# CIS210 Database Management and SQL

## Key Terms Chapters 7-9

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| Chapter 7  Authentication - Database authentication is the method or act of verifying that a user attempting to log in to a database.  Backup - A backup is a copy of your database's data that can be used to recreate it. Physical and logical backups are the two types of backups.  Batch Processing - Batch processing is the simultaneous processing of a large amount of data.  Biometrics - Biometrics are physical or behavioral characteristics of an individual that can be used to digitally identify them and grant access to systems, computers, or data.  Commit - A SQL COMMIT statement completes a transaction and makes all modifications available to other users in a relational database management system (RDBMS).  Deadlock - A deadlock in a database occurs when two or more transactions are waiting for one another to release locks.  Locking - A database lock is used to “lock” any data in a database such that it can only be updated by one database user/session.  Metadata - The term metadata refers to data that contains information about other data.  Rollback - A rollback is a database technology process that restores the database to a previous state.  Transaction - A database transaction is a unit of work that is conducted against a database by a database management system and is handled in a consistent and accurate manner, independent of other transactions.  Two-Phase Locking - The two-phase locking (2PL) method of concurrency management ensures serializability. | Chapter 8  Denormalizing - Denormalization is a performance-enhancing technique that is applied to a previously normalized database.  Disaster Recovery Plan - A disaster recovery plan (DRP) is a standardized, recorded approach that includes guidelines for dealing with unplanned events.  Hot Site - In the event of a computer or equipment failure, a hot site is a commercial disaster recovery facility that helps a company to continue computer and network operations.  Patriot Act - The USA Patriot Act was enacted to prevent and prosecute terrorist attacks in the United States and around the world.  RAID (redundant array of  inexpensive/independent drives)  Shared Lock - is a data storage virtualization technology that integrates multiple physical disk drive components into one or more logical units for data redundancy, performance, or both.  UPS - When a computer's primary power source fails, an uninterruptible power supply (UPS) keeps it going for at least a short time.  Warm Site - When an organization's primary data center goes down, it uses a warm location to restore the technology infrastructure. |
| Chapter 9  Application Server - A server that hosts applications is known as an application server.  Binary Large Objects (BLOBs) - is a list of condensed data stored on a file in a database or in a particular program.  Client/Server - Client-server refers to a partnership between cooperating programs in an application, with clients requesting services and servers fulfilling those requests.  Database Server - A database server, as specified by the client–server model, is a server that runs a database application and provides database services to other computer programs or computers.  Data Mining - Data mining is the method of predicting outcomes by looking for anomalies, trends, and similarities in large data sets.  Data Warehouse - A data warehouse is a form of data management system that is intended to facilitate and support business intelligence (BI) and analytics activities.  Distributed Database - A distributed database (DDB) is a set of databases that are physically distributed across many locations on a computer network.  Object-Oriented Database Management  System (OODBMS) - is a database management system that allows you to create and model data in the form of objects. In addition, OODBMS supports object classes and the inheritance of class properties, as well as methods, subclasses, and their artifacts.  Online Analytical Processing (OLAP) - is a versatile data discovery tool with unlimited report viewing, complex mathematical estimates, and predictive "what if" scenario planning capabilities.  Online Transaction Processing (OLTP) - is a form of internet-based software that can support transaction-oriented applications.  Three-Tier Architecture - A well-known software application architecture, three-tier architecture divides applications into three conceptual and physical computing levels.  Two-Phase Commit - A two-phase commit is a structured protocol that ensures that a database commit is implemented when a commit operation needs to be split into two pieces. |