

Understanding Db2 R Learning Visually With Examples

Marketshare for DB2 has been growing steadily over the past 5 years and with the announcement of DB2 Universal Database V8 (T-Rex), the product has never had more momentum. DB2 owns about 30 percent of the database market--the same as Oracle. Not only is the product used in many Fortune 500 companies, but it is becoming very popular in small to medium sized businesses as well. This book provides the reader with a comprehensive reference and research tool for DB2 for the mainframe. Official material is awkwardly written, spans over a dozen manuals in PDF format, and lacks real-world guidance. Author, Craig Mullins, consistently hears from readers of past editions that they rely on this book as their primary reference for DB2. Craig Mullins is constantly being asked when it will support a new release. This IBM® Redbooks® publication is focused on melding industry preferred practices with the unique needs of the IBM i community and providing a holistic view of modernization. This book covers key trends for application structure, user interface, data access, and the database. Modernization is a broad term when applied to applications. It is more than a single event. It is a sequence of actions. But even more, it is a process of rethinking how to approach the creation and maintenance of applications. There are tangible deliveries when it comes to modernization, the most notable being a modern user interface (UI), such as a web browser or being able to access applications from a mobile device. The UI, however, is only the beginning. There are many more aspects to modernization. Using modern tools and methodologies can significantly improve productivity and reduce long-term cost while positioning applications for the next decade. It is time to put the past away. Tools and methodologies have undergone significant transformation, improving functionality, usability, and productivity. This is true of the plethora of IBM tools and the wealth of tools available from many Independent Solution Providers (ISVs). This publication is the result of work that was done by IBM, industry experts, and by representatives from many of the ISV Tool Providers. Some of their tools are referenced in the book. In addition to reviewing technologies based on context, there is an explanation of why modernization is important and a description of the business benefits of investing in modernization. This critical information is key for line-of-business executives who want to understand the benefits of a modernization project. This book is appropriate for CIOs, architects, developers, and business leaders. Related information Making the Case for Modernization, IBM Systems Magazine

Data mining is the art and science of intelligent data analysis. By building knowledge from information, data mining adds considerable value to the ever increasing stores of electronic data that abound today. In performing data mining many decisions need to be made regarding the choice of methodology, the choice of data, the choice of tools, and the choice of algorithms. Throughout this book the reader is introduced to the basic concepts and some of the more popular algorithms of data mining. With a focus on the hands-on end-to-end process for data mining, Williams guides the reader through various capabilities of the easy to use, free, and open source Rattle Data Mining Software built on the sophisticated R Statistical Software. The focus on doing data mining rather than just reading about data mining is refreshing. The book covers data understanding, data preparation, data refinement, model building, model evaluation, and practical deployment. The reader will learn to rapidly deliver a data mining project using software easily installed for free from the Internet. Coupling Rattle with R delivers a very sophisticated data mining environment with all the power, and more, of the many commercial offerings.

This is an updated and expanded version of Murach's two best-selling CICS books. Now, in just one book, IBM mainframe programmers will learn everything they need to know for developing interactive programs with CICS. In addition, they will learn new design and implementation methods for distributed CICS processing. These methods also make it

A Developer's Guide
 Advantage Database Server
 Computerworld
 SQL Queries for Mere Mortals
 Developing Applications with Visual Basic and UML
 Special Collection

Reed's guide includes detailed coverage of architecting VB enterprise applications and features working examples and step-by-step instructions for planning and development of an order entry system, detailing do's and don't's for analysis, design and construction. CD-ROM contains several templates for applying UML, as well as complete Rational Rose models for the sample applications.

Understanding DB2 Learning Visually with Examples IBM Press

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 native XML 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

