PROIECT SISTEME DE GESTIUNE A BAZELOR DE DATE

REPREZENTANTA AUTO

Cuprins

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# Tematica

Baza de date prezenta integreaza conceptul unei reprezentante auto (dealer masini) ce are in inventar o multitudine de automobile, fie de ultima generatie cat si modele clasice, colectionabile.

# Definirea bazei de date

## Modelul Entitate-Relatie

Tabel producator:

**manufacturer\_id**: Cheie primara (identificator unic per producator).

**manufacturer\_name**: Numele producatorului (unic si necesar).

**manufacturer\_country**: Tara de origine a producatorului.

Tabel masini:

**car\_id**: Cheie primara (identificator unic per masina).

**manufacturer\_id**: Cheie externa (legat de tabela "Manufacturers" pentru a indica producatorul masinii).

**model\_name**: Numele modelului masinii (necesar).

**year**: Anul fabricatiei masinii.

**price**: Pretul masinii.

**color**: Culoarea masinii.

**mileage**: Distanta parcursa de masina.

**fuel\_type**: Tipul de combustibil al masinii.

Restrictie: cheie straina "fk\_manufacturer" care leaga "manufacturer\_id" de tabelul "Manufacturers".

Customers Table:

**customer\_id**: Cheie primara (identificator unic per client).

**first\_name**: Prenumele clientului (necesar).

**last\_name**: Numele clientului (necesar).

**email**: Adresa de email a clientului (unic si necesar).

**phone\_number**: Numarul de telefon al clientului.

**citizenship\_id**: Indicator al cetateniei clientului.

Employees Table:

**employee\_id**: Cheie primara (indentificator unic per angajat).

**first\_name**: Prenumele angajatului (necesar).

**last\_name**: Numele angajatului (necesar).

**position**: Pozitia angajatului in companie.

**hire\_date**: Data la care angajatul a fost angajat.

Sales Table:

**sale\_id**: Cheie primara (identificator unic per vanzare).

**car\_id**: Cheie externa (legat de tabela "Cars" pentru a indica masina vanduta).

**customer\_id**: Cheie externa (legat de tabela "Customers" pentru a indica clientul care a cumparat.

**employee\_id**: Cheie externa (legat de tabela "Employees" pentru a indica angajatul care a inregistrat vanzarea).

**sale\_date**: Data vanzarii.

**sale\_price**: Pretul la care s-a vandut masina.

Restrictie: cheie straina care leaga "car\_id", "customer\_id" si "employee\_id" de tabelele respective.

Rentals Table:

**rental\_id**: Cheie primara (identificator unic per inchiriere).

**car\_id**: Cheie externa (legat de tabela "Cars" pentru a indica masina inchiriata).

**customer\_id**: Cheie externa (legat de tabela "Customers" pentru a indica clientul care a inchiriat).

**employee\_id**: Cheie externa (legat de tabela "Employees" pentru a indica angajatul care a inregistrat inchirierea).

**start\_date**: Data de inceput a inchirierii.

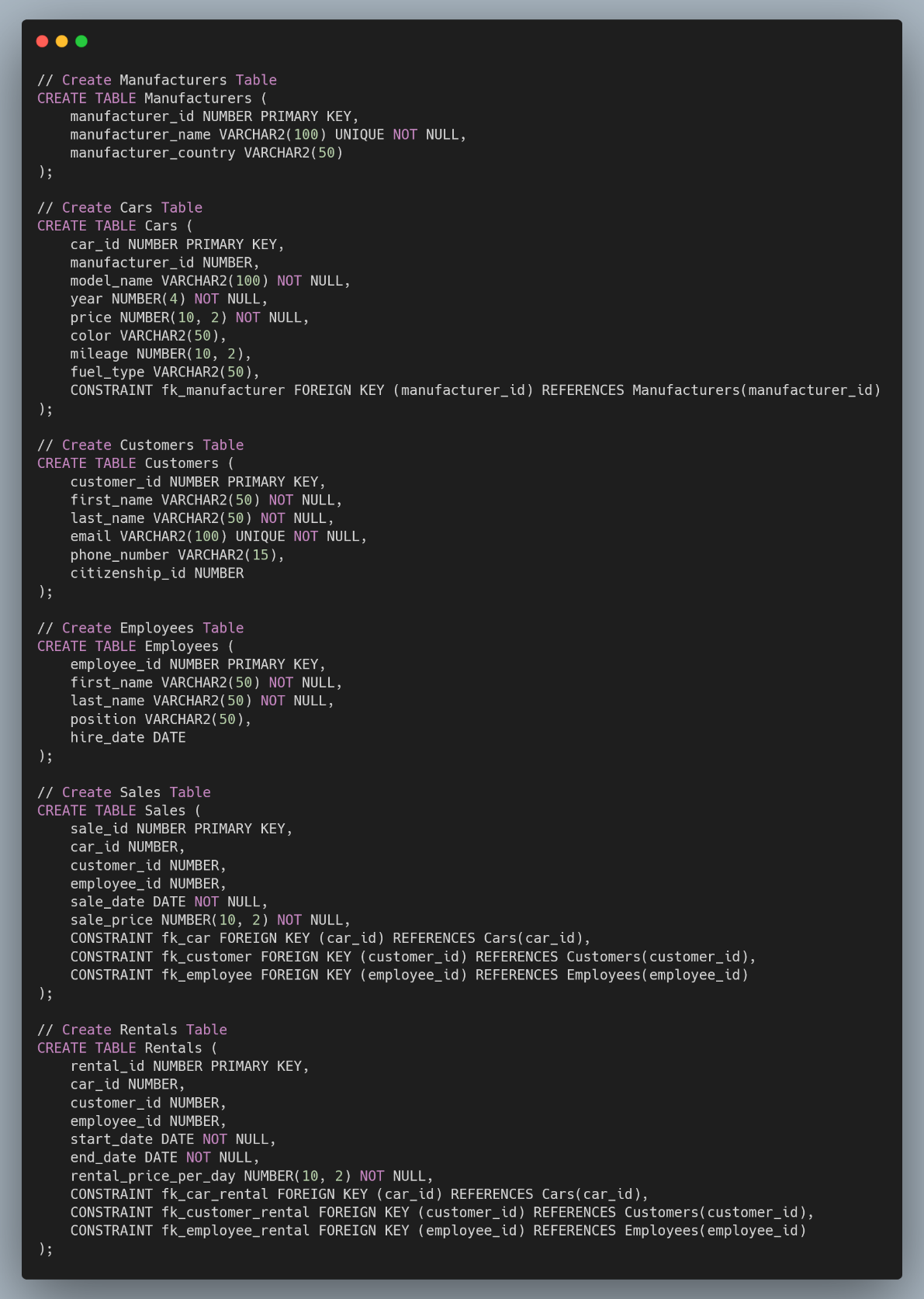
**end\_date**: Data de sfarsit a inchirierii.

