**FEATURES OF GOOD RELATIONAL DATABASE**

The primary benefit of the relational database approach is the ability to create meaningful information by joining the tables. A good relational database should have the following features:- durability, data flexibility , isolation, data consistency, and lookup relationships.

**ATOMIC DOMAIN AND FIRST NORMAL FORM**

A domain is the original sets of atomic values used to model data. By atomic value, we mean that each value in the domain is indivisible as far as the relational model is concerned. Important examples of atomic domains and all Noetherian domains. More generally, any integral domain satisfying the ascending chain condition on principal ideals (ACCP) is an atomic domain.

First normal form is the property of a relation in a relational database. A relation is in first normal form if and only if no attribute domain has relations as elements. Or more informally, that no table column can have tables as values. The first normal form state that:

Every column in the table must be unique.

Separate tables must be created for each set of related data.

Each table must be identified with unique column or concatenated columns called the primary key.

No rows may be duplicated.

No columns may be duplicated.

**DECOMPOSITION USING FUNCTIONAL DEPENDENCIES**

**FUNCTIONAL DEPENDENCY THEORY**

**ALGORITHM FOR FUNCTIONAL DEPENDENCIES**

**DECOMPOSITION USING MULTIVALUED DEPENDENCIES**

**MORE NORMAL FORMS**

**DATABASE DESIGN PROCESS**

**Database design can be generally defined as a collection of tasks or processes that enhance the designing, development, implementation, and maintenance of enterprise data management system.**

Defining the database objectives

Database design team and stake holders

Mapping business processes, rules and policies

Defining the user data requirements

**MODELING TEMPORARY DESIGN**