

Fundamentals of
DATABASE
SYSTEMS

FOURTH EDITION

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Chapter 10

Functional Dependencies and Normalization for Relational Databases



Chapter Outline

- 1 Informal Design Guidelines for Relational Databases
 - 1.1 Semantics of the Relation Attributes
 - 1.2 Redundant Information in Tuples and Update Anomalies
 - 1.3 Null Values in Tuples
 - 1.4 Spurious Tuples
- 2 Functional Dependencies (FDs)
 - 2.1 Definition of FD
 - 2.2 Inference Rules for FDs
 - 2.3 Equivalence of Sets of FDs
 - 2.4 Minimal Sets of FDs