

Practice Questions on Normalization

Relation R with an associated set of functional dependencies, F is decomposed into BCNF. The redundancy (arising out of functional dependencies) in the resulting set relations is.

- (A) Zero
- (B) More than zero but less than that of an equivalent 3NF decomposition
- (C) Indeterminate

Answer A

A table has fields F1, F2, F3, F4, F5 with the following functional dependencies

$F1 \rightarrow F3$

$F2 \rightarrow F4$

$(F1, F2) \rightarrow F5$

In terms of Normalization, this table is in

- (A) 1 NF
- (B) 2 NF
- (C) 3 NF
- (D) none

Answer A

Let R (A, B, C, D, E, P, G) be a relational schema in which the following functional dependencies are known to hold: $AB \rightarrow CD$, $DE \rightarrow P$, $C \rightarrow E$, $P \rightarrow C$ and $B \rightarrow G$. The relational schema R is

- (A) in BCNF
- (B) in 3NF, but not in BCNF
- (C) in 2NF, but not in 3NF
- (D) not in 2NF

Answer D

Which of the following is NOT a super key in a relational schema with attributes V, W, X, Y, Z and primary key V Y?

- (A) V X Y Z
- (B) V W X Z
- (C) V W X Y
- (D) V W X Y Z

Answer B