1995 Paper 5 Question 8

Databases

What forms of error do database normal forms seek to render less probable?

[3 marks]

Define Second Normal Form. [3 marks]

Define Fourth Normal Form. [4 marks]

Give an example of a database schema that is in 2NF form but *not* in 4NF, showing how it is possible for mutually contradictory data to be recorded. Explain your assumptions about the semantics underlying the database schema. [7 marks]

Are there applications where normal forms are unnecessary or even unhelpful?

[3 marks]