want to learn through this book should not be afraid of losing understanding of the programming concepts, because this book in detail discusses the concepts of Java programming from the basic to the advanced level. By applying the concept of learning by doing, this book will guide you step by step to start Java GUI programming from the basics until you are able to create database applications using JDBC and MySQL. Here are the material that you will learn in this book. CHAPTER 1 : This chapter will give you brief and clear introduction about how to create desktop application using Java GUI starting from how to setup your environments, create your first project, understand various

control for your form, and understand how to interact with your form using event handling. CHAPTER 2 : This chapter will discuss clearly about the concept and the implementation of data types and variables in Java GUI. CHAPTER 3 : This chapter will discuss in detail about how to make decisions or deal with a condition in the program. This chapter is the first step to deeper understanding of logics in programming. This chapter specifically discusses relational operators and logical operators, if statements, if-else statements, and switch-case statements, and how to implement all of these conditional statements using Java GUI. CHAPTER 4 : This chapter will discuss in detail the looping statements in Java including for statement, while statement, do-while statement, break statement, and continue statement. All of these looping statements will be implemented using Java GUI. CHAPTER 5 : This chapter will discuss how to use methods to group codes based on their functionality. This discussion will also be the first step for programmers to learn how to create efficient program code. This chapter will discuss in detail the basics of methods, methods with return values, how to pass parameters to methods, how to overload your methods, and how to make recursive methods. CHAPTER 6 : This chapter will discuss in detail how to create and use arrays, read and write file operations, and how to display data stored in arrays or files in graphical form. CHAPTER 7 : This chapter will discuss in detail the basics of MySQL, how to access databases using JDBC and MySQL, and how to perform CRUD operations using JDBC and MySQL. CHAPTER 8 : In this chapter we will discuss more about Java GUI programming. This chapter will discuss in detail about how to make a program that consists of multi forms, how to create MDI application, and how to create report using iReport with data stored in a database.

* Problem-solving tactics and practical test-taking techniques provide in-depth enrichment and preparation for various math competitions * Comprehensive introduction to trigonometric functions, their relations and functional properties, and their applications in the Euclidean plane and solid geometry * A cogent problem-solving resource for advanced high school students, undergraduates, and mathematics teachers engaged in competition training

Pro Oracle SQL unlocks the power of SQL in the Oracle Database—one of the most potent SQL implementations on the market today. To master it requires a three-pronged approach: learn the language features, learn the supporting features that Oracle provides to help use the language effectively, and learn to think and work in sets. Karen Morton and her team help you master powerful aspects of Oracle SQL not found in competing databases. You'll learn analytic functions, the MODEL clause, and advanced grouping syntax—features that will help in creating good queries for reporting and business intelligence applications. Pro Oracle SQL also helps you minimize parsing overhead, read execution plans, test for correct results, and exert control over SQL execution in your database. You'll learn when to create indexes, how to verify that they make a difference, how to use SQL Profiles to optimize SQL in packaged applications, and much more. You'll also understand how SQL is optimized for working in sets, and that the key to getting accurate results lies in making sure that queries ask clear and precise questions. What's the bottom-line? Pro Oracle SQL helps you work at a truly professional level in Oracle dialect of SQL. You'll master the language, the tools to work effectively with the language, and the right way to think about a problem in SQL. Pro Oracle SQL helps you rise above the crowd to provide stellar service in your chosen profession.

Endorsed by the OakTable Network, a group of Oracle technologists well-known for their rigorous and scientific approach to Oracle Database performance Comprehensive—goes beyond the language with a focus on what you need to know to write successful queries and data manipulation statements.

This drawing tutorial from best-selling author Christopher Hart shows artists how to draw exaggerated musculature of super-sized figures in action poses.

