

Farzaneh Noroozi Homework 3

The Public Safety office at Millennium College maintains a list of parking tickets issued to vehicles parked illegally on the campus.

A: Convert this table to a relation in first normal form by entering appropriate data in the table.

<u>St ID</u>	L Name	F Name	Phone No	St Lic	Lic No	<u>Ticket#</u>	Date	Code	Fine
38249	Brown	Thomas	111-7804	FL	BRY123	15634	10/17/2018	2	\$25
38249	Brown	Thomas	111-7804	FL	BRY123	16017	11/13/2018	1	\$15
82453	Green	Sally	391-1689	AL	TRE141	14987	10/5/2018	3	\$100
82453	Green	Sally	391-1689	AL	TRE141	16293	11/18/2018	1	\$15
82453	Green	Sally	391-1689	AL	TRE141	17892	12/13/2018	2	\$25

B: Draw a dependency diagram that shows all functional dependencies in the relation, based on the sample data shown.

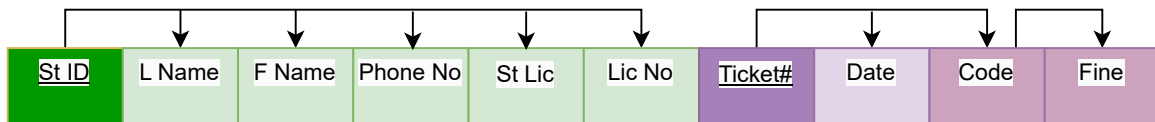
dependency diagram:

St_ID -> L_Name, F_Name, Phone_No

St_ID, Ticket # -> St Lic, Lic no

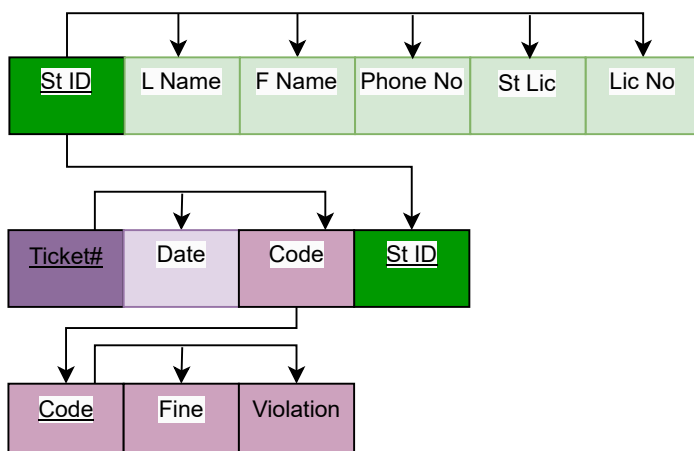
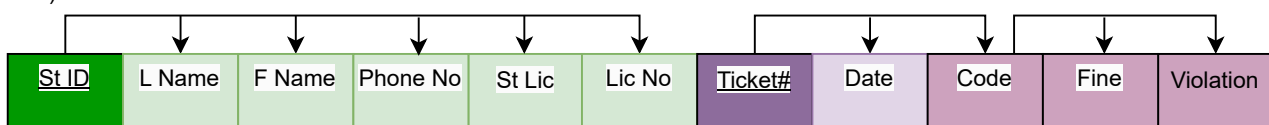
Ticket# -> Date, Code

Code -> Fine



C: Develop a set of relations in third normal form.

- Include a new column with the heading Violation in the appropriate table to explain the reason for each ticket. Expected values in this new column are: expired parking meter (ticket code 1), no parking permit (ticket code 2), and handicap violation (ticket code 3).



Code	Violation
1	Expired parking meter
2	No parking permit
3	Handicap violation