

Pitfalls in Relational database Design

Relational database design requires that we find a “good” collection of relational schemas. A bad design may lead to—

Repetition of information
Inability to represent certain information

Design Goals for Relational Database

1. Avoid redundant data
2. Ensure that relationships among attributes are represented.
3. Facilitate the checking of updates for violation of database integrity constraints

Example

Consider the relational schema

Lending-schema = (branch-name, branch-city, assets, customer-name, loan- number, amount)

Redundancy

--Data for branch name, branch city, assets are repeated for each loan that a branch makes.

--Wastes space and complicates updating

Null Values

--cannot store information about a branch if no loan exists

--can use null values, but they are difficult to handle.

In the given example the database design is faulty which makes the above pitfalls in database.

So we observe that in relational database design if the design is not good then there will be faults in databases.