*The most updated PostgreSQL book on the market, covering version 8.0 *Highlights the most popular PostgreSQL APIs, including C, Perl, PHP, and Java *This is two books in one; it simultaneously covers key relational database design principles, while teaching PostgreSQL

In this book, you will learn how to build from scratch a criminal records management database system using Java/SQLite. All Java code for digital image processing in this book is Native Java. Intentionally not to rely on external libraries, so that readers know in detail the process of extracting digital images from scratch in Java. In chapter one, you will create Bank database and its four tables. In chapter two, you will learn the basics of cryptography using Java. Here, you will learn how to write a Java program to count Hash, MAC (Message Authentication Code), store keys in a KeyStore, generate PrivateKey and PublicKey, encrypt / decrypt data, and generate and verify digital prints. In chapter three, you will learn how to create and store salt passwords and verify them. You will create a Login table. In this case, you will see how to create a Java GUI using NetBeans to implement it. In addition to the Login table, in this chapter you will also create a Client table. In the case of the Client table, you will learn how to generate and save public and private keys into a database. You will also learn how to encrypt / decrypt data and save the results into a database. In chapter four, you will create an Account table. This account table has the following ten fields: account_id (primary key), client_id (primarykey), account_number, account_date, account_type, plain_balance, cipher_balance, decipher_balance, digital_signature, and signature_verification. In this case, you will learn how to implement generating and verifying digital prints and storing the results into a database. In chapter five, you will create a Client_Data table, which has the following seven fields: client_data_id (primary key), account_id (primary_key), birth_date, address, mother_name, telephone, and photo_path. In chapter six, you will create Crime database and its six tables. In chapter seven, you will be taught how to extract image features, utilizing BufferedImage class, in Java GUI. In chapter eight, you will be taught to create Java GUI to view, edit, insert, and delete Suspect table data. This table has eleven columns: suspect_id (primary key), suspect_name, birth_date, case_date, report_date, suspect_status, arrest_date, mother_name, address, telephone, and photo. In chapter nine, you will be taught to create Java GUI to view, edit, insert, and delete Feature_Extraction table data. This table has eight columns: feature_id (primary key), suspect_id (foreign key), feature1, feature2, feature3, feature4, feature5, and feature6. All six fields (except keys) will have a BLOB data type, so that the image of the feature will be directly saved into this table. In chapter ten, you will add two tables: Police_Station and Investigator. These two tables will later be joined to Suspect table through another table, File_Case, which will be built in the seventh chapter. The Police_Station has six columns: police_station_id (primary key), location, city, province, telephone, and photo. The Investigator has eight columns: investigator_id (primary key), investigator_name, rank, birth_date, gender, address, telephone, and photo. Here, you will design a Java GUI to display, edit, fill, and delete data in both tables. In chapter eleven, you will add two tables: Victim and File_Case. The File_Case table will connect four other tables: Suspect, Police_Station, Investigator and Victim. The Victim table has nine columns: victim_id (primary key), victim_name, crime_type, birth_date, crime_date, gender, address, telephone, and photo. The File_Case has seven columns: file_case_id (primary key), suspect_id (foreign key), police_station_id (foreign key), investigator_id (foreign key), victim_id (foreign key), status, and description. Here, you will also design a Java GUI to display, edit, fill, and delete data in both

tables.

Get ready to unlock the power of your data. With the fourth edition of this comprehensive guide, you'll learn how to build and maintain reliable, scalable, distributed systems with Apache Hadoop. This book is ideal for programmers looking to analyze datasets of any size, and for administrators who want to set up and run Hadoop clusters. Using Hadoop 2 exclusively, author Tom White presents new chapters on YARN and several Hadoop-related projects such as Parquet, Flume, Crunch, and Spark. You'll learn about recent changes to Hadoop, and explore new case studies on Hadoop's role in healthcare systems and genomics data processing. Learn fundamental components such as MapReduce, HDFS, and YARN Explore MapReduce in depth, including steps for developing applications with it Set up and maintain a Hadoop cluster running HDFS and MapReduce on YARN Learn two data formats: Avro for data serialization and Parquet for nested data Use data ingestion tools such as Flume (for streaming data) and Sqoop (for bulk data transfer) Understand how high-level data processing tools like Pig, Hive, Crunch, and Spark work with Hadoop Learn the HBase distributed database and the ZooKeeper distributed configuration service

