

Normalization

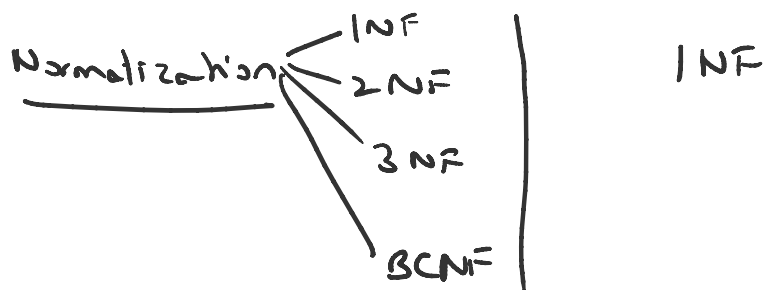
23 August 2023 12:14

Employee

id	name	Dept id	Dept Name	Dept head
1	Rajesh	121	Sales	Vinod
2	Raman	121	Sales	Vinod
3	Arsh	121	Sales	Vinod
4	Harsh	122	Marketing	Satyam
5	Durish	122	Marketing	Satyam
6	Vishal	123	IT	Shadi

1) Data Redundancy

2) Data Anomalies : Insertion , Deletion , Updation



1NF :

id	Name	age	Phone No 1	Phone 2
1	Rajat	22	0784	2234
2	Pulkit	24	0894	Null
3	Bhiman	22	7834	Null
4	Maresh	25	8910	Null

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1	Rajat	22	● 2234
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id	name	age	id	Phone No.
1	Rajat	22	1	0784
2	Pulkit	24	1	2234
3	Bhiman	22	2	--
4	Maresh	25	3	--
			4	--

2NF

$R(A B C D)$

$A B \rightarrow D$

$B \rightarrow C$

Partial

\overline{AB}

$R(A B C)$

$B \rightarrow C$

Prime attribute $\rightarrow AB$

Non-prime attribute $\rightarrow (C)$

Partial Dependency:

$(LHS) \rightarrow (RHS)$

Non prime attribute

Proper Subset of CK

2NF:

1) 1NF

2) No partial dependency