**rental\_price\_per\_day**: Pretul de inchiriere pe zi.

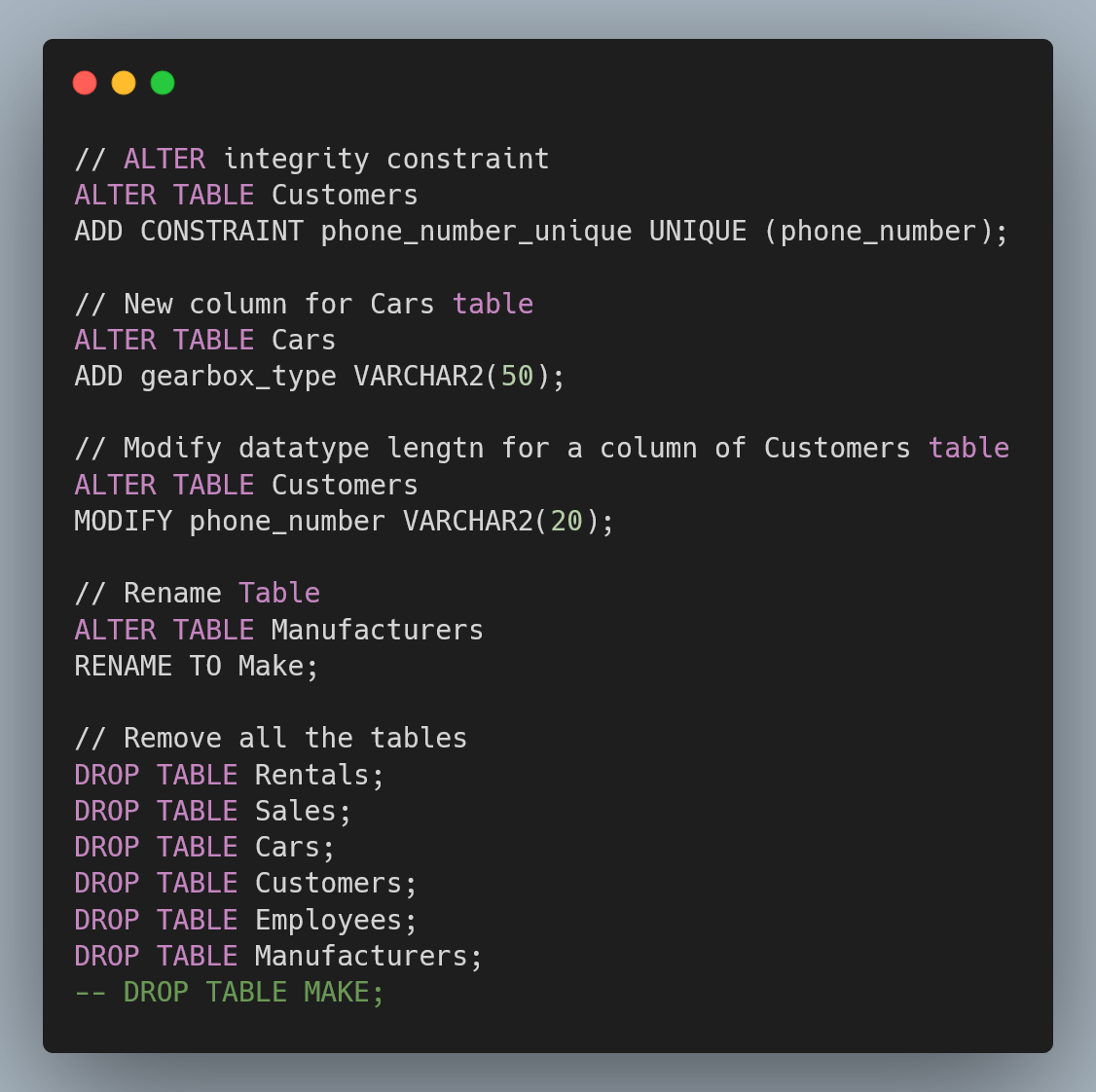
Restrictie: cheie straina care leaga "car\_id", "customer\_id" si "employee\_id" de tabelele respective.