Expert Oracle Application Express, 2nd Edition is newly updated for APEX 5.0 and brings deep insight from some of the best APEX practitioners in the field today. You'll learn about important features in APEX 5.0, and how those can be applied to make your development work easier and with greater impact on your business. Oracle Application Express (APEX) is an entirely web-based development framework that is built into every edition of Oracle Database. The framework rests upon Oracle's powerful PL/SQL language, enabling power users and developers to rapidly develop applications that easily scale to hundreds, even thousands of concurrent users. APEX has seen meteoric growth and is becoming the tool of choice for ad-hoc application development in the enterprise. The many authors of Expert Oracle Application Express, 2nd Edition build their careers around APEX. They know what it takes to make the product sing—developing secure applications that can be deployed globally to users inside and outside a large enterprise. The authors come together in this book to share some of their deepest and most powerful insights into solving the difficult problems surrounding globalization, configuration and lifecycle management, and more. New in this edition for APEX 5.0 is coverage of Oracle REST Data Services, map integration, jQuery with APEX, and the new Page Designer. You'll learn about debugging and performance, deep secrets to customizing your application user interface, how to secure applications from intrusion, and about deploying globally in multiple languages. Expert Oracle Application Express, 2nd Edition is truly a book that will move you and your skillset a big step towards the apex of Application Express development. Contains all-new content on Oracle REST Data Services, jQuery in APEX, and map integration Addresses globalization and other concerns of enterprise-level development Shows how to customize APEX for your own application needs

In the last ten years IT has brought fundamental changes to the way the world works. Not only has it increased the speed of operations and communications, but it has also undermined basic assumptions of traditional business models and increased the number of variables. Today, the survival of major corporations is challenged by a world-wide marketplace, international operations, outsourcing, global communities, a changing workforce, security threats, business continuity, web visibility, and customer expectations. Enterprises must constantly adapt or they will be unable to compete. Fred Cummins, an EDS Fellow, presents IT as a key enabler of the agile enterprise. He demonstrates how the convergence of key technologies—including SOA, BPM and emerging enterprise and data models—can be harnessed to transform the enterprise. Cummins mines his 25 years experience to provide IT leaders, as well as enterprise architects and management consultants, with the critical information, skills, and insights they need to partner with management and redesign the enterprise for continuous change. No other book puts IT at the center of this transformation,

nor integrates these technologies for this purpose. Shows how to integrate and deploy critical technologies to foster agility Details how to design an enterprise architecture that takes full advantage of SOA, BPM, business rules, enterprise information management, business models, and governance Outlines IT's critical mission in providing an integration infrastructure and key services, while optimizing technology adoption throughout the enterprise Illustrates concepts with examples and cases from large and small commercial enterprises Shows how to create systems that recognize and respond to the need for change Identifies the unique security issues that arise with SOA and shows how to deploy a framework of technologies and processes that address them

A guide to the java.sql package demonstrates variables, methods, client-server architecture, three-tier database access, JDBC, query optimization, and interface design.

The traditional division of labor between the database (which only stores and manages SQL and XML data for fast, easy data search and retrieval) and the application server (which runs application or business logic, and presentation logic) is obsolete. Although the book's primary focus is on programming the Oracle Database, the concepts and techniques provided apply to most RDBMS that support Java including Oracle, DB2, Sybase, MySQL, and PostgreSQL. This is the first book to cover new Java, JDBC, SQLJ, JPublisher and Web Services features in Oracle Database 10g Release 2 (the coverage starts with Oracle 9i Release 2). This book is a must-read for database developers audience (DBAs, database applications developers, data architects), Java developers (JDBC, SQLJ, J2EE, and OR Mapping frameworks), and to the emerging Web Services assemblers. Describes pragmatic solutions, advanced database applications, as well as provision of a wealth of code samples. Addresses programming models which run within the database as well as programming models which run in middle-tier or client-tier against the database. Discusses languages for stored procedures: when to use proprietary languages such as PL/SQL and when to use standard languages such as Java; also running non-Java scripting languages in the database. Describes the Java runtime in the Oracle database 10g (i.e., OracleJVM), its architecture, memory management, security management, threading, Java execution, the Native Compiler (i.e., NCOMP), how to make Java known to SQL and PL/SQL, data types mapping, how to call-out to external Web components, EJB components, ERP frameworks, and external databases. Describes JDBC programming and the new Oracle JDBC 10g features, its advanced connection services (pooling, failover, load-balancing, and the fast database event notification mechanism) for clustered databases (RAC) in Grid environments. Describes SQLJ programming and the latest Oracle SQLJ 10g features, contrasting it with JDBC. Describes the latest Database Web services features, Web services concepts and Services Oriented Architecture (SOA) for DBA, the database as Web services provider and the database as Web services consumer. Abridged coverage of JPublisher 10g, a versatile complement to JDBC, SQLJ and Database Web Services.

