

Ans to the QNo. 1

i) The relation is already in 1NF as there are no composite or multivalued attributes.

ii) The relation from (i) is not in 2NF because commission attribute has FD with only one of the PK

Updated:

CAR_SALE(car, sales person, Date_sold, Discount_amt)

can 1 (sales person, commission)

ii) The relation from (ii) is not in 3NF. As there is a Transitive FD between Date_sold and Discount_amt

Updated:

CAR_SALE(car, salesperson, Date_sold)

can 1 (salesperson, commission)

can 2 (Date_sold, Discount_amt)

Ans to the QNo. 2

i) The relation is already in 1NF. As there is no multivalued or composite attribute.

ii) The relation is not in 2NF as FD1 and FD2 have dependency with only one of the PKs

Update:

T20CricketTournament(TournamentAcronym, Team-ID,
Sinal-Amount, Tournament-year, Tournament-logo,
tournament_sponsor)

T1(TournamentAcronym, Tournament-ID,
Tournament-title, Tournament-matches, Base-Amount)

T2(Team-ID, Team-name, Team-lead)

iii) The relations of (ii) are not in 3NF. Because FD3 is a Transitive dependency

T20CricketTournament(TournamentAcronym, Team-ID,
Sinal-Amount, Tournament-year, Tournament-logo,
tournament_sponsor)

T1(TournamentAcronym, Tournament-ID,
Base-Amount)

T2(Team-ID, Team-name, Team-lead)

T3(Tournament-ID, Tournament-title,
Tournament-matches)