## Definirea tabelelor

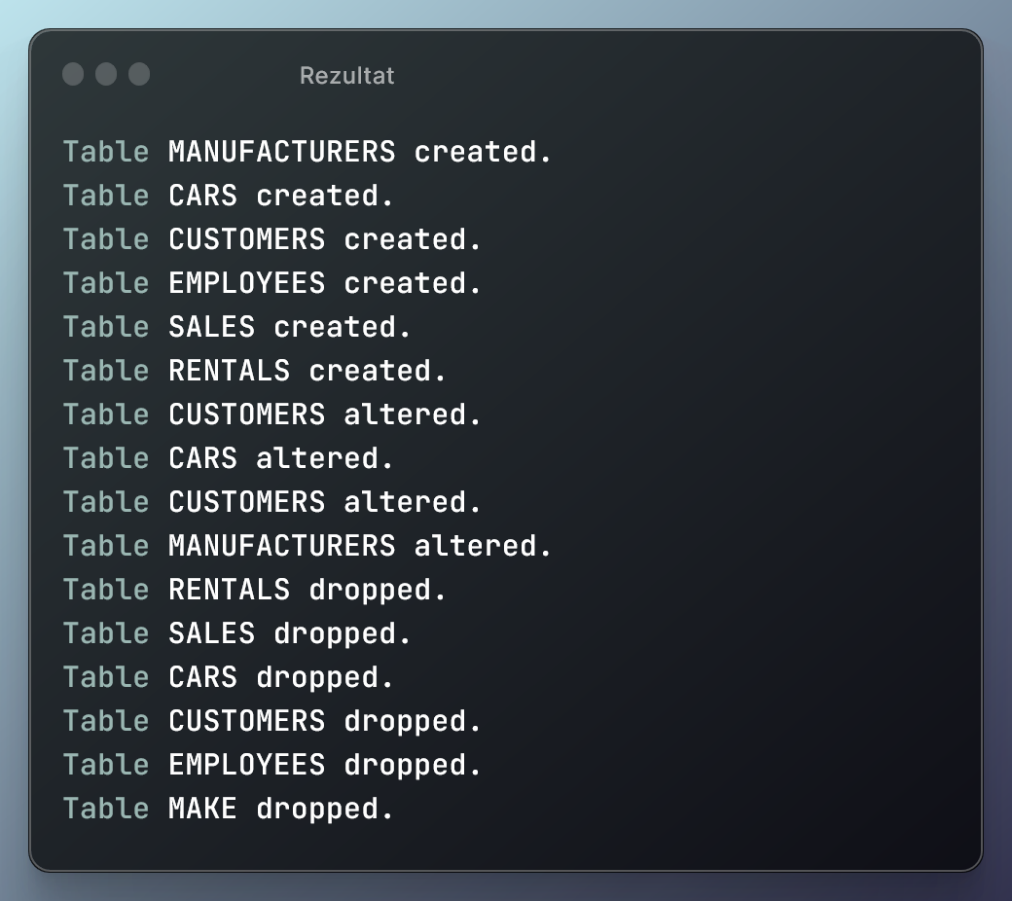
1. **Construire tabele**



1. **Alte elemente ale limbajului de definire a datelor**

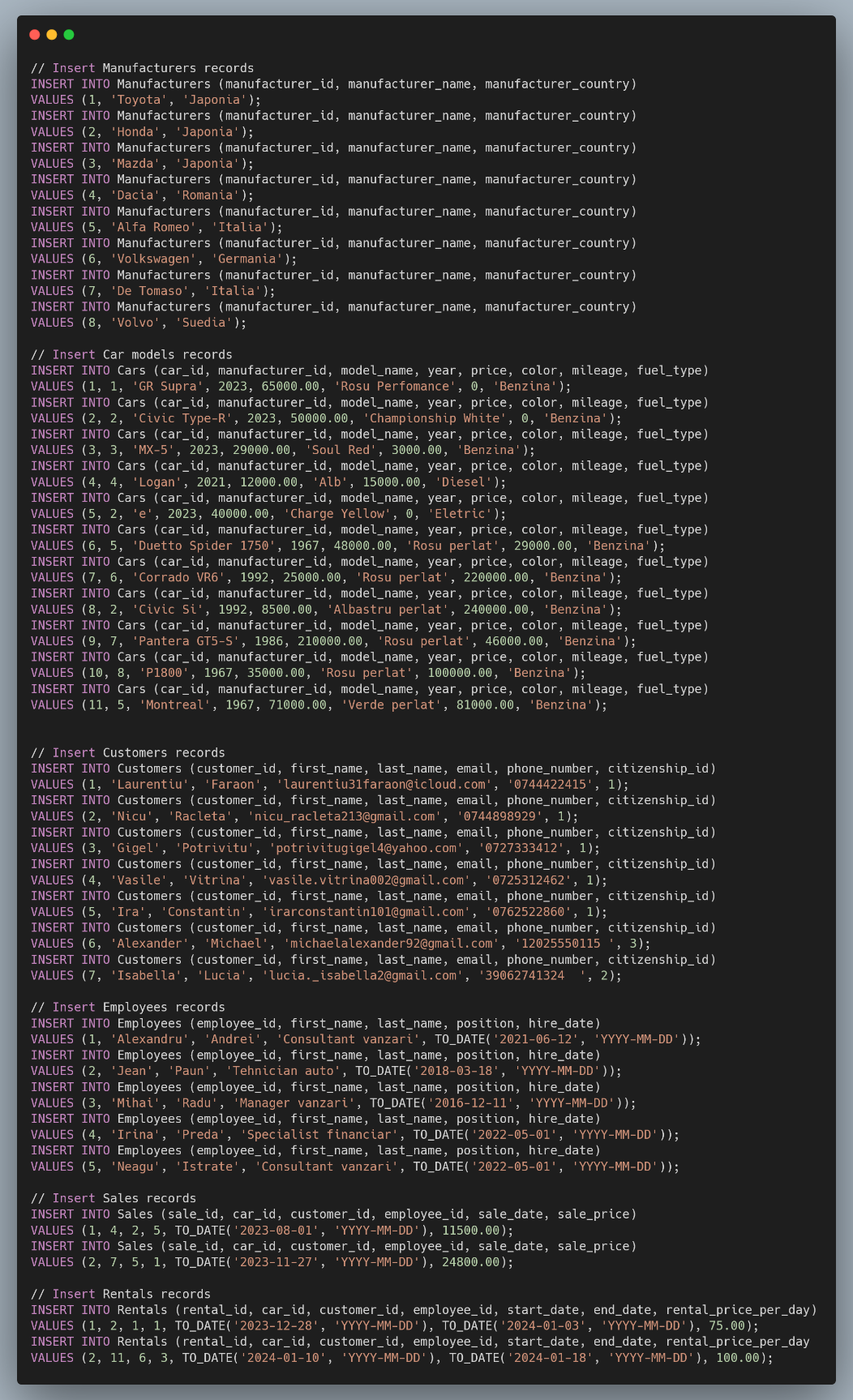


1. **Rezultat rulare instructiuni**

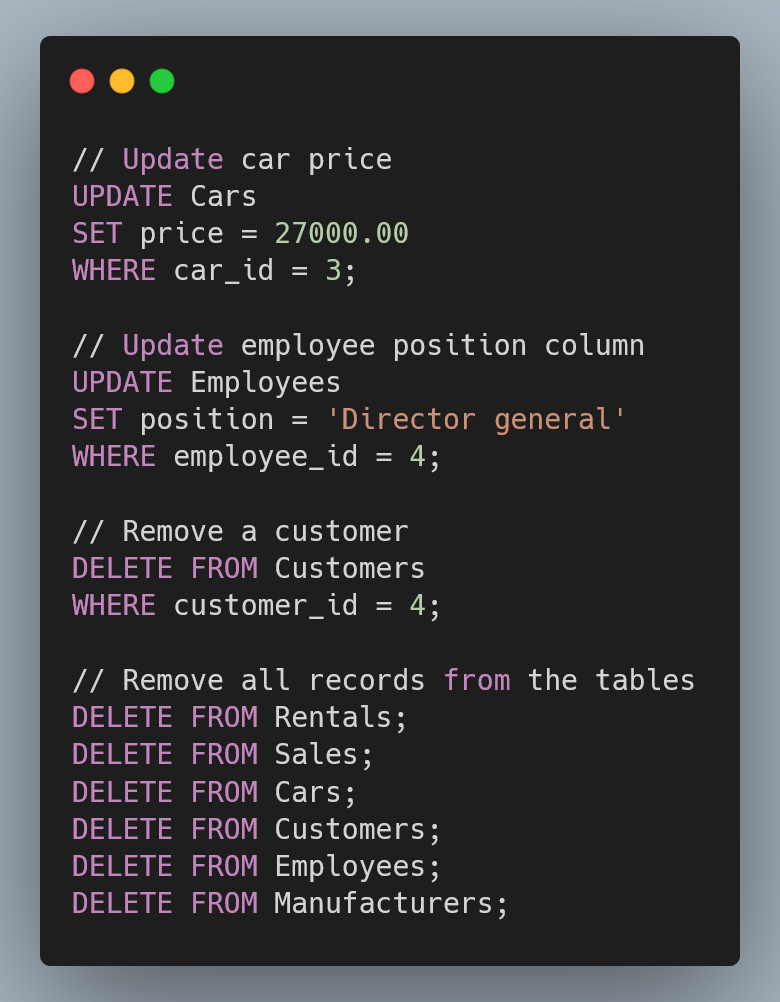


## Manipularea datelor

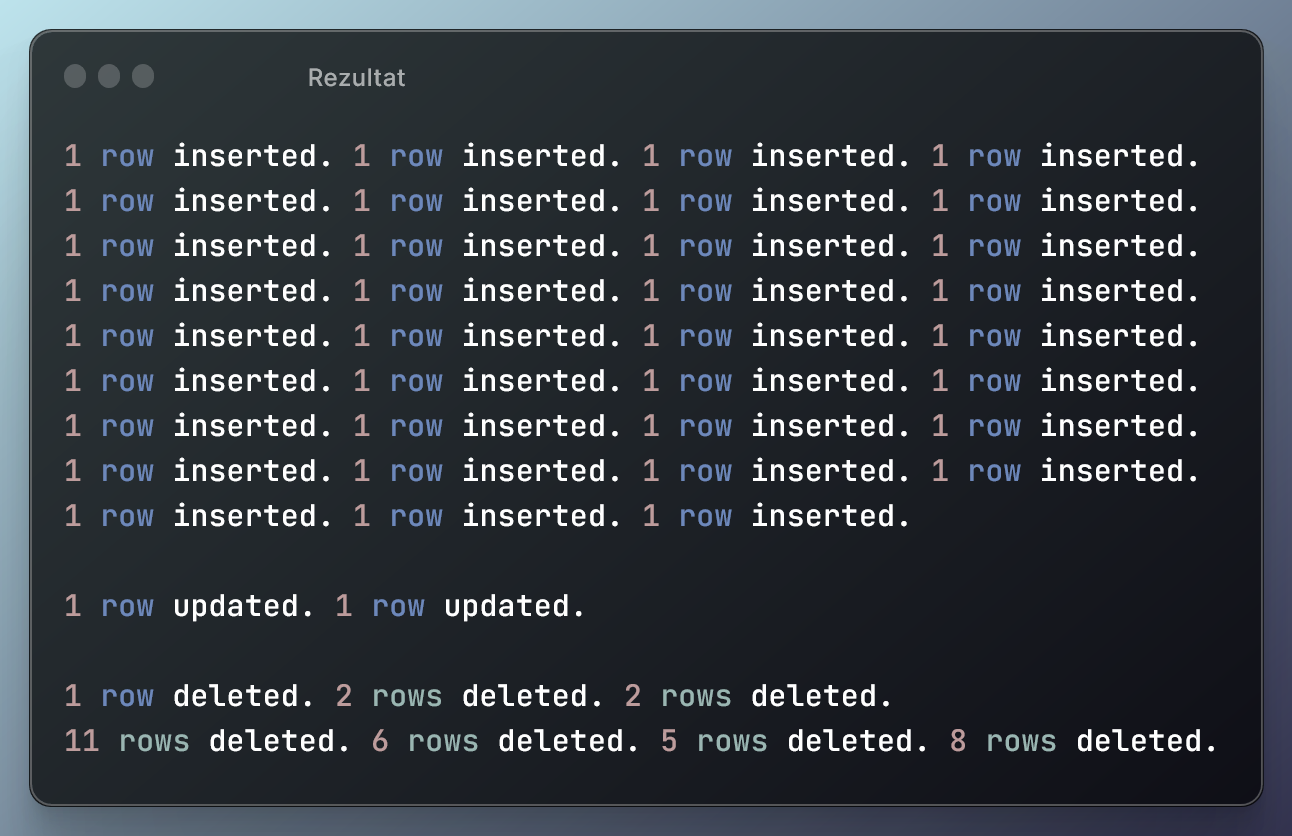
1. **Inserare inregistrari in tabele**

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1. **Alte elemente ale limbajului de prelucrare a datelor**