Master the foundations of T-SQL with the right balance of conceptual and practical content. Get hands-on guidance—including exercises and code

samples—that show you how to develop code to query and modify data. You'll gain a solid understanding of the T-SQL language and good programming practices, and learn to write more efficient and powerful queries. Discover how to: Apply T-SQL fundamentals, create tables, and define data integrity Understand logical query processing Query multiple tables using joins and subqueries Simplify code and improve maintainability with table expressions Explore pivoting techniques and how to handle grouping sets Write code that modifies data Isolate inconsistent data and address deadlock and blocking scenarios

* First book on the market that covers building high-performance Java applications on the Oracle database—using the latest versions of both the Oracle database (10g) and the JDBC API (3.0). * Promotes and explains an "anti black box" approach to Oracle development complete with benchmark code) that will allow developers to write highly efficient, high performance Oracle JDBC applications. * A new book from the prestigious OakTable Press, which Apress will be strongly promoting and supporting throughout 2004.

Data pipelines are the foundation for success in data analytics. Moving data from numerous diverse sources and transforming it to provide context is the difference between having data and actually gaining value from it. This pocket reference defines data pipelines and explains how they work in today's modern data stack. You'll learn common considerations and key decision points when implementing pipelines, such as batch versus streaming data ingestion and build versus buy. This book addresses the most common decisions made by data professionals and discusses foundational concepts that apply to open source frameworks, commercial products, and homegrown solutions. You'll learn: What a data pipeline is and how it works How data is moved and processed on modern data infrastructure, including cloud platforms Common tools and products used by data engineers to build pipelines How pipelines support analytics and reporting needs Considerations for pipeline maintenance, testing, and alerting

Summary The Spark distributed data processing platform provides an easy-to-implement tool for ingesting, streaming, and processing data from any source. In Spark in Action, Second Edition, you'll learn to take advantage of Spark's core features and incredible processing speed, with applications including real-time computation, delayed evaluation, and machine learning. Spark skills are a hot commodity in enterprises worldwide, and with Spark's powerful and flexible Java APIs, you can reap all the benefits without first learning Scala or Hadoop. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Analyzing enterprise data starts by reading, filtering, and merging files and streams from many sources. The Spark data processing engine handles this varied volume like a champ, delivering speeds 100 times faster than Hadoop systems. Thanks to SQL support, an intuitive interface, and a straightforward multilanguage API, you can use Spark without learning a complex new ecosystem. About the book Spark in Action, Second Edition, teaches you to create end-to-end analytics applications.

In this entirely new book, you'll learn from interesting Java-based examples, including a complete data pipeline for processing NASA satellite data. And you'll discover Java, Python, and Scala code samples hosted on GitHub that you can explore and adapt, plus appendixes that give you a cheat sheet for installing tools and understanding Spark-specific terms. What's inside Writing Spark applications in Java Spark application architecture Ingestion through files, databases, streaming, and Elasticsearch Querying distributed datasets with Spark SQL

About the reader This book does not assume previous experience with Spark, Scala, or Hadoop. About the author Jean-Georges Perrin is an experienced data and software architect. He is France's first IBM Champion and has been honored for 12 consecutive years.

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* The only standard size JDBC "cookbook" in market with clear specification of problems and ready-to-be-used working code solutions (in a cut-and-paste fashion) that work for at least two leading databases such as MySQL and Oracle. • Most existing JDBC-related books provide only generic solutions, which might not work on any vendor's database. This book shows the importance of "vendor" factor for solving JDBC problems. • Complete coverage of database and result set "metadata" (which is missing from most JDBC books).