Learn effective tools and techniques to separate big data into manageable and logical components for efficient data visualization About This Book This unique guide teaches you how to visualize your cluttered, huge amounts of big data with ease It is rich with ample options and solid use cases for big data visualization, and is a must-have book for your shelf Improve your decision-making by visualizing your big data the right way Who This Book Is For This book is for data analysts or those with a basic knowledge of big data analysis who want to learn big data visualization in order to make their analysis more useful. You need sufficient knowledge of big data platform tools such as Hadoop and also some experience with programming languages such as R. This book will be great for those who are familiar with conventional data visualizations and now want to widen their horizon by exploring big data visualizations. What You Will Learn Understand how basic analytics is affected by big data Deep dive into effective and efficient ways of visualizing big data Get to know various approaches (using various technologies) to address the challenges of visualizing big data Comprehend the concepts and models used to visualize big data Know how to visualize big data in real time and for different use cases Understand how to integrate popular dashboard visualization tools such as Splunk and Tableau Get to know the value and process of integrating visual big data with BI tools such as Tableau Make sense of the visualization options for big data, based upon the best suited visualization techniques for big data In Detail When it comes to big data, regular data visualization tools with basic features become insufficient. This book covers the concepts and models used to visualize big data, with a focus on efficient visualizations. This book works around big data visualizations and the challenges around visualizing big data and address characteristic challenges of visualizing like speed in accessing, understanding/adding context to, improving the quality of the data, displaying results, outliers, and so on. We focus on the most popular libraries to execute the tasks of big data visualization and explore "big data oriented" tools such as Hadoop and Tableau. We will show you how data changes with different variables and for different use cases with step-through topics such as: importing data to something like Hadoop, basic analytics. The choice of visualizations depends on the most suited techniques for big data, and we will show you the various options for big data visualizations based upon industry-proven techniques. You will then learn how to integrate popular visualization tools with graphing databases to see how huge amounts of certain data. Finally, you will find out how to display the integration of visual big data with BI using Cognos BI. Style and approach With the help of insightful real-world use cases, we'll tackle data in the world of big data. The scalability and hugeness of the data makes big data visualizations different from normal data visualizations, and this book addresses all the difficulties encountered by professionals while visualizing their big data.

Understanding DB2 in a Big Data World
 Data analysis and graphics with R
 DB2 Essentials
 Learning SQL
 Fundamentals of Relational Database Management Systems

Big Data represents a new era in data exploration and utilization, and IBM is uniquely positioned to help clients navigate this transformation. This book reveals how IBM is leveraging open source Big Data technology, infused with IBM technologies, to deliver a robust, secure, highly available, enterprise-class Big Data platform. The three defining characteristics of Big Data--volume, variety, and velocity--are discussed. You'll get a primer on Hadoop and how IBM is hardening it for the enterprise, and learn when to leverage IBM InfoSphere BigInsights (Big Data at rest) and IBM InfoSphere Streams (Big Data in motion) technologies. Industry use cases are also included in this practical guide. Learn how IBM hardens Hadoop for enterprise-class scalability and reliability Gain insight into IBM's unique in-motion and at-rest Big Data analytics platform Learn tips and tricks for Big Data use cases and solutions Get a quick Hadoop primer

This is the eBook version of the printed book. 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 d.

DB2 SQL developers now have a handy reference guide with tuning tips to improve performance in queries, programs and applications. Poorly coded programs or improperly coded SQL statements are often the culprit causing poor performance. Many developers working with an IBM DB2 relational database will benefit from this guide, entitled 'DB2 SQL 75+ Tuning Tips For Developers'. The book's focus is to increase developers' knowledge in the ways of performance and tuning in an IBM DB2 relational database environment. In an organized and easy-to-understand format, the guide provides development and SQL tips that will help developers improve performance problems. By modifying application and SQL code, understanding Runstat options, or adding and altering indexes, there are many things that developers can do to resolve performance issues. This book provides development tips and suggestions, along with many SQL coding examples, all with the purpose of gaining better performance.

DB2® packages were introduced with DB2 V2.3 in 1993. During the 15 years that have elapsed, a lot has changed. In particular, there is a more widespread use of distributed computing, Java™ language, new tools, and upgrades in the platform software and hardware. The best practices back then just might not be optimal today. In this IBM® Redbooks® publication, we take a fresh look at bringing packages into the 21st century. We begin with an overview of packages and explain the advantages of using packages. Because database request module (DBRM) based plans have been deprecated in DB2 9, you need to convert to packages if you did not use packages already. We provide guidance on using a DB2 provided function to convert from DBRM-based plans to packages. We re-examine the application development frameworks for packages: program preparation, package setup, and execution. For distributed applications, we include a discussion of a utility to identify and remove deprecated private protocol and converting to DRDA® as well as an introduction to the new pureQuery function of Data Studio. We also discuss common problems and their resolutions. We then explore administration and operational activities dealing with packages, including security, access path management (where we discuss the newly introduced package stability feature to allow for a seamless fallback), and management and performance aspects. The appendixes include useful queries and mention tools for managing packages effectively.