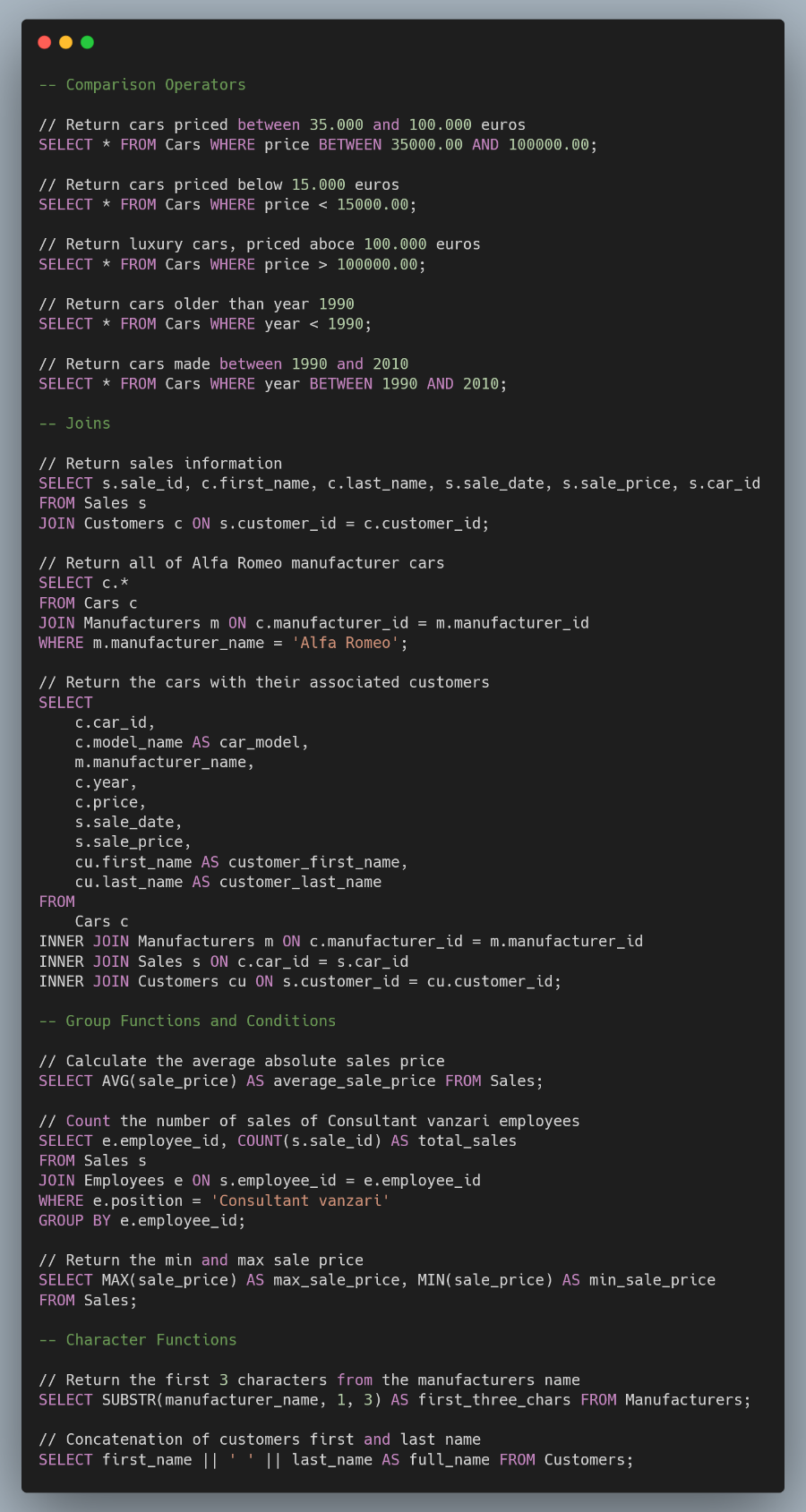


1. **Rezultat rulare instructiuni**

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## Interogari variate

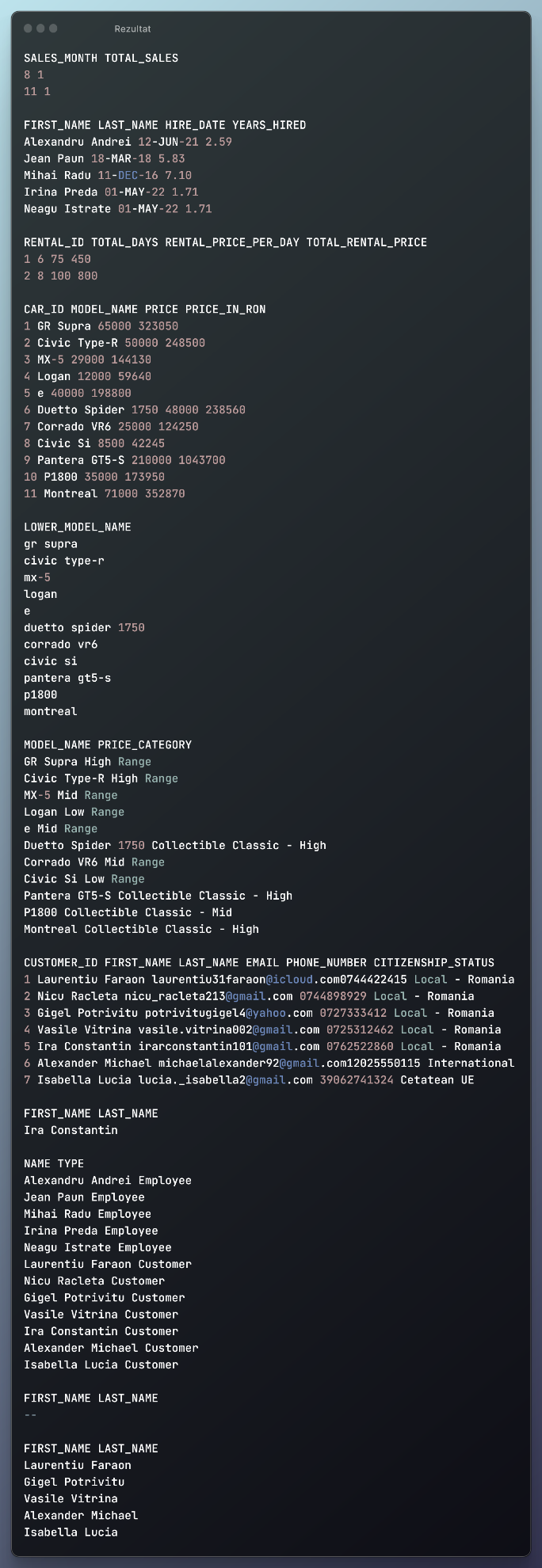
1. **Instructiuni**





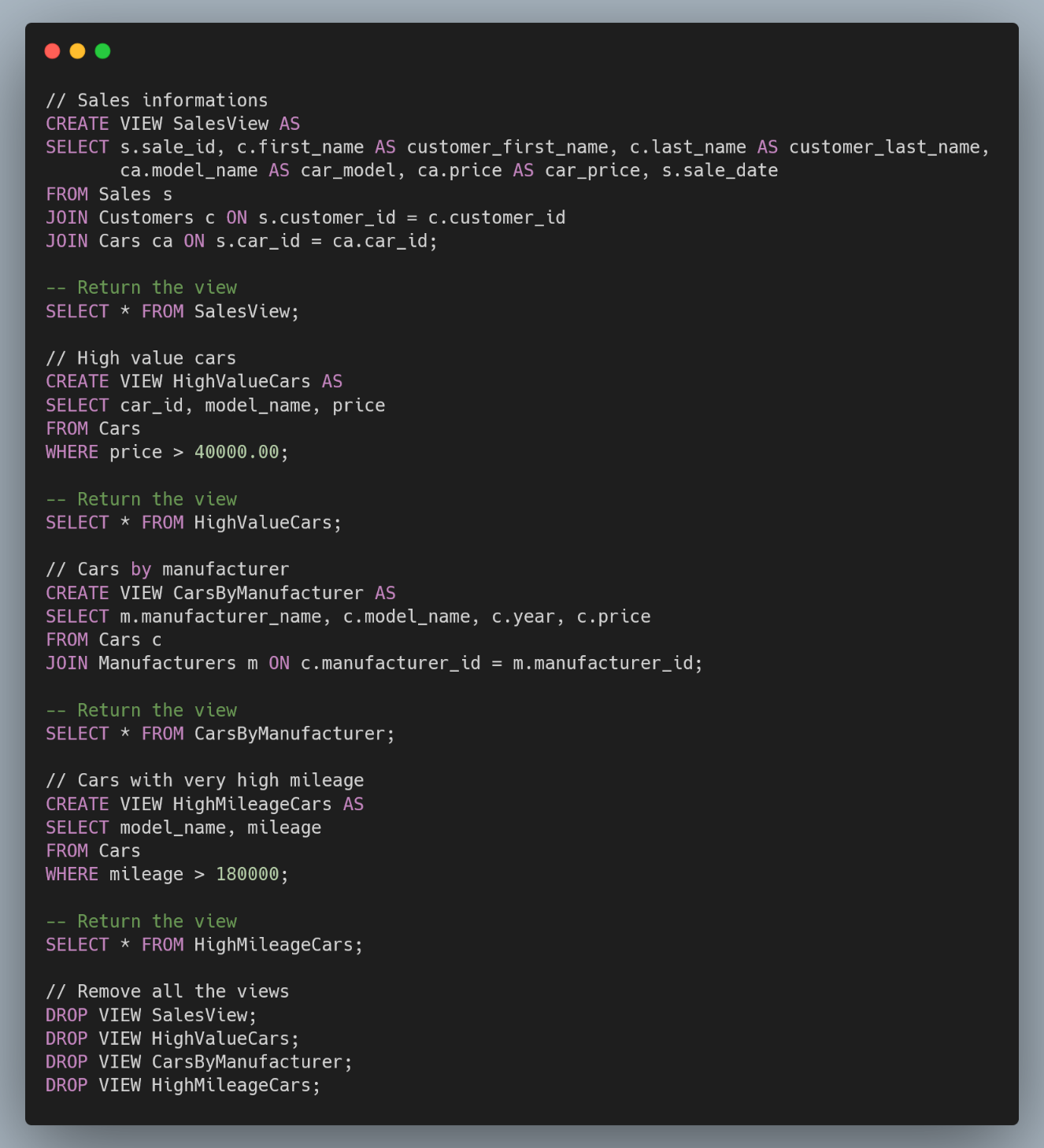
1. **Rezultat rulare instructiuni**

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## Tabele virtuale (vederi)