CodeNotes provides the most succinct, accurate, and speedy way for a developer to ramp up on a new technology or language. Unlike other programming books, CodeNotes drills down to the core aspects of a technology, focusing on the key elements needed in order to understand it quickly and implement it immediately. It is a unique resource for developers, filling the gap between comprehensive manuals and pocket reference. CodeNotes for J2EE: EJB, JDBC, JSP, and Servlets introduces Java developers to the key database and web development technologies of the Java 2 Platform, Enterprise Edition. The JDBC API, JavaServer Pages, and Servlet frameworks are covered individually with examples that show how these technologies work together to create robust, dynamic web-based applications. The book also explains how to use Enterprise JavaBeans to create large, distributed, scalable applications. This edition of CodeNotes includes: -A global overview of a technology and explanation of what problems it can be used to solve -Real-world examples -"How and Why," "Design Notes," and "Bugs and Caveats" sections that provide

hints, tricks, workarounds, and tips on what should be taken advantage of or avoided -Instructions and classroom-style tutorials throughout from expert trainers and software developers Visit www.codenotes.com for updates, source code templates, access to message boards, and discussion of specific problems with CodeNotes authors and other developers. Every CodeNotes title is written and reviewed by a team of commercial software developers and technology experts. See "About the Authors" at the beginning of the book for more information.

This book constitutes the refereed proceedings of the Advanced Workshop on Content Computing, AWCC 2004, held in Zhen Jiang, Jiang Su, China in November 2004. The 26 revised full papers and 36 revised short papers presented were carefully reviewed and selected from 194 submissions. The papers are organized in topical sections on mobile code and agent technology, content sharing and consistency management, networking infrastructure and performance, content aware security, multimedia content, content mining and knowledge extraction, Web services and content applications, content retrieval and management, and ontologies and knowledge conceptualization.

This book, written by veteran Oracle database administrator Iggy Fernandez, a regular on the Oracle conference circuit and the editor of NoCOUG Journal, is a manageable introduction to key Oracle database administration topics including planning, installation, monitoring, troubleshooting, maintenance, and backups, to name just a few. As is clear from the table of contents, this book is not simply a recitation of Oracle Database features such as what you find in the reference guides available for free download on the Oracle web site. For example, the chapter on database monitoring explains how to monitor database availability, database changes, database security, database backups, database growth, database workload, database performance, and database capacity. The chapters of this book are logically organized into four parts that closely track the way your database administration career will naturally evolve. Part 1 gives you necessary background in relational database theory and Oracle Database concepts, Part 2 teaches you how to implement an Oracle database correctly, Part 3 exposes you to the daily routine of a database administrator, and Part 4 introduces you to the fine art of performance tuning. Each chapter has exercises designed to help you apply the lessons of the chapter. Each chapter also includes a list of reference works that contain more information on the topic of the chapter. In this book, you'll find information that you won't find in other books on Oracle Database. Here you'll discover not only technical information, but also guidance on work practices that are as vital to your success as technical skills. The author's favorite chapter is "The Big Picture and the Ten Deliverables." If you take the lessons in that chapter to heart, you can quickly become a much better Oracle database administrator than you ever thought possible.

JDBC is the key Java technology for relational database access. Oracle is arguably the most widely used relational database platform in the world. In this book, Donald Bales

brings these two technologies together, and shows you how to leverage the full power of Oracle's implementation of JDBC. You begin by learning the all-important mysteries of establishing database connections. This can be one of the most frustrating areas for programmers new to JDBC, and Donald covers it well with detailed information and examples showing how to make database connections from applications, applets, Servlets, and even from Java programs running within the database itself. Next comes thorough coverage of JDBC's relational SQL features. You'll learn how to issue SQL statements and get results back from the database, how to read and write data from large, streaming data types such as BLOBs, CLOBs, and BFILEs, and you'll learn how to interface with Oracle's other built-in programming language, PL/SQL. If you're taking advantage of the Oracle's relatively new ability to create object tables and column objects based on user-defined datatypes, you'll be pleased with Don's thorough treatment of this subject. Don shows you how to use JPublisher and JDBC to work seamlessly with Oracle database objects from within Java programs. You'll also learn how to access nested tables and arrays using JDBC. Donald concludes the book with a discussion of transaction management, locking, concurrency, and performance--topics that every professional JDBC programmer must be familiar with. If you write Java programs to run against an Oracle database, this book is a must-have.