SQL Procedures, Triggers, and Functions on IBM DB2 for i
 Database Design and Development
 Information Modeling and Relational Databases
 Policy Technologies for Self-managing Systems
 Modernizing IBM i Applications from the Database up to the User Interface and Everything in Between
 Big Data Visualization

For more than 40 years, Computerworld has been the leading source of technology news and information for IT influencers worldwide. Computerworld's award-winning Web site (Computerworld.com), twice-monthly publication, focused conference series and custom research form the hub of the world's largest global IT media network.

Provides an examination of past and future e-learning approaches, and explores the implications of applying e-learning in practice. This work is useful for those involved in technology learning systems. It is of relevance to those involved in ICT and education modules, and e-learning courses.

DB2 Developer's Guide is the field's #1 go-to source for on-the-job information on programming and administering DB2 on IBM z/OS mainframes. Now, three-time IBM Information Champion Craig S. Mullins has thoroughly updated this classic for DB2 v9 and v10. Mullins fully covers new DB2 innovations including temporal database support; hashing; universal tablespaces; pureXML; performance, security and governance improvements; new data types, and much more. Using current versions of DB2 for z/OS, readers will learn how to:

- * Build better databases and applications for CICS, IMS, batch, CAF, and RRS/AF
- * Write proficient, code-optimized DB2 SQL
- * Implement efficient dynamic and static SQL applications
- * Use binding and rebinding to optimize applications
- * Efficiently create, administer, and manage DB2 databases and applications
- * Design, build, and populate efficient DB2 database structures for online, batch, and data warehousing
- * Improve the performance of DB2 subsystems, databases, utilities, programs, and SQL

stat DB2 Developer's Guide, Sixth Edition builds on the unique approach that has made previous editions so valuable. It combines:

- * Condensed, easy-to-read coverage of all essential topics: information otherwise scattered through dozens of documents
- * Detailed discussions of crucial details within each topic
- * Expert, field-tested implementation advice
- * Sensible examples

SQL est le langage incontournable des systèmes de gestion de bases de données relationnelles (SGBDR). Il a été adopté par tous les éditeurs informatiques qui proposent un moyen efficace et sécurisé de stocker et de manipuler des données sur un serveur. Ce livre a pour objectif d'enseigner SQL dans un réel souci pédagogique, en respectant sa syntaxe normalisée par l'ISO. Il traite plus particulièrement le typage (apports du relationnel-objet), la création des différents objets d'un schéma et la gestion des privilèges. Cette nouvelle édition met l'accent sur les règles de Codd, qui permettent de mieux comprendre les SGBDR et leurs règles de formalisation. Elle comprend également un chapitre complet sur les informations de schéma. Le CD-ROM d'accompagnement contient plus de 150 exercices et travaux pratiques corrigés, qui permettent au lecteur de mettre en œuvre, au sein du SGBD de son choix, les notions étudiées. Il compare également les principaux SGBDR par rapport à la norme SQL et présente les nouveautés de SQL Server 2008. Cet ouvrage s'adresse aux étudiants de premier et de second cycles (IUT, BTS, universités et écoles d'ingénieurs). Il sera également utile aux professionnels en formation continue désireux de parfaire leurs connaissances.

SQL
 Db2 Sql 75+ Tuning Tips for Developers
 Murach's CICS for the COBOL Programmer
 Computational Visual Media
 Understanding DB2(R).

Turning Data into Insight with IBM Machine Learning for z/OS

The Mystery of Aquarius is a real Mystery of Initiation into Sacral Codes of the New Era.You will discover the astrological manuscript,The Heritage of Sirian Cosmic Culture, the Mystery of the Goddess Isis and Her Elixir of Life in the Book of Aquarius. Here's two books united in One!

Presents a guide to writing effective SQL queries, from simple data selection and filtering to joining multiple tables and modifying sets of data, with information on how to solve a variety of challenging SQL problems.

