

Unit III – Database Design

Dependencies and Normal forms - Functional Dependencies, Armstrong's axioms for FD's, closure of a set of FD's, minimal covers-Non- loss decomposition-First, Second, Third Normal Forms, Dependency Preservation-Boyce/Codd Normal Form-Multivalued Dependencies and Fourth Normal Form- Join Dependencies and Fifth Normal Form





Dependencies

Dependencies in DBMS is a relation between two or more attributes.

It has the following types in DBMS

- Functional Dependency
- Fully-Functional Dependency
- Transitive Dependency
- Multivalued Dependency
- Partial Dependency

Normal Forms

- **Normalization** is the process of minimizing **redundancy** from a relation or set of relations.
- Redundancy in relation may cause insertion, deletion, and update anomalies.
- So, it helps to minimize the redundancy in relations.
- **Normal forms** are used to eliminate or reduce redundancy in database tables.



Normal Forms in DBMS





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Thank You!