With detailed notes, tables, and examples, this handy reference will help you navigate the basics of structured machine learning. Author Matt Harrison delivers a valuable guide that you can use for additional support during training and as a convenient resource when you dive into your next machine learning project. Ideal for programmers, data scientists, and AI engineers, this book includes an overview of the machine learning process and walks you through classification with structured data. You'll also learn methods for clustering, predicting a continuous value (regression), and reducing dimensionality, among other topics. This pocket reference includes sections that cover: Classification, using the Titanic dataset Cleaning data and dealing with missing data Exploratory data analysis Common preprocessing steps using sample data Selecting features useful to the model Model selection Metrics and classification evaluation Regression examples using k-nearest neighbor, decision trees, boosting, and more Metrics for regression evaluation Clustering Dimensionality reduction Scikit-learn pipelines

Apache Spark's speed, ease of use, sophisticated analytics, and multilanguage support makes practical knowledge of this cluster-computing framework a required skill for data engineers and data scientists. With this hands-on guide, anyone looking for an introduction to Spark will learn practical algorithms and examples using PySpark. In each chapter, author Mahmoud Parsian shows you how to solve a data problem with a set of Spark transformations and algorithms. You'll learn how to tackle problems involving ETL, design patterns, machine learning algorithms, data partitioning, and genomics analysis. Each detailed recipe includes PySpark algorithms using the PySpark driver and shell script. With this book, you will: Learn how to select Spark transformations for optimized solutions Explore powerful transformations and reductions including `reduceByKey()`, `combineByKey()`, and `mapPartitions()` Understand data partitioning for optimized queries Design machine learning algorithms including Naive Bayes, linear regression, and logistic regression Build and apply a model using PySpark design patterns Apply motif-finding algorithms to graph data Analyze graph

data by using the GraphFrames API Apply PySpark algorithms to clinical and genomics data (such as DNA-Seq)

With the growth of Java and the rise of database-powered Web applications, the need to use Java with SQL is clear. Until now, authoritative coverage of the techniques available to meet these challenges and reap their benefits-both programming and career benefits-didn't exist. Understanding SQL and Java Together examines all the standards for combining SQL and Java. It shows you exactly how to use their features to write efficient and effective code supporting Java access to SQL data in a variety of ways. You'll gain a thorough understanding of the relationship between SQL and Java, which will allow you to write static and dynamic SQL programs in Java, merge Java code with SQL databases and SQL code, and use other data management techniques wherever appropriate. * Covers all the technologies for using SQL and Java together, including JDBC, Java Blend, and SQLJ Parts 0, 1, and 2 * Explains how to embed SQL code in Java and take advantage of Java's ability to compile that code for a specific DBMS * Explains how to store and invoke Java routines in an SQL database-and how to store Java objects in an SQL database for seamless interchange among application layers * Covers dynamic SQL access techniques using JDBC and advantageous ways to combine static and dynamic SQL * Comes with a CD-ROM containing Oracle's JDeveloper , Sybase's Adaptive Server Anywhere, Informix's Cloudscape, the complete database schema, and the complete text of most of the examples

JDBC RecipesA Problem-Solution ApproachApress

Write powerful SQL statements and PL/SQL programs Learn to access Oracle databases through SQL statements and construct PL/SQL programs with guidance from Oracle expert, Jason Price. Published by Oracle Press, Oracle Database 11g SQL explains how to retrieve and modify database information, use SQL Plus and SQL Developer, work with database objects, write PL/SQL programs, and much more. Inside, you'll find in-depth coverage of the very latest SQL features and tools, performance optimization techniques, advanced queries, Java support, and XML. This book contains everything you need to master SQL. Explore SQL Plus and SQL Developer Use SQL SELECT, INSERT, UPDATE, and DELETE statements Write PL/SQL programs Create tables, sequences, indexes, views, and triggers Write advanced queries containing complex analytical functions Create database objects and collections to handle abstract data Use large objects to handle multimedia files containing music and movies Write Java programs to access an Oracle Database using JDBC Tune your SQL statements to make them execute faster Explore the XML capabilities of the Oracle Database Master the very latest Oracle Database 11g features, such as PIVOT and UNPIVOT, flashback archives, and much more