Maintaining a practical perspective, Python Programming: A Practical Approach acquaints you with the wonderful world of programming. The book is a starting point for those who want to learn Python programming. The backbone of any programming, which is the data structure and components such as strings, lists, etc., have been illustrated with many examples and enough practice problems to instill a level of self-confidence in the reader. Drawing on knowledge gained directly from teaching Computer Science as a subject and working on a wide range of projects related to ML, AI, deep learning, and blockchain, the authors have tried their best to present the necessary skills for a Python programmer. Once the foundation of Python programming is built and the readers are aware of the exact structure, dimensions, processing, building blocks, and representation of data, they can readily take up their specific problems from the area of interest and solve them with the help of Python. These include, but are not limited to, operators, control flow, strings, functions, module processing, object-oriented programming, exception and file handling, multithreading, synchronization, regular expressions, and Python database programming. This book on Python programming is specially designed to keep readers busy with learning fundamentals and generates a sense of confidence by attempting the assignment problems. We firmly believe that explaining any particular technology deviates from learning the fundamentals of a programming language. This book is focused on helping readers attempt implementation in their areas of interest through the skills imparted through this book. We have attempted to present the real essence of Python programming, which you can confidently apply in real life by using Python as a tool. Salient Features

- Based on real-world requirements and solution.
- Simple presentation without avoiding necessary details of the topic.
- Executable programs on almost every topic.
- Plenty of exercise questions, designed to test readers' skills and understanding. Purposefully designed to be instantly applicable, Python Programming: A Practical Approach provides implementation examples so that the described subject matter can be immediately implemented due to the well-known versatility of Python in handling different data types with ease.

A Practical, Start-to-Finish Approach to Managing, Evolving, and Transforming Legacy IT Systems For every IT executive, manager, architect, program leader, project leader, and lead analyst "Richard and Kevin introduce us to a reality that's often neglected in our industry: the problem of evolving legacy systems, a domain they call 'Brownfield development.' The authors identify the root of the problem as that of complexity, and offer an approach that focuses on the fundamentals of abstraction and efficient communication to nibble at this problem of transformation bit by bit. As the old saying goes, the way you eat the elephant is one bite at a time. Richard and Kevin bring us to the table with knife and fork and other tools, and show us a way to devour this elephant in the room." Grady Booch, IBM Fellow, co-creator of UML "Most organizations in the 21st century have an existing, complex systems landscape. It is time that the IT industry face up to the reality of the situation and the need for new development methods and tools that address it. This book describes a new approach to the development of future systems: a structured approach that recognizes the challenges of 'Brownfield' development, is based on engineering principles, and is supported by appropriate tooling." Chris Winter, CEng CITP FBCS FIET, IBM Fellow, Member of the IBM Academy of Technology Most conventional approaches to IT development assume that you're building entirely new systems. Today, "Greenfield" development is a rarity. Nearly every project exists in the context of existing, complex system landscapes--often poorly documented and poorly understood. Now, two of IBM's most experienced senior architects offer a new approach that is fully optimized for the unique realities of "Brownfield" development. Richard Hopkins and Kevin Jenkins explain why accumulated business and IT complexity is the root cause of large-scale project failure and show how to overcome that complexity "one bite of the elephant at a time." You'll learn how to manage every phase of the Brownfield project, leveraging breakthrough collaboration, communication, and visualization tools--including Web 2.0, semantic software engineering, model-driven development and architecture, and even virtual worlds. This book will help you reengineer new flexibility and agility into your IT environment...integrate more effectively with partners...prepare for emerging business challenges... improve system reuse and value...reduce project failure rates...meet any business or IT challenge that requires the evolution or transformation of legacy systems. · System complexity: understand it, and harness it Go beyond the comforting illusion of your high-level architecture diagrams · How conventional development techniques actually make things worse Why traditional decomposition and abstraction don't work--and what to do instead · Reliably reengineer your IT in line with your business priorities New ways to understand, communicate, visualize, collaborate, and solve complex IT problems · Cut the elephant down to size, one step at a time Master all four phases of a Brownfield project: survey, engineer, accept, and deploy

E-Learning
 DB2 9 for z/OS: Packages Revisited

A Visual Approach
 Data Mining with Rattle and R
 Visual Analytics and Interactive Technologies: Data, Text and Web Mining Applications

R for Everyone

With the launch of ADS 7.0, the authors can now satisfy the needs of this growing community with an official guide on ADS.

