



18. SQL&Distributed DBMS

Data model

- Data models of computing systems(P46)
- Principle: be declarative, not procedural(P47)
- The relation model(P48-50)
- The relational model vs. key-value(P52)
- Modeling relationship between data/relation model(P53-54)
- Relational model vs. key-value model(P55)
- The relational model is a superset of key-value(P56)

query language

- Relational algebra(P59)
- Relational model & SQL(P60-64)

Example: (Simplified) TiDB(P69-76)

Detailed case study: Google Spanner

- Design goals of Spanner(P78)
- Physical layout of Spanner(P79-80)
- What is the consistency goal? External consistency(P82)
- Spanner achieves external consistency (P83-
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