1. **Instructiuni**

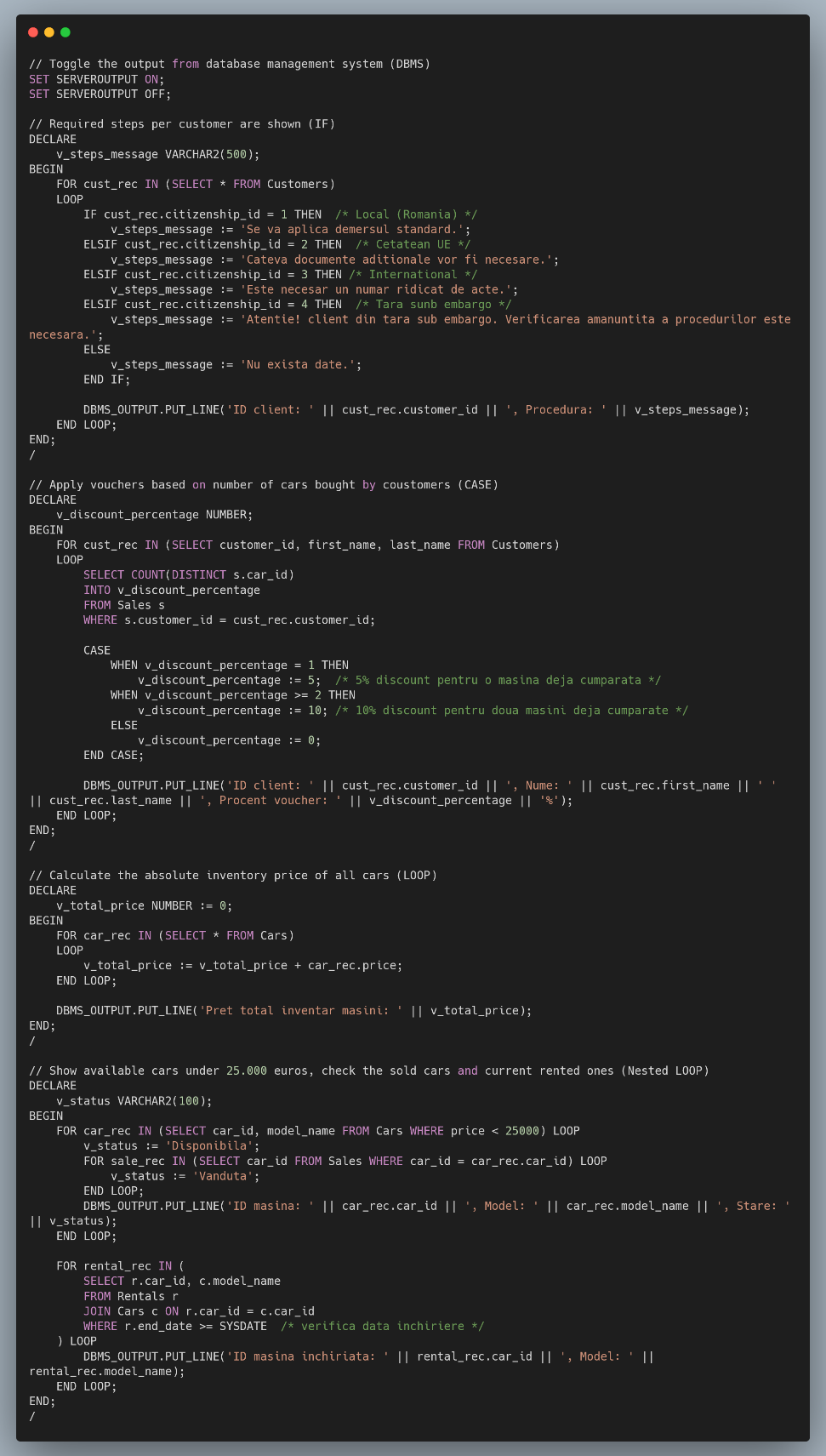


1. **Rezultat rulare instructiuni**

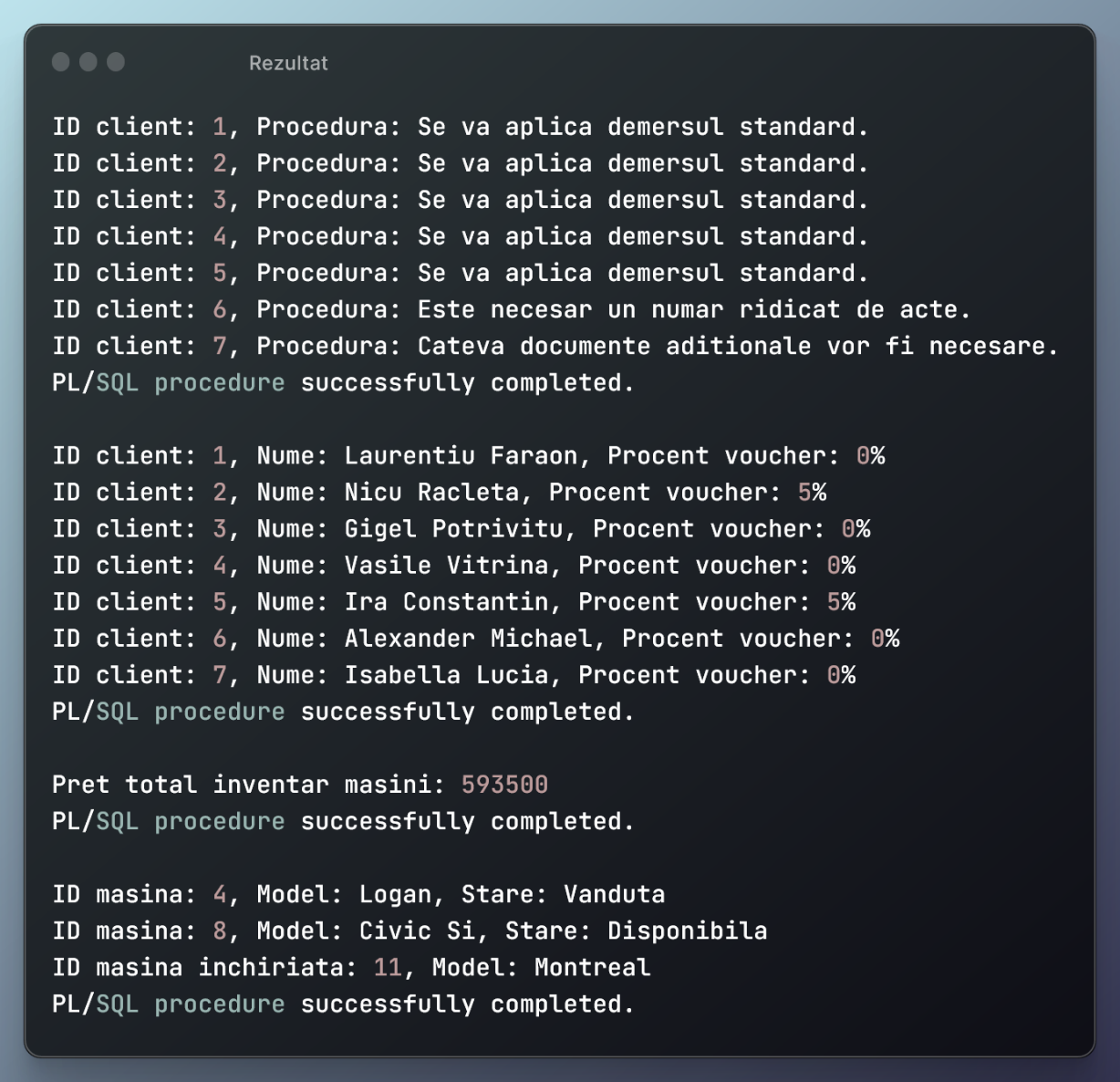
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## Blocuri PL/SQL

1. **Instructiuni**

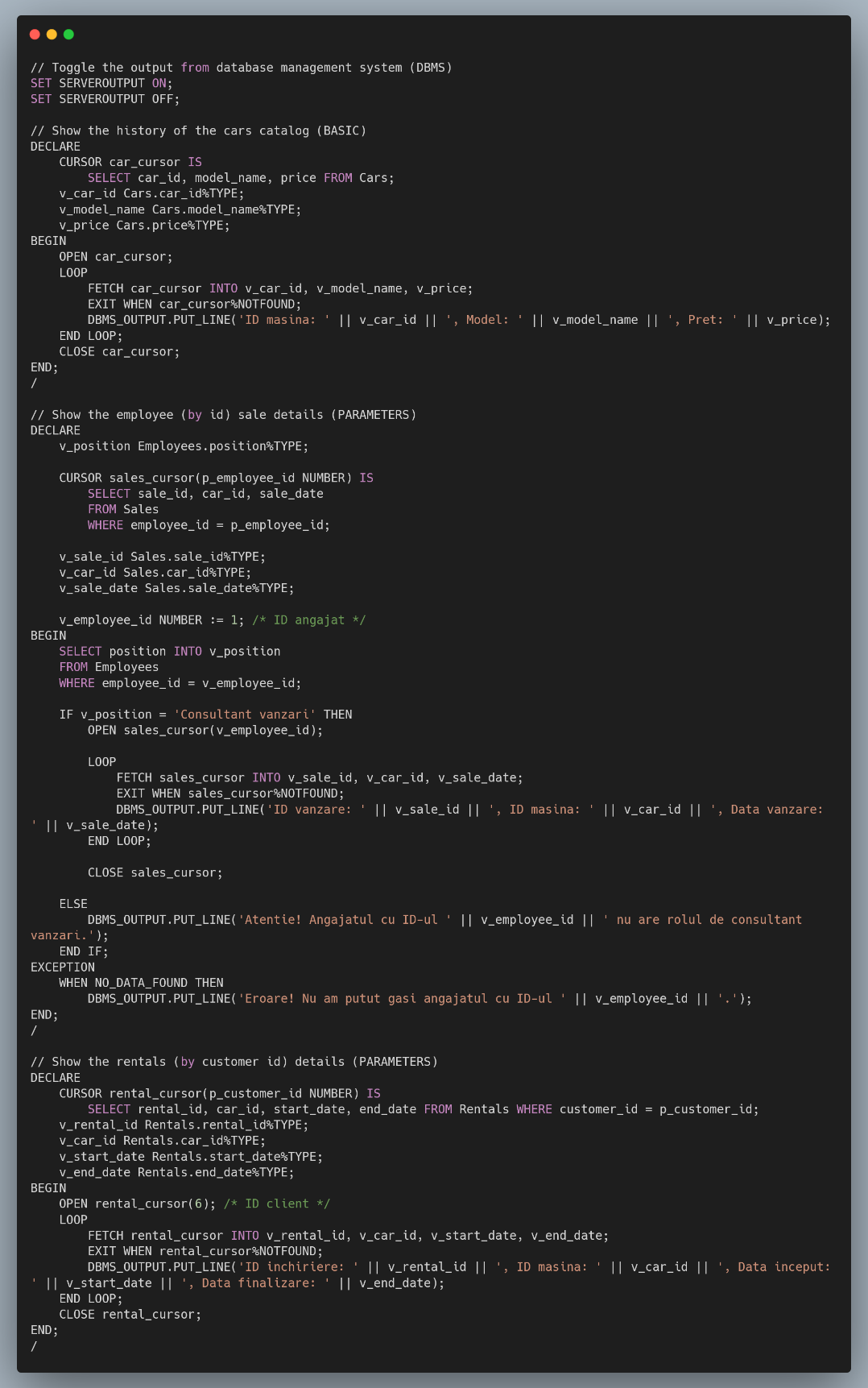


1. **Rezultat rulare instructiuni**

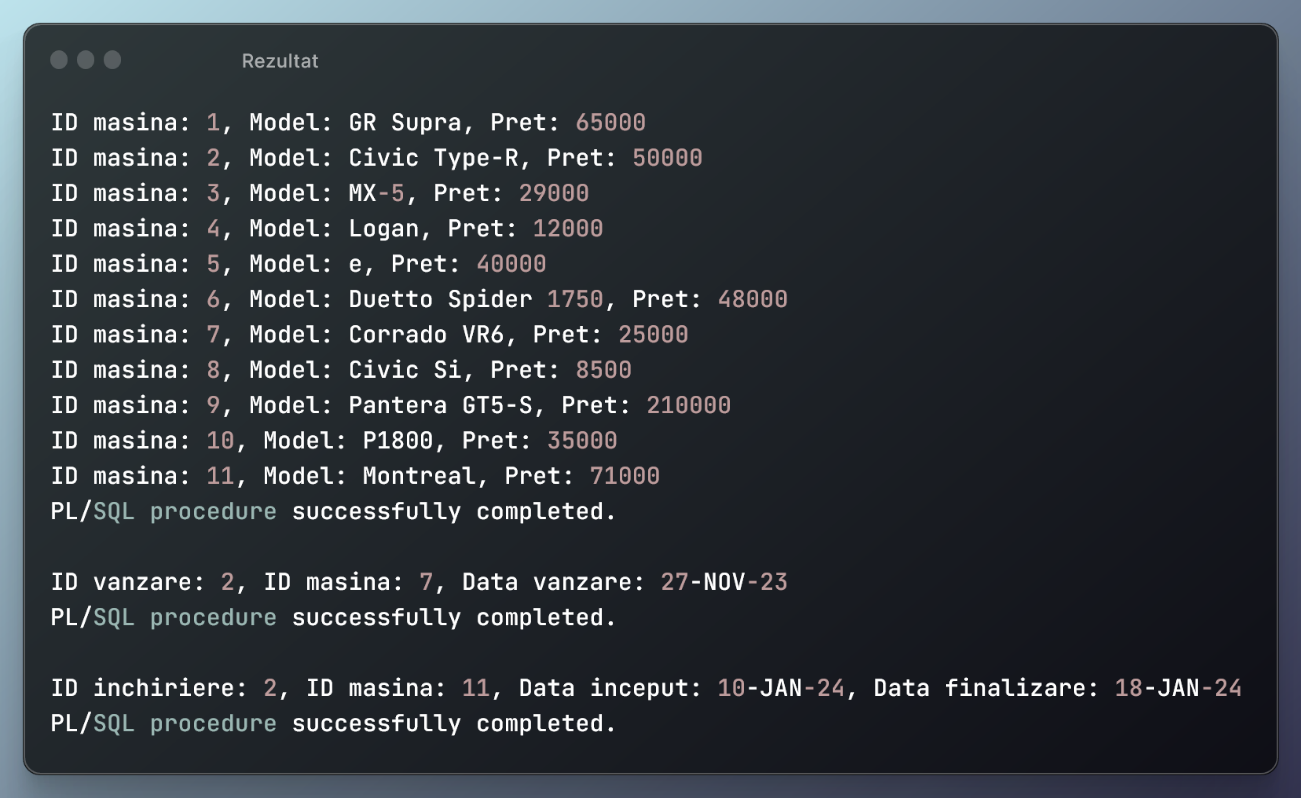
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## Cursoare

1. **Instructiuni**

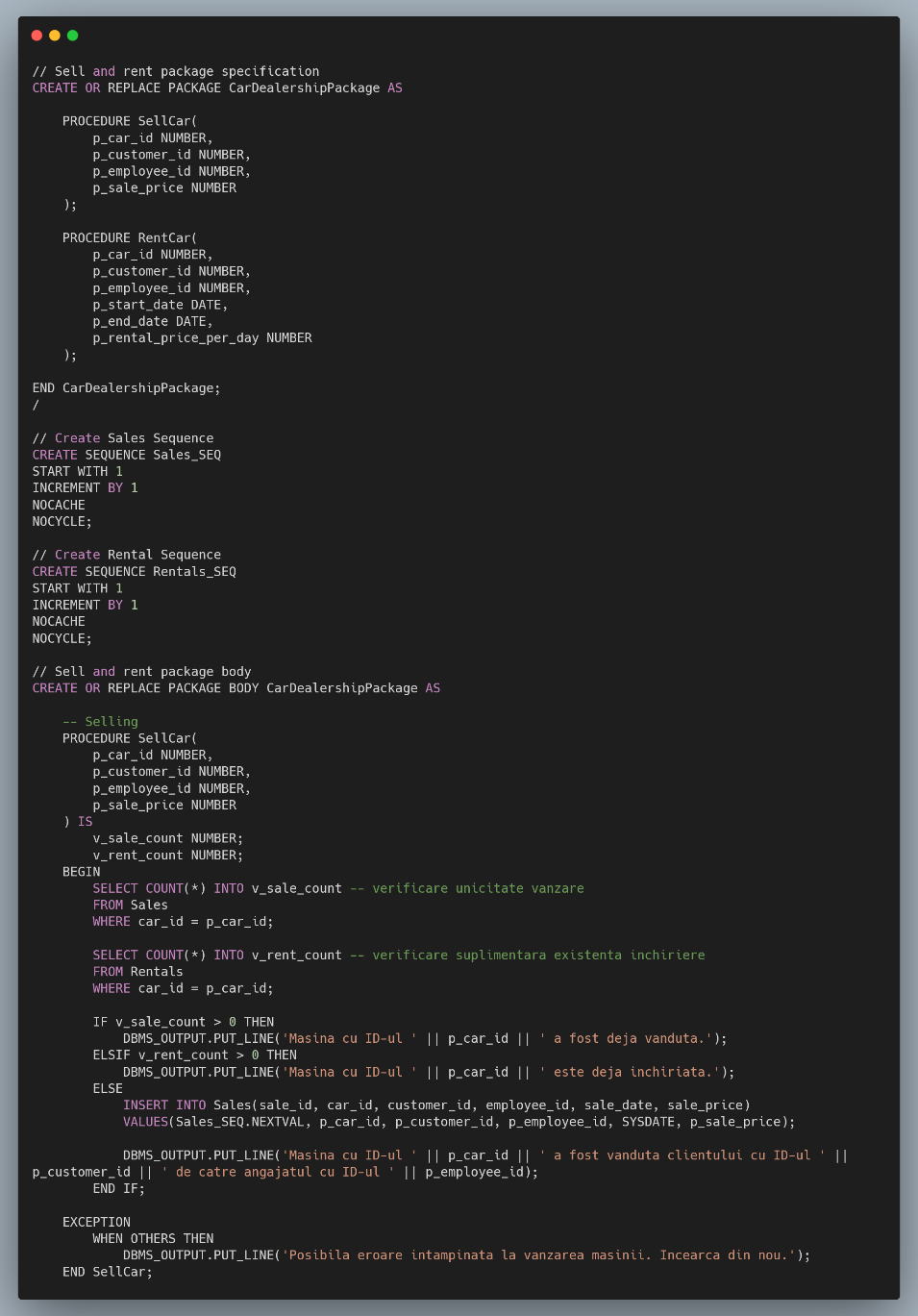


1. **Rezultat rulare instructiuni**



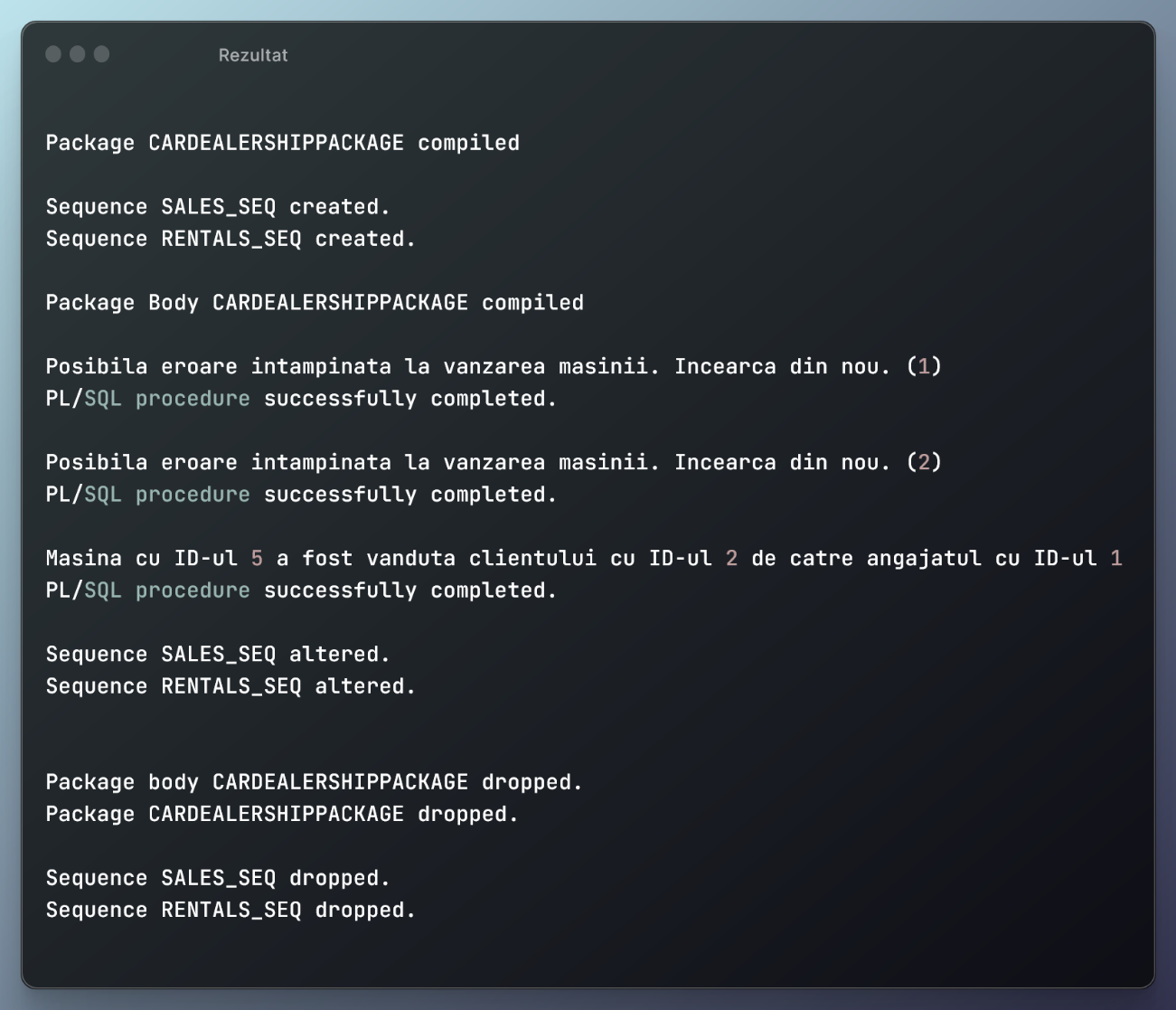
## Pachete cu proceduri complexe

1. **Instructiuni**





1. **Rezultat rulare instructiuni**

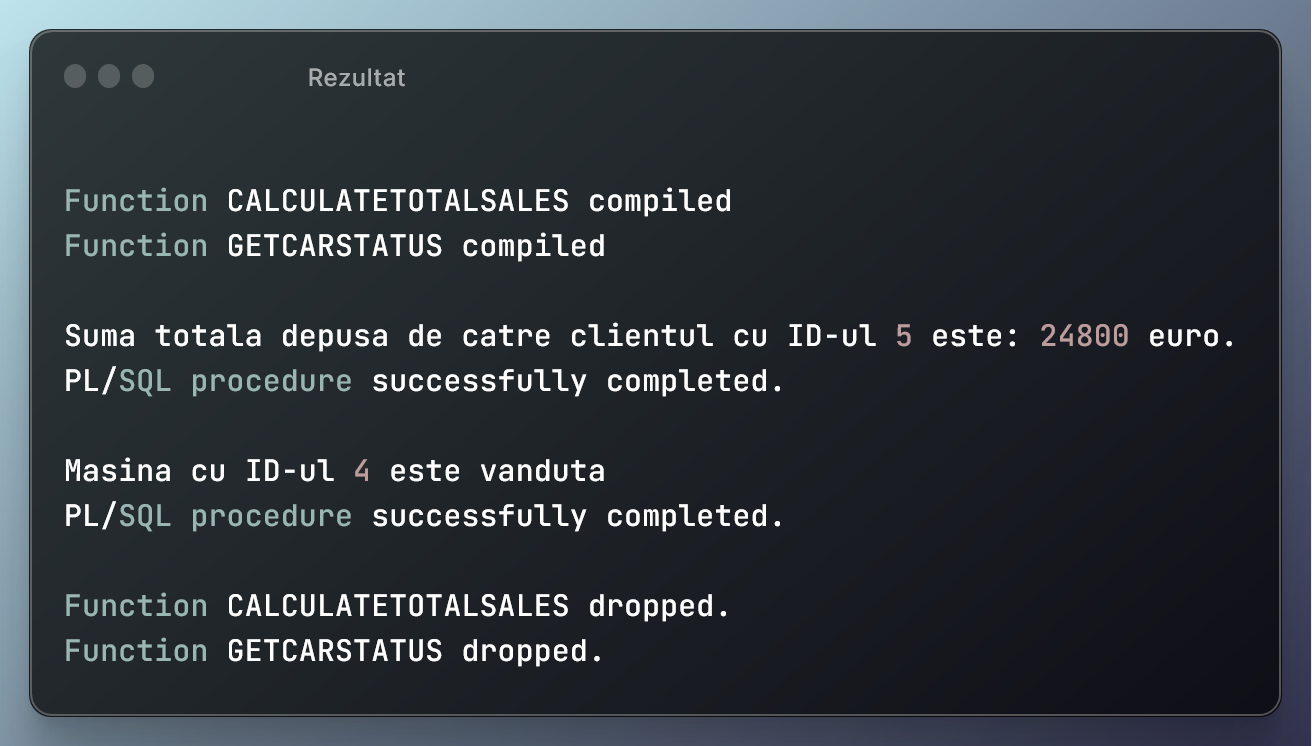