Structured Query Language (SQL) procedures, triggers, and functions, which are also known as user-defined functions (UDFs), are the key database features for developing robust and distributed applications. IBM® DB2® for i supported these features for many years, and they are enhanced in IBM i versions 6.1, 7.1, and 7.2. DB2 for i refers to the IBM DB2 family member and relational database management system that is integrated within the IBM Power operating system that is known as IBM i. This IBM Redbooks® publication includes several of the announced features for SQL procedures, triggers, and functions in IBM i versions 6.1, 7.1, and 7.2. This book includes suggestions, guidelines, and practical examples to develop DB2 for i SQL procedures, triggers, and functions effectively. This book covers the following topics: Introduction to the SQL/Persistent Stored Modules (PSM) language, which is used in SQL procedures, triggers, and functions SQL procedures SQL triggers SQL functions This book is for IBM i database engineers and data-centric developers who strive to provide flexible, extensible, agile, and scalable database solutions that meet business requirements in a timely manner. Before you read this book, you need to know about relational database technology and the application development environment on the IBM Power Systems™ with the IBM i operating system.

DB2 Workload Manager (WLM) introduces a significant evolution in the capabilities available to database administrators for controlling and monitoring executing work within DB2. This new WLM technology is directly incorporated into the DB2 engine infrastructure to allow handling higher volumes with minimal overhead. It is also enabled for tighter integration with external workload management products, such as those provided by AIX WLM. This IBM Redbooks publication discusses the features and functions of DB2 Workload Manager for Linux, UNIX, and Windows. It describes DB2 WLM architecture, components, and WLM-specific SQL statements. It demonstrates installation, WLM methodology for customizing the DB2 WLM environment, new workload monitoring table functions, event monitors, and stored procedures. It provides examples and scenarios using DB2 WLM to manage database activities in DSS and OLTP mixed database systems, so you learn about these advanced workload management capabilities and see how they can be used to explicitly allocate CPU priority, detect and prevent "runaway" queries, and closely monitor database activity in many different ways. Using Data Warehouse Edition Design Studio and DB2 Performance Expert with DB2 WLM is covered. Lastly, the primary differences between Workload Manager and Query Patrolter are explained, along with how they interact in DB2 9.5.

SAS Visual Analytics is a business intelligence and analytics platform that provides visual exploration and discovery, self-serve analytics, and interactive reporting for organizations of all sizes. All organizations have a wide variety of users, and each user needs something different from data and analytics. SAS Visual Analytics allows everyone to easily discover and share powerful insights that inspire action. Several useful papers have been written to demonstrate how to use these techniques. We have carefully selected a handful of these from recent Global Forum contributions to introduce you to the topic and let you sample what each has to offer. Also available free as a PDF from sas.com/books.

DB2 Virtualization

Understanding DB2

DB2 Developer's Guide

Eating the IT Elephant

The Art of Excavating Data for Knowledge Discovery

Relational Database Design and Implementation

Perform fast interactive analytics against different data sources using the Trino high-performance distributed SQL query engine. With this practical guide, you'll learn how to conduct analytics on data where it lives, whether it's Hive, Cassandra, a relational database, or a proprietary data store. Analysts, software engineers, and production engineers will learn how to manage, use, and even develop with Trino. Initially developed by Facebook, open source Trino is now used by Netflix, Airbnb, LinkedIn, Twitter, Uber, and many other companies. Matt Fuller, Manfred Moser, and Martin Traverso show you how a single Trino query can combine data from multiple sources to allow for analytics across your entire organization. Get started: Explore Trino's use cases and learn about tools that will help you connect to Trino and query data Go deeper: Learn Trino's internal workings, including how to connect to and query data sources with support for SQL statements, operators, functions, and more Put Trino in production: Secure Trino, monitor workloads, tune queries, and connect more applications; learn how other organizations apply Trino Updated for the latest database management systems -- including MySQL 6.0, Oracle 11g, and Microsoft's SQL Server 2008 -- this introductory guide will get you up and running with SQL quickly. Whether you need to write database applications, perform administrative tasks, or generate reports, Learning SQL, Second Edition, will help you easily master all the SQL fundamentals. Each chapter presents a self-contained lesson on a key SQL concept or technique, with numerous illustrations and annotated examples. Exercises at the end of each chapter let you practice the skills you learn. With this book, you will: Move quickly through SQL basics and learn several advanced features Use SQL data statements to generate, manipulate, and retrieve data Create database objects, such as tables, indexes, and constraints, using SQL schema statements Learn how data sets interact with queries, and understand the importance of subqueries Convert and manipulate data with SQL's built-in functions, and use conditional logic in data statements Knowledge of SQL is a must for interacting with data. With Learning SQL, you'll quickly learn how to put the power and flexibility of this language to work.

