

Notes from Bharat Bhargava

Preparing for midterm examination of CS 448

Chapters covered in depth relational model, relational algebra and calculus ( tuple, domain, SQL etc)

Chapter 1 - Introduction (many definition type of questions) ( all sections)

Chapter 2 -Database System Concepts and Architecture ( basic questions) ( all sections)

(From chapter 1 and 2, you must know data independence, advantages of a database management system, different types of databases and models, integrity, privacy, security, recovery issues, database design issues such as schema, views, requirement analysis, and some implementation issues)

Chapter 3 - Data Modeling Using the Entity Relationship (ER) Model ( good understanding needed for sections 3.1-3.6)

(You must be able to convert the various types of data and relationship involved in an information system to an E-R diagram and then convert this to database relations as in the relational model)

Chapter 5 - The Relational Data Model Relational Database Constraints ( must know in depth)

Chapters 6 and 8- The Relational Algebra ( chapter 8 section 8.1-8.6) and Basic SQL ( must know in depth)

Optimization ideas for query processing and algebra expressions, different algebra operators, outer/inner joins, time spent in I/O on disks ( chapter 16 section 16.1-16.4), and steps in processing queries.

Chapter 7 - SQL-99: Schema Definition, Constraints, and Queries and Views ( must know in depth) ( briefly based on project, tutorial etc)

Chapter 14 Functional Dependencies, 14.1 to 14.2 sections

I have mention some questions in class in last class.

Please read all definitions that are in bold wording in book. Please go over some review questions at the end of chapters.