

LET'S START WITH DBMS :).

Normalisation and its types

BCNF(Boyce Codd Normal Form)

A relation is in BCNF if it satisfies the following conditions:

- 1.It is in Third Normal Form (3NF).
- 2.For a given FD $X \rightarrow Y$ should always have CK or SK, and should only determine non-prime attributes

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Normalisation and its types

BCNF(Boyce Codd Normal Form)

Consider there is a relation $R(A,B,C,D)$ with FD : $AB \rightarrow C$, $AB \rightarrow D$. Find if this is in BCNF?

1. Identify the Candidate Key

$A^+ = \{A\}$

$B^+ = \{B\}$

$C^+ = \{C\}$

$D^+ = \{D\}$

$AB^+ = \{A,B,C,D\}$

So, AB is a candidate key here.

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Normalisation and its types

BCNF(Boyce Codd Normal Form)

2. Check for C.K or S.K in LHS

FD: $AB \rightarrow C$, $AB \rightarrow D$

CK : AB

a. $AB \rightarrow C$ (LHS i.e AB is a CK)

b. $AB \rightarrow D$ (LHS i.e AB is a CK)

It is in BCNF.