

Module 1j: Normalization

Objective:

To understand the top-down normalization process for database design and its significance in overcoming design anomalies at each stage of the process.

Topics:

- functional dependency
- grouping attribute and its anomalies
- partial dependency and its (insertion/deletion/update) anomalies
- transitive dependency and its anomalies
- multi-valued dependency and its anomalies

Task:

For each of the lower normal forms, write down an example DB operation for each type of anomaly. Verify the relational schema design for each of the sample databases satisfy at least third normal form.

Assessment:

This knowledge will be tested in quizzes. A solid understanding of normalization will be valued highly in technical job interviews.