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## Functii

1. **Instructiuni**

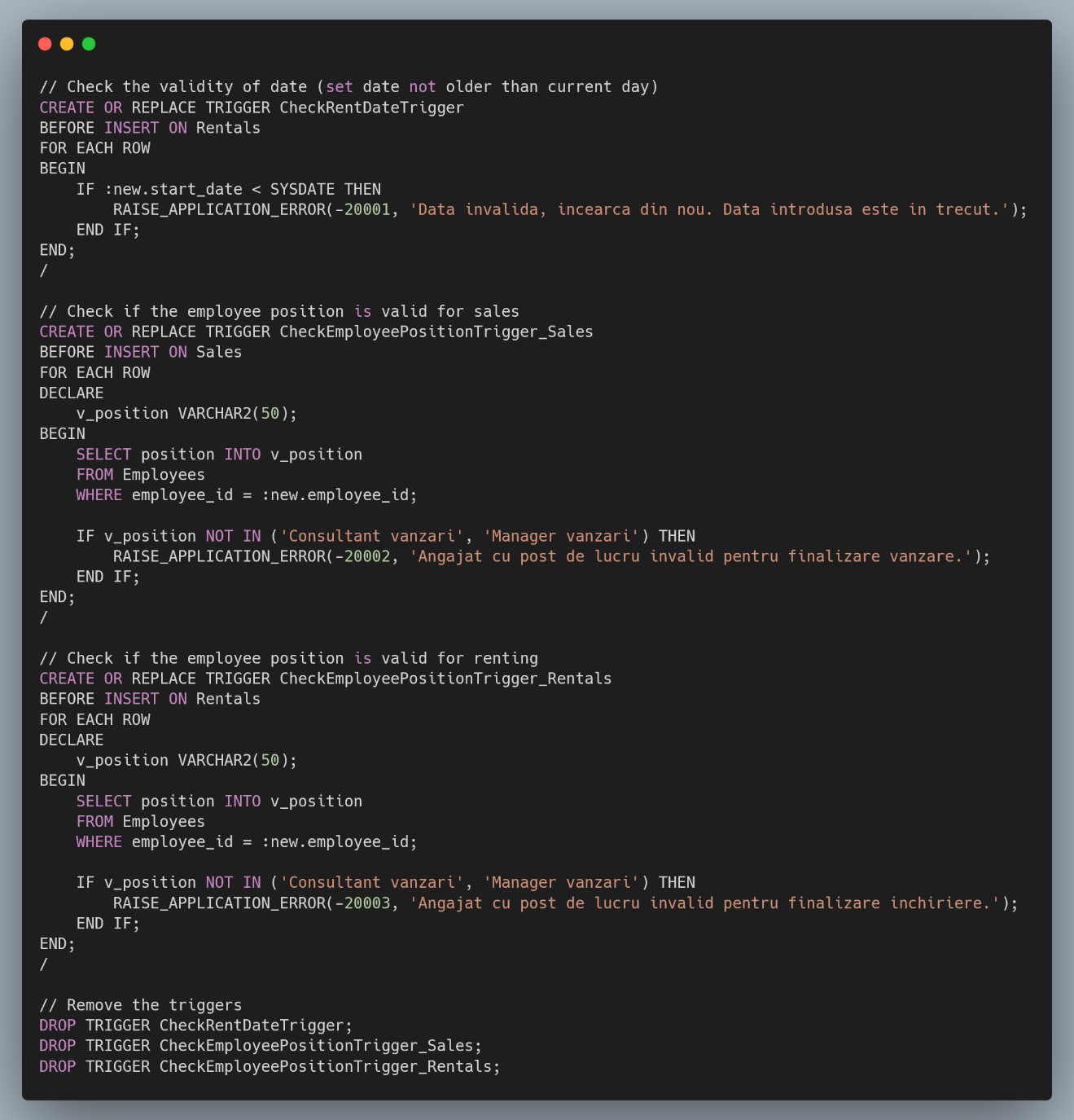


1. **Rezultat rulare instructiuni**



## Triggere

1. **Instructiuni**



1. **Rezultate rulare instructiuni cu exemplificare**