The exponential growth in data over the last decade coupled with a drastic drop in cost of storage has enabled organizations to amass a large amount of data. This vast data becomes the new natural resource that these organizations must tap in to innovate and stay ahead of the competition, and they must do so in a secure environment that protects the data throughout its lifecycle and data access in real time at any time. When it comes to security, nothing can rival IBM® Z, the multi-workload transactional platform that powers the core business processes of the majority of the Fortune 500 enterprises with unmatched security, availability, reliability, and scalability. With core transactions and data originating on IBM Z, it simply makes sense for analytics to exist and run on the same platform. For years, some businesses chose to move their sensitive data off IBM Z to platforms that include data lakes, Hadoop, and warehouses for analytics processing. However, the massive growth of digital data, the punishing cost of security exposures as well as the unprecedented demand for instant actionable intelligence from data in real time have convinced them to rethink that decision and, instead, embrace the strategy of data gravity for analytics. At the core of data gravity is the conviction that analytics must exist and run where the data resides. An IBM client eloquently compares this change in analytics strategy to a shift from "moving the ocean to the boat to moving the boat to the ocean," where the boat is the analytics and the ocean is the data. IBM respects and invests heavily on data gravity because it recognizes the tremendous benefits that data gravity can deliver to you, including reduced cost and minimized security risks. IBM Machine Learning for z/OS® is one of the offerings that decidedly move analytics to Z where your mission-critical data resides. In the inherently secure Z environment, your machine learning scoring services can co-exist with your transactional applications and data, supporting high throughput and minimizing response time while delivering consistent service level agreements (SLAs). This book introduces Machine Learning for z/OS version 1.1.0 and describes its unique value proposition. It provides step-by-step guidance for you to get started with the program, including best practices for capacity planning, installation and configuration, administration and operation. Through a retail example, the book shows how you can use the versatile and intuitive web user interface to quickly train, build, evaluate, and deploy a model. Most importantly, it examines use cases across industries to illustrate how you can easily turn your massive data into valuable insights with Machine Learning for z/OS. Information Modeling and Relational Databases, Second Edition, provides an introduction to ORM (Object-Role Modeling)and much more. In fact, it is the only book to go beyond introductory coverage and provide all of the in-depth instruction you need to transform knowledge from domain experts into a sound database design. This book is intended for anyone with a stake in the accuracy and efficacy of databases: systems analysts, information modelers, database designers and administrators, and programmers. Terry Halpin, a pioneer in the development of ORM, blends conceptual information with practical instruction that will let you begin using ORM effectively as soon as possible. Supported by examples, exercises, and useful background information, his step-by-step approach teaches you to develop a natural-language-based ORM model, and then, where needed, abstract ER and UML models from it. This book will quickly make you proficient in the modeling technique that is proving vital to the development of accurate and efficient databases that best meet real business objectives. Presents the most indepth coverage of Object-Role Modeling available anywhere, including a thorough update of the book for ORM2, as well as UML2 and E-R (Entity-Relationship) modeling. Includes clear coverage of relational database concepts, and the latest developments in SQL and XML, including a new chapter on the impact of XML on information modeling, exchange and transformation. New and improved case studies and exercises are provided for many topics.

Python Programming

Moving from Greenfield Development to Brownfield

A Solutions-Oriented Approach to Learning the Foundation and Capabilities of DB2 for z/OS

R in Action

A Practical Approach

Concepts and Practice

For students in the introductory course in database who want to learn how to design rather than just manipulate relational databases.The book that balances database theory, business problem solving, and hands-on-practice. This book prepares student for the workplace without sacrificing rigorous academic theory.

"This book is a comprehensive reference on concepts, algorithms, theories, applications, software, and visualization of data mining, text mining, Web mining and computing/supercomputing, covering state-of-the-art of the theory and applications of mining"--

Server virtualization technologies are becoming more popular to help efficiently utilize resources by consolidating servers. IBM® , the first company that developed and made available the virtual technology in 1966, offers advanced, powerful, reliable, and cost-saving virtualization technologies in various hardware and software products including DB2® for Linux, UNIX, and Windows. This IBM Redbooks® publication describes using IBM DB2 9 with server virtualization. We start with a general overview of virtualization and describe specific server virtualization technologies to highlight how the server virtualization technologies have been implemented. With this introduction anyone new to virtualization will have a better understanding of server virtualization and the industry server virtualization technologies available in the market. Following the virtualization concept, we describe in detail the setup, configuration, and managing of DB2 with three leading server virtualization technologies: IBM Power Systems™ with PowerVMTM VMware Hyper-V We discuss the virtual machine setup with DB2 in mind to help IT support understand the effective ways of setting up a virtual environment specific for DB2. We explain the architecture and components of these three server virtualization technologies to allow DBAs to understand how a database environment using DB2 can benefit from using the server virtualization technologies. In addition, we discuss the DB2 features and functions that can take advantage of using server virtualization. These features are put into practice when describing how to set up DB2 with the three virtualization technologies discussed in this book. This book also includes a list of best practices from the various tests performed while using these virtualization technologies. These best practices can be used as a guideline or a reference when setting up DB2 using these virtualization technologies.

