# Sistem de Gestionare a Vânzărilor într-o Companie de Retail

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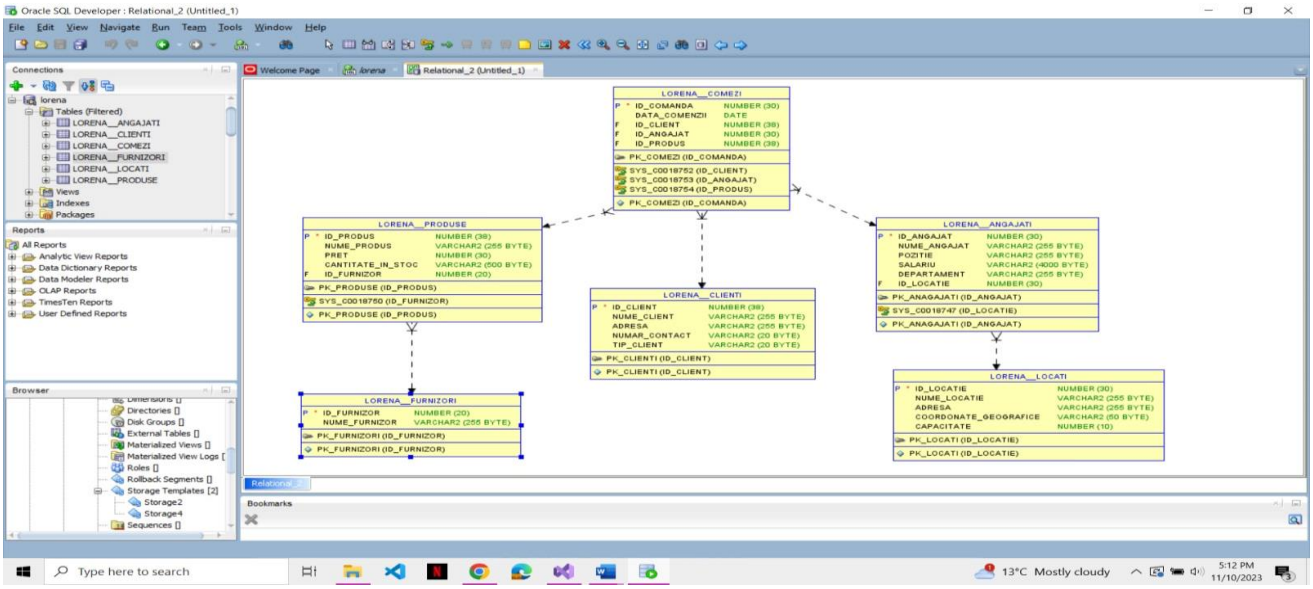
GRUPA:1054

1. **Descrierea temei economice alese (max. ½ pag).**

Tema economică aleasă pentru acest proiect este "Sistem de Gestionare a Vânzărilor într-o Companie de Retail." Companiile de retail se confruntă cu o multitudine de operațiuni, cum ar fi gestionarea stocurilor, urmărirea vânzărilor, gestionarea clienților și plăților. Scopul acestui proiect este de a dezvolta o bază de date eficientă care să faciliteze gestionarea acestor operațiuni într-un mod mai organizat și mai eficient. Principalele obiective ale proiectului includ:

-Urmărirea stocurilor disponibile pentru produsele din magazine,inregistrarea comenzilor clienților și gestionarea acestora.,gestionarea detaliilor despre clienți și a istoricului comenzilor.,monitorizarea plăților și încasărilor de la clienți,asocierea angajaților cu diferite departamente și responsabilități si  urmărirea locațiilor fizice ale magazinelor.

