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- ❖ What is schema integration? Why schema integration?
- ❖ Integration processing strategies
- ❖ Steps in integration process
  - Pre-integration
  - Comparison of the schemas
  - Conforming the schemas
  - Merging and Restructuring

- ❖ Schema integration example
- ❖ What is conflicts?
- ❖ Types of conflicts:
  - Naming Conflicts:
    - Synonyms
    - Homonyms

  - Structural Conflicts:
    - Attribute vs. Entity
    - Aggregation differences

  - Data Type Conflicts
  - Value Conflicts (Semantic Conflicts)
  - Key Conflicts (Identifier Conflicts)
  - Constraint Conflicts

- ❖ What is view? How to create a view?
- ❖ Key Features of a View:
  - Virtual
  - Up-to-date
  - Security & Simplification

- ❖ What is view-based Data Integration (VDIS)?
- ❖ Historical Background (Problems)
- ❖ The Solution
- ❖ VDIS Architecture
- ❖ Mediation Process in Data Integration

- ❖ VDIS Categories:
  - Common data model and query language
  - Mapping Language
  - Data storage method

- ❖ Data storage methods:
  - Materialized Approach (Eager / In-Advance / Data Warehousing)
  - Virtual Approach (Lazy / On-the-Fly / Mediation)

- ❖ Materialized Approach:
  - What happens?
  - How it works?
  - Advantages
  - Disadvantages

- ❖ Virtual Approach:
  - What happens?
  - How it works?
  - Advantages
  - Disadvantages

- ❖ Materialize Vs Virtual Approach
- ❖ Mapping:
  - Global As View (GAV)
  - Local As View (LAV) and
  - Global and Local As View (GLAV)

- ❖ Mapping- Global As View
  - Example
  - Advantages
  - Disadvantages

- ❖ Mapping- Local As View
  - Example
  - Advantages
  - Disadvantages

- ❖ Mapping- Global and Local As View: