

SQL-Exercises:

Exercise1:

Consider the following Database:

Customer (customer_id, customer_name, favorite_color, phone)

Cart (item_id, product_Nb, customer_id, color, date_sold)

Product (product_Nb, product_name, price, maker)

Available_colors (product_Nb, color)

- a) Write in SQL a statement to create the relation *Available_colors*. Don't forget the primary keys.
- b) Write in SQL a statement to delete attribute "date_sold" from the *cart* relation.
- c) Write in SQL a statement to add attribute "birthdate" to the *customer* relation with default value sysdate.

Exercise2:

Consider the below relational database, where the primary keys are underlined. The database has 4 relations that contain information about restaurants, their customers, their employees and managers.

Note that a manager is also an employee. The table frequents provides info about which restaurants are frequented by each customer.

Employee (employeeSSN, employee-name, street, city, age)

Works (employeeSSN, restaurantID, salary)

Restaurant (restaurantID, restaurant-name, city, managerSSN)

Customer (customerSSN, customer-name, phone, street, city, age)

Frequents (customerSSN, restaurantID)

Write the SQL query that (3 points each)

1. Find the SSNs of all employees named "Samer"
2. Find the SSNs of all employees whose names start with "A"
3. Find the names of all employees whose salaries>1500
4. Find the SSNs and names of customers who live in Hamra Street of Beirut

5. Find the names of all employees who live in the same city as the restaurant which they work for
6. Find the SSNs of employees who work for only 1 restaurant
7. Find the names of all restaurants' managers
8. For each restaurant, count the total number of its employee
9. Select the names of the employees who work in restaurantID: 1, 14, 21 or 50.