**2.Schema conceptuală pentru modelarea temei alese (minim 4 tabele). Din schemă va trebui să rezulte tipul legăturilor dintre entități.**



## 3.Crearea tabelelor (min. 4 tabele)

```
CREATE TABLE Lorena__Furnizori (
   ID_furnizor NUMBER(20) CONSTRAINT pk_furnizori PRIMARY KEY,
   Nume_furnizor VARCHAR(255));
```

Welcome Page | lorena | LORENA__FURNIZORI

Columns | Data | Model | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies | Details | Partitions | Indexes | SQL

Actions...

| | COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|---|
| 1 | ID_FURNIZOR | NUMBER(20,0) | No | (null) | 1 | (null) |
| 2 | NUME_FURNIZOR | VARCHAR2(255 BYTE) | Yes | (null) | 2 | (null) |

```
CREATE TABLE Lorena__Locati (
   ID_locatie NUMBER(30) CONSTRAINT pk_locati PRIMARY KEY,
   Nume_locatie VARCHAR(255),
   Adresa VARCHAR(255),
   Coordonate_geografice VARCHAR(50),
   Capacitate NUMBER(10));
```

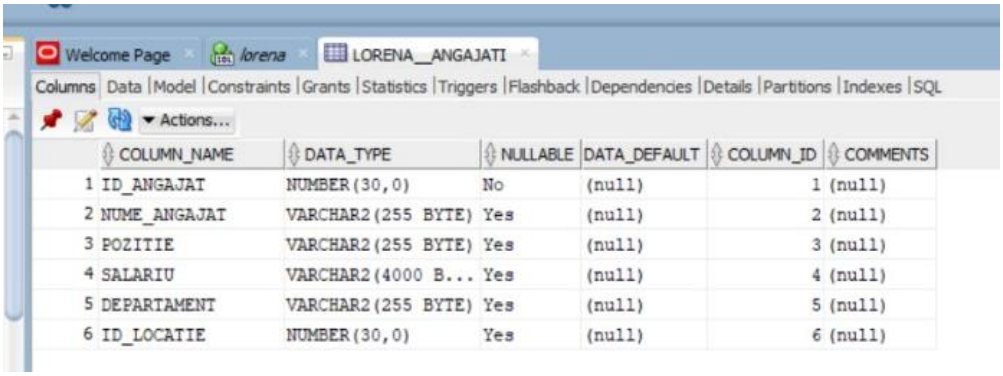
Welcome Page | lorena | LORENA__LOCATI

Columns | Data | Model | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies | Details | Partitions | Indexes | SQL

Actions...

| | COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|---|
| 1 | ID_LOCATIE | NUMBER(30,0) | No | (null) | 1 | (null) |
| 2 | NUME_LOCATIE | VARCHAR2(255 BYTE) | Yes | (null) | 2 | (null) |
| 3 | ADRESA | VARCHAR2(255 BYTE) | Yes | (null) | 3 | (null) |
| 4 | COORDONATE_GEO... | VARCHAR2(50 BYTE) | Yes | (null) | 4 | (null) |
| 5 | CAPACITATE | NUMBER(10,0) | Yes | (null) | 5 | (null) |

```
CREATE TABLE Lorena__Angajati (
   ID_angajat NUMBER(30) CONSTRAINT pk_anagajati PRIMARY KEY,
   Nume_angajat VARCHAR(255),
   Pozitie VARCHAR(255),
   Salariu VARCHAR(4000),
   Departament VARCHAR(255),
   ID_locatie NUMBER(30),
   FOREIGN KEY (ID_locatie) REFERENCES Lorena__Locati(ID_locatie));
```



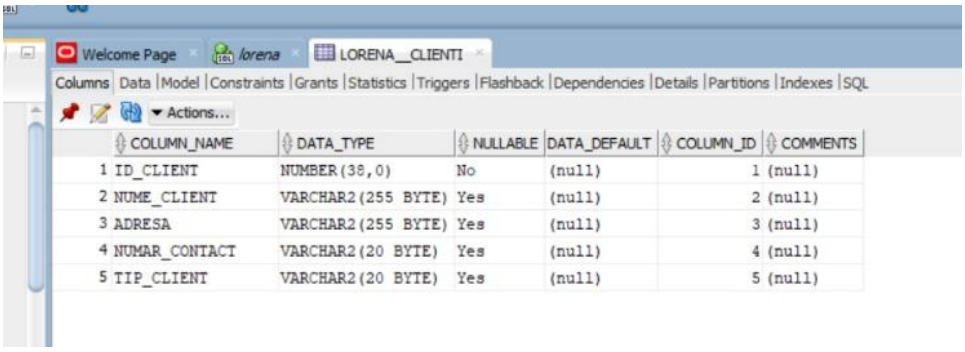
Welcome Page | lorena | LORENA__ANGAJATI

Columns | Data | Model | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies | Details | Partitions | Indexes | SQL

Actions...