The Easy, Visual Introduction to IBM DB2 Version 10.5 for Linux, UNIX, and Windows Foreword by Judy Huber, Vice President, Distributed Data Servers and Data Warehousing; Director, IBM Canada Laboratory This book covers everything you need to get productive with the latest version of IBM DB2 and apply it to today ' s business challenges. It discusses key features introduced in DB2 Versions 10.5, 10.1, and 9.7, including improvements in manageability, integration, security, Big Data support, BLU Acceleration, and cloud computing. DB2 Essentials illuminates key concepts with examples drawn from the authors ' extensive experience with DB2 in enterprise environments. Raul F. Chong and Clara Liu explain how DB2 has evolved, what ' s new, and how to choose the right products, editions, and tools. Next, they walk through installation, configuration, security, data access, remote connectivity, and day-to-day administration. Each chapter starts with an illustrative overview to introduce its key concepts using a big picture approach. Clearly explained figures are used extensively, and techniques are presented with intuitive screenshots, diagrams, charts, and tables. Case studies illustrate how " theory " is applied in real-life environments, and hundreds of review questions help you prepare for IBM ' s newest DB2 certification exams. Coverage includes • Understanding the role of DB2 in Big Data • Preparing for and executing a smooth installation or upgrade • Understanding the DB2 environment, instances, and databases • Configuring client and server connectivity • Working with database objects • Getting started with BLU Acceleration • Implementing security: authentication and authorization • Understanding concurrency and locking • Maintaining, backing up, and recovering data • Using basic SQL in DB2 environments • Diagnosing and solving DB2 problems This book is for anyone who plans to work with DB2, including DBAs, system administrators, developers, and consultants. It will be a great resource whether you ' re upgrading from an older version of DB2, migrating from a competitive database, or learning your first database platform.

A Hands-on Guide to Data Manipulation in SQL

Understanding Big Data: Analytics for Enterprise Class Hadoop and Streaming Data

Visual Analytics with SAS Viya

Advanced Analytics and Graphics

Learning Visually with Examples

Master SQL Fundamentals

This book constitutes the refereed proceedings of CVM 2012, the First International Conference on Computational Visual Media, held in Beijing, China, in November 2012. The 33 revised full papers were carefully reviewed and selected from 81 submissions. The papers are organized in topical sections on image processing I and II, geometric processing, saliency, recognition, perception and learning, shape analysis, media retrieval, and capture, rendering and visualization.

Statistical Computation for Programmers, Scientists, Quants, Excel Users, and Other Professionals Using the open source R language, you can build powerful statistical models to answer many of your most challenging questions. R has traditionally been difficult for non-statisticians to learn, and most R books assume far too much knowledge to be of help. R for Everyone, Second Edition, is the solution. Drawing on his unsurpassed experience teaching new users, professional data scientist Jared P. Lander has written the perfect tutorial for anyone new to statistical programming and modeling. Organized to make learning easy and intuitive, this guide focuses on the 20 percent of R functionality you'll need to accomplish 80 percent of modern data tasks. Lander's self-contained chapters start with the absolute basics, offering extensive hands-on practice and sample code. You'll download and install R; navigate and use the R environment; master basic program control, data import, manipulation, and visualization; and walk through several essential tests. Then, building on this foundation, you'll construct several complete models, both linear and nonlinear, and use some data mining techniques. After all this you'll make your code reproducible with LaTeX, RMarkdown, and Shiny. By the time you're done, you won't just know how to write R programs, you'll be ready to tackle the statistical problems you care about most. Coverage includes Explore R, RStudio, and R packages Use R for math: variable types, vectors, calling functions, and more Exploit data structures, including data.frames, matrices, and lists Read many different types of data Create attractive, intuitive statistical graphics Write user-defined functions Control program flow with if, ifelse, and complex checks Improve program efficiency with group manipulations Combine and reshape multiple datasets Manipulate strings using R's facilities and regular expressions Create normal, binomial, and Poisson probability distributions Build linear, generalized linear, and nonlinear models Program basic statistics: mean, standard deviation, and t-tests Train machine learning models Assess the quality of models and variable selection Prevent overfitting and perform variable selection, using the Elastic Net and Bayesian methods Analyze univariate and multivariate time series data Group data via K-means and hierarchical clustering Prepare reports, slideshows, and web pages with knitr Display interactive data with RMarkdown and htmlwidgets Implement dashboards with Shiny Build reusable R packages with devtools and Rcpp Register your product at informit.com/register for convenient access to downloads, updates, and corrections as they become available.

