

DBMS = DataBase Management Systems

DBMS Test

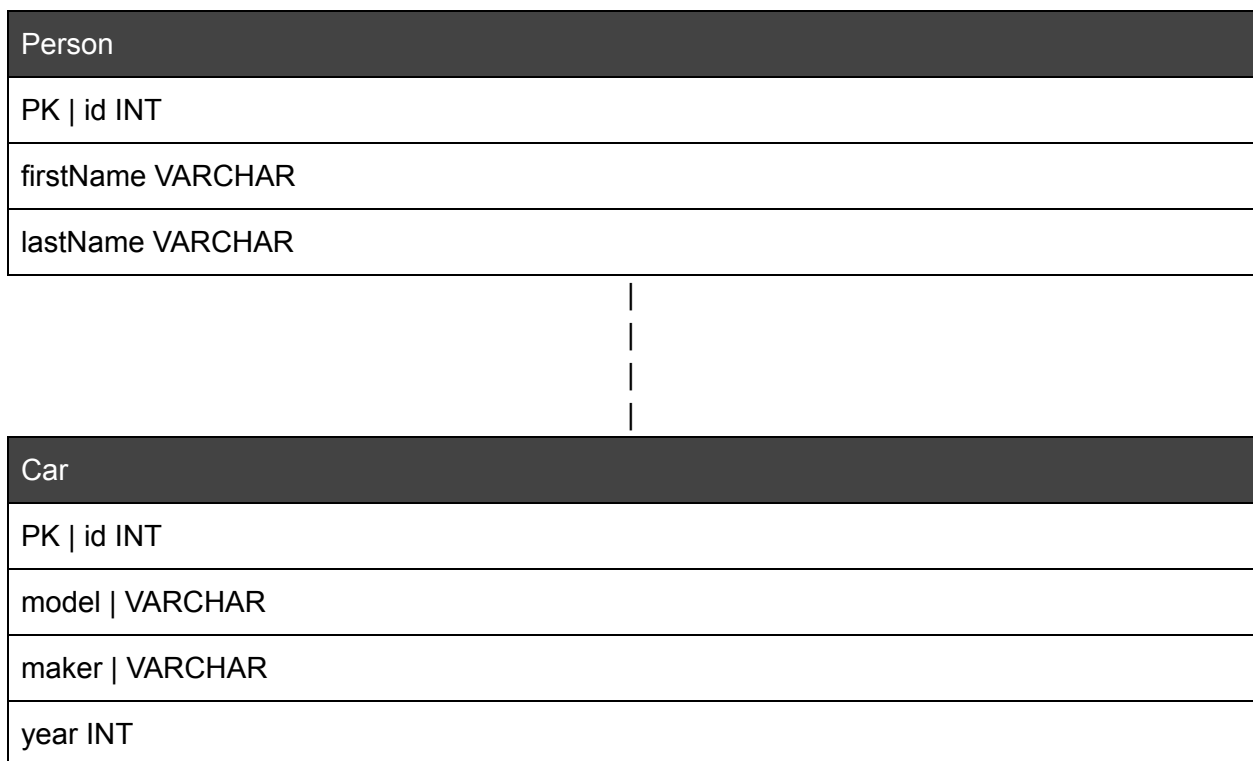
Question 1: Characteristics of primary key attribute:

1. Not null
2. Unique
3. Not null and unique
4. None of the above.

Question 2: In a relational database having only one table, this table cannot have any foreign key. Is it TRUE or FALSE?

Question 3: What is bridge table in relational database? It sometimes can be called in other name like: pivot table, association table, ... Explain it.

Question 4: Given following ER diagram:



FK person_id INT

Write an SQL to get following data.

- **Find all Persons who have first name starting with 'M' and have a car before year 2000.**

Note: subqueries is forbidden

Question 5: Consider a table in a relational database with the following structure:

employeeId	<i>Unique ID for employee</i>
projectId	<i>Unique ID for project</i>
employeeName	<i>Name of employee</i>
projectName	<i>Name of project</i>
designation	<i>Unique string to describe the job title of an employee (ex. programmer, tester...)</i>
payPerHour	<i>Payment for each unique designation per hour</i>
timeSpent	<i>Number of hours employee has been working on the project</i>

Re-design this table to match 3NF. Draw an ER diagram to illustrate the design. Make sure to include any relationship if there is.