

Hands-on Lab: Relational Model Concepts

Estimated time needed: 10 minutes

In this module, you have learned the concepts of a relational model, including entity, attribute, relation, degree, and cardinality.

Now, in this lab, let's apply the concepts learned in this module to a real-world example of a database.

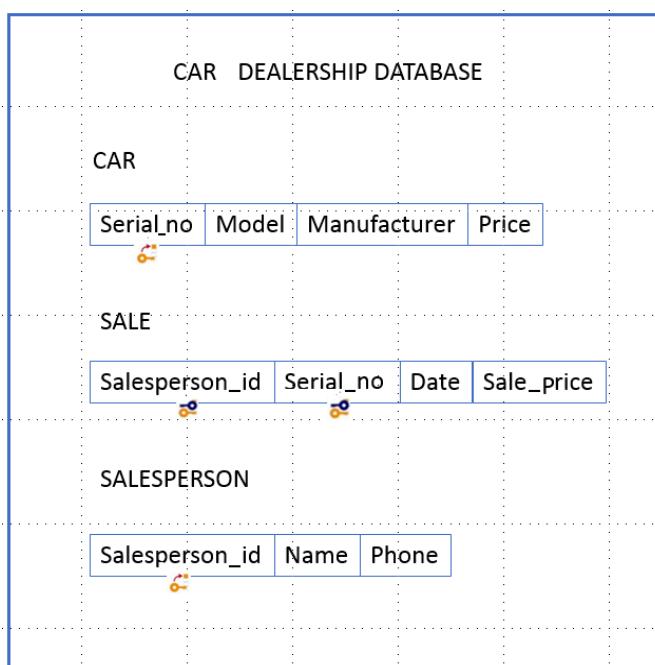
Objectives

After completing this lab, you will evaluate your knowledge of relational model concepts.

Exercise

In this exercise, you will work on a relational database schema called Car Dealership, which someone designed to track automobile sales in a car dealership.

Schema diagram for the Car Dealership relational database:



Relational instance of SALE:

Salesperson_id	Serial_no	Date	Sale_price
10001	1we4ds87	12/03/2020	\$ 10,000.00
10005	d63jw3ty	12/03/2020	\$ 5,000.00
10009	sy63bjd1	13/03/2020	\$ 25,000.00
10001	k2k4edr8	13/03/2020	\$ 49,000.00
10051	w3r334ac	13/03/2020	\$ 8,000.00

Now let us go through some questions based on the database schema of Car Dealership and relational instance of SALE:

1. How many relations does the Car Dealership database schema contain?

- ▶ Hint
- ▶ Answer

2. How many columns does the relation Car contain?

- ▶ Hint
- ▶ Answer

3. How many rows does the relation Sale contain?

- ▶ Hint
- ▶ Answer

4. What is the degree of the relation Salesperson?

- ▶ Hint
- ▶ Answer

5. Identify the cardinality of the relation Sale.

- ▶ Hint
- ▶ Answer

6. Identify the attributes of the relation Salesperson.

- ▶ Hint
- ▶ Answer

Congratulations! You have completed this lab and are ready for the next topic

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