This book provides comprehensive coverage of fundamentals of database management system. It contains a detailed description on Relational Database Management System Concepts. There are a variety of solved examples and review questions with solutions. This book is for those who require a better understanding of relational data modeling, its purpose, its nature, and the standards used in creating relational data model.

Relational Database Design and Implementation: Clearly Explained, Fourth Edition, provides the conceptual and practical information necessary to develop a database design and management scheme that ensures data accuracy and user satisfaction while optimizing performance. Database systems underlie the large majority of business information systems. Most of those in use today are based on the relational data model, a way of representing data and data relationships using only two-dimensional tables. This book covers relational database theory as well as providing a solid introduction to SQL, the international standard for the relational database data manipulation language. The book begins by reviewing basic concepts of databases and database design, then turns to creating, populating, and retrieving data using SQL. Topics such as the relational data model, normalization, data entities, and Codd's Rules (and why they are important) are covered clearly and concisely. In addition, the book looks at the impact of big data on relational databases and the option of using NoSQL databases for that purpose.

Features updated and expanded coverage of SQL and new material on big data, cloud computing, and object-relational databases Presents design approaches that ensure data accuracy and consistency and help boost performance Includes three case studies, each illustrating a different database design challenge Reviews the basic concepts of databases and database design, then turns to creating, populating, and retrieving data using SQL

Trino: The Definitive Guide

First International Conference, CVM 2012, Beijing, China, November 8-10, 2012, Proceedings

Data, Text and Web Mining Applications

DB2 Workload Manager for Linux, UNIX, and Windows

Summary R in Action, Second Edition presents both the R language and the examples that make it so useful for business developers. Focusing on practical solutions, the book offers a crash course in statistics and covers elegant methods for dealing with messy and incomplete data that are difficult to analyze using traditional methods. You'll also master R's extensive graphical capabilities for exploring and presenting data visually. And this expanded second edition includes new chapters on time series analysis, cluster analysis, and classification methodologies, including decision trees, random forests, and support vector machines. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Business pros and researchers thrive on data, and R speaks the language of data analysis. R is a powerful programming language for statistical computing. Unlike general-purpose tools, R provides thousands of modules for solving just about any data-crunching or presentation challenge you're likely to face. R runs on all important platforms and is used by thousands of major corporations and institutions worldwide. About the Book R in Action, Second Edition teaches you how to use the R language by presenting examples relevant to scientific, technical, and business developers. Focusing on practical solutions, the book offers a crash course in statistics, including elegant methods for dealing with messy and incomplete data. You'll also master R's extensive graphical capabilities for exploring and presenting data visually. And this expanded second edition includes new chapters on forecasting, data mining, and dynamic report writing. What's Inside Complete R language tutorial Using R to manage, analyze, and visualize data Techniques for debugging programs and creating packages OOP in R Over 160 graphs About the Author Dr. Rob Kabacoff is a seasoned researcher and teacher who specializes in data analysis. He also maintains the popular Quick-R website at statmethods.net. Table of Contents PART 1 GETTING STARTED Introduction to R Creating a dataset Getting started with graphs Basic data management Advanced data management PART 2 BASIC METHODS Basic graphs Basic statistics PART 3 INTERMEDIATE METHODS Regression Analysis of variance Power analysis Intermediate graphs Resampling statistics and bootstrapping PART 4 ADVANCED METHODS Generalized linear models Principal components and factor analysis Time series Cluster analysis Classification Advanced methods for missing data PART 5 EXPANDING YOUR SKILLS Advanced graphics with ggplot2 Advanced programming Creating a package Creating dynamic reports Advanced graphics with the lattice package available online only from manning.com/kabacoff2