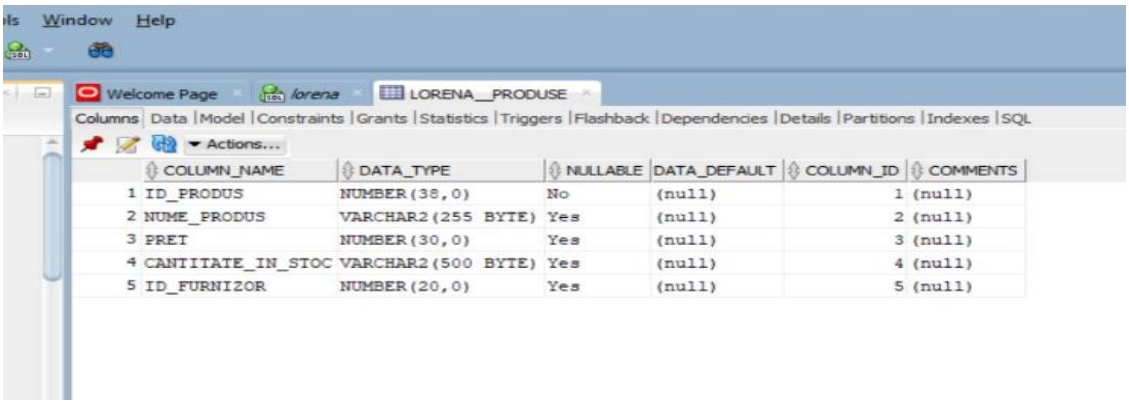
| | COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|---|
| 1 | ID_ANGAJAT | NUMBER(30,0) | No | (null) | 1 | (null) |
| 2 | NUME_ANGAJAT | VARCHAR2(255 BYTE) | Yes | (null) | 2 | (null) |
| 3 | POZITIE | VARCHAR2(255 BYTE) | Yes | (null) | 3 | (null) |
| 4 | SALARIU | VARCHAR2(4000 B... | Yes | (null) | 4 | (null) |
| 5 | DEPARTAMENT | VARCHAR2(255 BYTE) | Yes | (null) | 5 | (null) |
| 6 | ID_LOCATIE | NUMBER(30,0) | Yes | (null) | 6 | (null) |

```
CREATE TABLE Lorena__Clienti (
   ID_client NUMBER(38) CONSTRAINT pk_clienti PRIMARY KEY,
   Nume_client VARCHAR(255),
   Adresa VARCHAR(255),
   Numar_contact VARCHAR(20),
   Tip_client VARCHAR(20) -- persoană fizică sau juridică);
```



| | COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|---|
| 1 | ID_CLIENT | NUMBER(38,0) | No | (null) | 1 | (null) |
| 2 | NUME_CLIENT | VARCHAR2(255 BYTE) | Yes | (null) | 2 | (null) |
| 3 | ADRESA | VARCHAR2(255 BYTE) | Yes | (null) | 3 | (null) |
| 4 | NUMAR_CONTACT | VARCHAR2(20 BYTE) | Yes | (null) | 4 | (null) |
| 5 | TIP_CLIENT | VARCHAR2(20 BYTE) | Yes | (null) | 5 | (null) |

```
CREATE TABLE Produse (
ID_produs INT PRIMARY KEY,
Nume_produs VARCHAR(255),
Pret DECIMAL(10, 2),
Cantitate_stoc INT,
ID_furnizor INT,
FOREIGN KEY (ID_furnizor) REFERENCES Furnizori(ID_furnizor));
```



| | COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|---|
| 1 | ID_PRODUS | NUMBER(38,0) | No | (null) | 1 | (null) |
| 2 | NUME_PRODUS | VARCHAR2(255 BYTE) | Yes | (null) | 2 | (null) |
| 3 | PRET | NUMBER(30,0) | Yes | (null) | 3 | (null) |
| 4 | CANTITATE_IN_STOC | VARCHAR2(500 BYTE) | Yes | (null) | 4 | (null) |
| 5 | ID_FURNIZOR | NUMBER(20,0) | Yes | (null) | 5 | (null) |

```
CREATE TABLE Lorena__Comezi (
   ID_comanda NUMBER(30) CONSTRAINT pk_comezi PRIMARY KEY,
   Data_comenzii DATE,
   ID_client NUMBER(38),
   ID_angajat NUMBER(30),
   ID_produs NUMBER(38),
   FOREIGN KEY (ID_client) REFERENCES Lorena__Clienti(ID_client),
   FOREIGN KEY (ID_angajat) REFERENCES Lorena__Angajati(ID_angajat),
   FOREIGN KEY (ID_produs) REFERENCES Lorena__Produse(ID_produs) );
```