This step-by-step guide to explore database programming using Java is ideal for people with little or no programming experience. The goal of this concise book is not just to teach you Java, but to help you think like a programmer. Each brief chapter covers the material for one week of a college course to help you practice what you've learned. As you would expect, this book shows how to build from scratch two different databases: PostgreSQL and SQLite using Java. In designing a GUI and as an IDE, you will make use of the NetBeans tool. In the first chapter, you will learn: How to install NetBeans, JDK 11, and the PostgreSQL connector; How to integrate external libraries into projects; How the basic PostgreSQL commands are used; How to query statements to

create databases, create tables, fill tables, and manipulate table contents is done. In the first chapter, you will learn: How to install NetBeans, JDK 11, and the PostgreSQL connector; How to integrate external libraries into projects; How the basic PostgreSQL commands are used; How to query statements to create databases, create tables, fill tables, and manipulate table contents is done. In the second chapter, you will learn querying data from the postgresql using jdbc including establishing a database connection, creating a statement object, executing the query, processing the resultset object, querying data using a statement that returns multiple rows, querying data using a statement that has parameters, inserting data into a table using jdbc, updating data in postgresql database using jdbc, calling postgresql stored function using jdbc, deleting data from a postgresql table using jdbc, and postgresql jdbc transaction. In chapter three, you will create a PostgreSQL database, named School, and its tables. In chapter four, you will study: Creating the initial three table projects in the school database: Teacher table, TClass table, and Subject table; Creating database configuration files; Creating a Java GUI for viewing and navigating the contents of each table; Creating a Java GUI for inserting and editing tables; and Creating a Java GUI to join and query the three tables. In chapter five, you will learn: Creating the main form to connect all forms; Creating a project will add three more tables to the school database: the Student table, the Parent table, and Tuition table; Creating a Java GUI to view and navigate the contents of each table; Creating a Java GUI for editing, inserting, and deleting records in each table; Creating a Java GUI to join and query the three tables and all six. In chapter six, you will study how to query the six tables. In chapter seven, you will be shown how to create SQLite database and tables with Java. In chapter eight, you will be taught how to extract image features, utilizing BufferedImage class, in Java GUI. Digital image techniques to extract image features used in this chapter are grascaling, sharpening, inverting, blurring, dilation, erosion, closing, opening, vertical prewitt, horizontal prewitt, Laplacian, horizontal sobel, and vertical sobel. For readers, you can develop it to store other advanced image features based on descriptors such as SIFT and others for developing descriptor based matching. In chapter nine, you will be taught to create Java GUI to view, edit, insert, and delete Suspect table data. This table has eleven columns: suspect_id (primary key), suspect_name, birth_date, case_date, report_date, suspect_status, arrest_date, mother_name, address, telephone, and photo. In chapter ten, you will be taught to create Java GUI to view, edit, insert, and delete Feature_Extraction table data. This table has eight columns: feature_id (primary key), suspect_id (foreign key), feature1, feature2, feature3, feature4, feature5, and feature6. All six fields (except keys) will have a BLOB data type, so that the image of the feature will be directly saved into this table. In chapter eleven, you will add two tables: Police_Station and Investigator. These two tables will later be joined to Suspect table through another table, File_Case, which will be built in the seventh chapter. The Police_Station has six columns: police_station_id (primary key), location, city, province, telephone, and photo. The Investigator has eight columns: investigator_id (primary key), investigator_name, rank, birth_date, gender, address, telephone, and photo. Here, you will design a Java GUI to display, edit, fill, and delete data in both tables. In chapter twelve, you will add two tables: Victim and Case_File. The File_Case table will connect four other tables: Suspect, Police_Station, Investigator and Victim. The Victim table has nine columns: victim_id (primary key), victim_name, crime_type, birth_date,

crime_date, gender, address, telephone, and photo. The Case_File has seven columns: case_file_id (primary key), suspect_id (foreign key), police_station_id (foreign key), investigator_id (foreign key), victim_id (foreign key), status, and description. Here, you will also design a Java GUI to display, edit, fill, and delete data in both tables. Finally, this book is hopefully useful and can improve database programming skills for every Java/PostgreSQL/SQLite programmer.

Ajax, or Asynchronous JavaScript and XML, exploded onto the scene in the spring of 2005 and remains the hottest story among web developers. With its rich combination of technologies, Ajax provides a strong foundation for creating interactive web applications with XML or JSON-based web services by using JavaScript in the browser to process the web server response. Ajax Design Patterns shows you best practices that can dramatically improve your web development projects. It investigates how others have successfully dealt with conflicting design principles in the past and then relays that information directly to you. The patterns outlined in the book fall into four categories:

