

Database Normalization #7

Let us take the example of a simple movie library. Each movie has a description, director, and serial number. Customers have a name, address, and membership number. Assume only one copy of each movie exists in the library. We are given the following relations and determinants:

Relations:

movie(Description,serialno)
serial(SERIALNO,director)
customer(name,addr,MEMBERNO)
borrow(memberno,DATE,SERIALNO)

Determinants:

description->director,serialno
serialno->description
serialno->director
name,addr -> memberno
memberno -> name,addr
serialno,date -> memberno

The above relation is in **x**NF form where x may take the following values {1,2,3,3.5} corresponding to {1NF, 2NF, 3NF and BCNF} respectively.**

What is the maximum possible value of **x such that the above relation satisfies the *x*NF form? Your answer should only be restricted to one of these numbers:1/2/3/3.5 Do not leave any leading or trailing spaces.