Welcome Page | lorena | LORENA__COMEZI

Columns | Data | Model | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies | Details | Partitions | Indexes | SQL

Actions...

| | COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|---|
| 1 | ID_COMANDA | NUMBER(30,0) | No | (null) | 1 | (null) |
| 2 | DATA_COMENZII | DATE | Yes | (null) | 2 | (null) |
| 3 | ID_CLIENT | NUMBER(38,0) | Yes | (null) | 3 | (null) |
| 4 | ID_ANGAJAT | NUMBER(30,0) | Yes | (null) | 4 | (null) |
| 5 | ID_PRODUS | NUMBER(38,0) | Yes | (null) | 5 | (null) |

## 4.Actualizarea structurii tabelelor si modificarea restricțiilor de integritate (1p)

```
CREATE TABLE Lorena_comenzi_online as  select
id_comanda,id_angajat,id_produs,id_client,data_comenzii  from Lorena__comezi;
```

| | | | | |
|---|---|---|---|---|
| 1 | 4 | 6 | 2 | 01-MAY-23 |
| 2 | 6 | 1 | 5 | 08-JUL-22 |
| 3 | 1 | 2 | 1 | 23-OCT-23 |
| 4 | 9 | 5 | 9 | 04-DEC-22 |
| 5 | 8 | 10 | 4 | 01-SEP-23 |
| 6 | 2 | 4 | 3 | 09-APR-22 |
| 7 | 3 | 8 | 7 | 11-JUN-23 |
| 8 | 5 | 7 | 6 | 30-NOV-22 |
| 9 | 10 | 3 | 8 | 15-SEP-23 |
| 10 | 7 | 9 | 10 | 21-FEB-23 |

```
drop table lorena_comenzi_online;
```

```
Table LORENA_COMENZI_ONLINE dropped.
```

```
alter table Lorena__comezi

RENAME to Lorena__comenzi;
```

```
ALTER  TABLE LORENA__LOCATI
MODIFY (NUME_LOCATIE VARCHAR(100));
```

_LOCATI@lorena

Window Help

Welcome Page | lorena | LORENA__LOCATI

Columns | Data | Model | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies | Details | Partitions | Indexes | SQL

Actions...

| | COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|---|
| 1 | ID_LOCATIE | NUMBER(30,0) | No | (null) | 1 | (null) |
| 2 | NUME_LOCATIE | VARCHAR2(100 BYTE) | Yes | (null) | 2 | (null) |
| 3 | ADRESA | VARCHAR2(255 BYTE) | Yes | (null) | 3 | (null) |
| 4 | CAPACITATE | NUMBER(10,0) | Yes | (null) | 4 | (null) |

```
ALTER TABLE LORENA__FURNIZORI
MODIFY(NUME_FURNIZOR VARCHAR(150));
```

Welcome Page | lorena | LORENA__FURNIZORI

Columns | Data | Model | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies | Details | Partitions | Indexes | SQL

Actions...

| | COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|---|
| 1 | ID_FURNIZOR | NUMBER(20,0) | No | (null) | 1 | (null) |
| 2 | NUME_FURNIZOR | VARCHAR2(150 BYTE) | Yes | (null) | 2 | (null) |

```
ALTER TABLE LORENA__CLIENTI
MODIFY (TIP_CLIENT VARCHAR2(15));
```

```
alter table lorena__furnizori
add(perioada_contract number(2));
```

