

Module 2: Relational Model Constraints & Data Objects

Lesson 2: Additional Details

Primary Keys

- If a relation schema has more than one key, then each key is called a **candidate key**. One of the candidate keys is designated as the primary key, and the others are called **secondary keys**.
- Rules:
 - No missing values(NULL)
 - Immutable – once created, it can not be changed.
 - If Primary key consists of multiple attributes, none of these values can be updated.

Semantic Constraints

- Ensures that data entered into a row reflects an allowable value for that row.
- Example – Quantity column of Items table allows only numbers.
- Semantic Constraints: cannot be directly expressed in the schemas of data model. Also called as “application-based rules or business rules”

Assignment

➔ CAR

<u>Serial No.</u>	Model	Manufacture	Price
-------------------	-------	-------------	-------

➔ SALE

<u>Salesperson_id</u>	Serial_no	Date	Sale_price
-----------------------	-----------	------	------------

➔ SALEPERSON

<u>Salesperson_id</u>	Name	Phone
-----------------------	------	-------

Question 1: Identify Primary Key of relation CAR

Question 2: Identify Foreign Key of relation SALE

Question 3: How many Constraints types are there in relation SALE

Assignment - Solution

➤ CAR

<u>Serial No.</u>	Model	Manufacture	Price
-------------------	-------	-------------	-------

Question 1: Identify Primary Key of relation CAR

Serial No.

➤ SALE

<u>Salesperson_id</u>	Serial_no	Date	Sale_price
-----------------------	-----------	------	------------

Question 2: Identify Foreign Key of relation SALE

Serial No.

➤ SALEPERSON

<u>Salesperson_id</u>	Name	Phone
-----------------------	------	-------

Question 3: How many Constraints types are there in relation SALE

2 Constraints : Primary Key and Foreign Key