- Foundational technology: Examines the raw technologies required for Ajax development
- Programming: Exposes techniques that developers have discovered to ensure their Ajax applications are maintainable
- Functionality and usability: Describes the types of user interfaces you'll come across in Ajax applications, as well as the new types of functionality that Ajax makes possible
- Development: Explains the process being used to monitor, debug, and test Ajax applications

Ajax Design Patterns will also get you up to speed with core Ajax technologies, such as XMLHttpRequest, the DOM, and JSON. Technical discussions are followed by code examples so you can see for yourself just what is-and isn't-possible with Ajax. This handy reference will help you to produce high-quality Ajax architectures, streamline web application performance, and improve the user experience. Michael Mahemoff holds a PhD in Computer Science and Software Engineering from the University of Melbourne, where his thesis was "Design Reuse in Software Engineering and Human-Computer Interaction." He lives in London and consults on software development issues in banking, health care, and logistics. "Michael Mahemoff's Ajax Design Patterns is a truly comprehensive compendium of web application design expertise, centered around but not limited to Ajax techniques. Polished nuggets of design wisdom are supported by tutorials and real-world code examples resulting in a book that serves not only as an intermediate to expert handbook but also as an extensive reference for building rich interactive web applications." --Brent Ashley, remote scripting pioneer

There are dozens of Java frameworks out there, but most of them require you to learn special coding techniques and new, often rigid, patterns of development. Wicket is different. As a component-based Web application framework, Wicket lets you build maintainable enterprise-grade web applications using the power of plain old Java objects (POJOs), HTML, Ajax, Spring, Hibernate and Maven. Wicket automatically manages state at the component level, which means no more awkward HttpSession objects. Its elegant programming model enables you to write rich web applications quickly. Wicket in Action is an authoritative, comprehensive guide for Java developers building Wicket-based Web applications. This book starts with an introduction to Wicket's structure and components, and moves quickly into examples of Wicket at work. Written by two of the project's earliest and most authoritative experts, this book shows you both the "how-to" and the "why" of Wicket. As you move through the book,

you'll learn to use and customize Wicket components, how to interact with other technologies like Spring and Hibernate, and how to build rich, Ajax-driven features into your applications. 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.

What is this book about? This book is a comprehensive introduction to the Java programming language, updated thoroughly (more than 35% new and updated) for the latest SDK 1.5 release. This book shows readers how to build real-world Java applications using the Java SDK. No previous programming experience is required. The author uses numerous step-by-step programming examples to guide readers through the ins and outs of Java development. In addition to fully covering new features of SDK 1.5, such as generic types, the author has also added new chapters on Java database programming with JDBC and Java programming with XML.

1 -- Introduction to JDBC -- 2 -- Presenting Information to Users -- 3 -- Querying the Database -- 4 -- Updating the Database -- 5 -- Advanced JDBC Topics -- 6 -- An eCommerce Example -- 7 -- How to Stay Current with JDBC -- 8 -- Appendix.

Beginning Oracle Application Express 4 introduces one of the most talked-about development platforms to come out of Oracle Corporation in years. Oracle Application Express, called APEX for short, enables rapid and easy development of web-based applications that make full use of Oracle Database. The release of APEX 4 brings a huge leap forward in terms of functionality and usability for both the developer and the end user. Power users and programmers alike can quickly put together robust and scalable applications for use by one person, by a department, by an entire company. Whether you're new to Oracle or an old hand who's yet to test the waters of APEX, Beginning Oracle Application Express 4 introduces the processes and best practices you'll need to become proficient with APEX. The book shows off the programming environment, the utilities and tools available, and then continues by walking through the process of building a working system from the ground up. While the book assumes a foundational knowledge of SQL and PL/SQL, all code used is documented and explained so that those new to the languages will not be lost. Covers brand-new functionality in APEX 4 Provides fully documented and explained example code Guides you through creating a working and fully deployable application

The Teknophage, a 65 million year old reptile, holds the keys to the universe. An immensely powerful being, Henry Phage has spent his lifetime as a conqueror, using his immense psychic powers and his ability to manipulate wormholes in order to take over planets across galaxies and feed upon the suffering of the denizens within, effectively making himself a god. From The Phage Building, located on the planet Kahlighoul, The Teknophage plots and plans the expansion of his intergalactic empire. However, when he turns his sights towards Kahlighoul's sister planet, Earth, the Teknophage encounters a source of resistance that he did not expect. 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.

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