Script Output | Query Result

All Rows Fetched: 11 in 0.025 seconds

| | ID_FURNIZOR | NUME_FURNIZOR | PERIOADA_CONTRACT |
|---|---|---|---|
| 1 | 1 | Square | (null) |
| 2 | 2 | Shopify | (null) |
| 3 | 3 | Toast | (null) |
| 4 | 4 | Vend | (null) |
| 5 | 5 | Lightspeed | (null) |
| 6 | 6 | NCR Retail | (null) |
| 7 | 7 | Microsoft Dynamics 365 Retail | (null) |
| 8 | 8 | Oracle Retail | (null) |
| 9 | 9 | Clover | (null) |
| 10 | 10 | Epicor Retail | (null) |
| 11 | 11 | Epicor | (null) |

```
alter table lorena__furnizori
add constraint check_contract CHECK (perioada_contract>1);
```

```
alter table lorena__furnizori
disable constraint check_contract;

alter table lorena__furnizori
drop column perioada_contract;
```

Script Output | Query Result

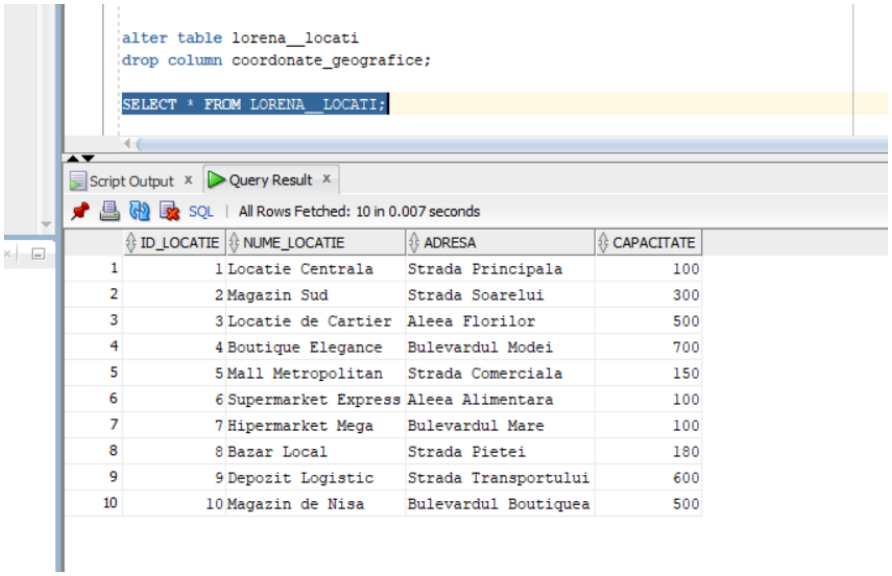
All Rows Fetched: 11 in 0.037 seconds

| | ID_FURNIZOR | NUME_FURNIZOR |
|---|---|---|
| 1 | 1 | Square |
| 2 | 2 | Shopify |
| 3 | 3 | Toast |
| 4 | 4 | Vend |
| 5 | 5 | Lightspeed |
| 6 | 6 | NCR Retail |
| 7 | 7 | Microsoft Dynamics 365 Retail |
| 8 | 8 | Oracle Retail |
| 9 | 9 | Clover |
| 10 | 10 | Epicor Retail |
| 11 | 11 | Epicor |

Bookmarks

alter table lorena__locati

**drop column** coordonate_geografice;



```
alter table lorena__locati
drop column coordonate_geografice;

SELECT * FROM LORENA__LOCATI;
```

Script Output | Query Result

SQL | All Rows Fetched: 10 in 0.007 seconds

| | ID_LOCATIE | NUME_LOCATIE | ADRESA | CAPACITATE |
|---|---|---|---|---|
| 1 | 1 | Locatie Centrala | Strada Principala | 100 |
| 2 | 2 | Magazin Sud | Strada Soarelui | 300 |
| 3 | 3 | Locatie de Cartier | Aleea Florilor | 500 |
| 4 | 4 | Boutique Elegance | Bulevardul Modei | 700 |
| 5 | 5 | Mall Metropolitan | Strada Comerciala | 150 |
| 6 | 6 | Supermarket Express | Aleea Alimentara | 100 |
| 7 | 7 | Hipermarket Mega | Bulevardul Mare | 100 |
| 8 | 8 | Bazar Local | Strada Pietei | 180 |
| 9 | 9 | Depozit Logistic | Strada Transportului | 600 |
| 10 | 10 | Magazin de Nisa | Bulevardul Boutiquea | 500 |

