

5. Consider the following relation schema:

$CAR_SALE(Car\#, Date_Sold, SalesPerson\#, Commission\%, Discount_Amt)$,

where $\{Car\#, SalesPerson\#\}$ is the primary key (we assume that a car may be sold by multiple salespeople). Assume the following additional dependencies:

$$Date_Sold \rightarrow Discount_Amt,$$
$$SalesPerson\# \rightarrow Commission\%.$$

(a) Based on the primary key, determine whether this relation is in 1NF, 2NF, 3NF. [9]

(b) Perform any normalisation steps required to bring it into 3NF. [16]

Total mark for this question: 25