## 5.Adăugarea (min. 10) de înregistrări în fiecare tabelă (1p)

```
INSERT INTO lorena__furnizori (id_furnizor,nume_furnizor )Values (1,'Square');
INSERT INTO lorena__furnizori (id_furnizor,nume_furnizor  )Values (2,'Shopify');
INSERT INTO lorena__furnizori (id_furnizor,nume_furnizor )Values (3,'Toast');
INSERT INTO lorena__furnizori (id_furnizor,nume_furnizor  )Values (4,'Vend');
INSERT INTO lorena__furnizori (id_furnizor,nume_furnizor  )Values (5,'Lightspeed');
INSERT INTO lorena__furnizori (id_furnizor,nume_furnizor )Values (6,'NCR Retail');
INSERT INTO lorena__furnizori (id_furnizor,nume_furnizor  )Values (7,'Microsoft Dynamics
365 Retail');
INSERT INTO lorena__furnizori (id_furnizor,nume_furnizor )Values (8,'Oracle Retail');
INSERT INTO lorena__furnizori (id_furnizor,nume_furnizor )Values (9,'Clover');
INSERT INTO lorena__furnizori (id_furnizor,nume_furnizor  )Values (10,'Epicor Retail');
```

Script Output | Query Result

SQL | All Rows Fetched: 10 in 0.03 seconds

| | ID_FURNIZOR | NUME_FURNIZOR |
|---|---|---|
| 1 | 1 | Square |
| 2 | 2 | Shopify |
| 3 | 3 | Toast |
| 4 | 4 | Vend |
| 5 | 5 | Lightspeed |
| 6 | 6 | NCR Retail |
| 7 | 7 | Microsoft Dynamics 365 Retail |
| 8 | 8 | Oracle Retail |
| 9 | 9 | Clover |
| 10 | 10 | Epicor Retail |

```
INSERT INTO lorena__locati(id_locatie,nume_locatie,adresa,capacitate) values(1,'Locatie Centrala', 'Strada Principala',100);

INSERT INTO lorena__locati(id_locatie,nume_locatie,adresa,capacitate) values(2,'Magazin Sud', 'Strada Soarelui',300);

INSERT INTO lorena__locati(id_locatie,nume_locatie,adresa,capacitate) values(3,'Locatie de Cartier', 'Aleea Florilor',500);

INSERT INTO lorena__locati(id_locatie,nume_locatie,adresa,capacitate) values(4,'Boutique Elegance', 'Bulevardul Modei',700);

INSERT INTO lorena__locati(id_locatie,nume_locatie,adresa,capacitate) values(5,'Mall Metropolitan', 'Strada Comerciala',150);

INSERT INTO lorena__locati(id_locatie,nume_locatie,adresa,capacitate) values(6,'Supermarket Express', 'Aleea Alimentara',100);

INSERT INTO lorena__locati(id_locatie,nume_locatie,adresa,capacitate) values(7,'Hipermarket Mega', 'Bulevardul Mare',100);

INSERT INTO lorena__locati(id_locatie,nume_locatie,adresa,capacitate) values(8,'Bazar Local', 'Strada Pietei ',180);

INSERT INTO lorena__locati(id_locatie,nume_locatie,adresa,capacitate) values(9,'Depozit Logistic', 'Strada Transportului',600);

INSERT INTO lorena__locati(id_locatie,nume_locatie,adresa,capacitate) values(10,'Magazin de Nisa', 'Bulevardul Boutiquea',500);
```

Script Output | Query Result

All Rows Fetched: 10 in 0.08 seconds

| | ID_LOCATIE | NUME_LOCATIE | ADRESA | CAPACITATE |
|---|---|---|---|---|
| 1 | 1 | Locatie Centrala | Strada Principala | 100 |
| 2 | 2 | Magazin Sud | Strada Soarelui | 300 |
| 3 | 3 | Locatie de Cartier | Aleea Florilor | 500 |
| 4 | 4 | Boutique Elegance | Bulevardul Modei | 700 |
| 5 | 5 | Mall Metropolitan | Strada Comerciala | 150 |
| 6 | 6 | Supermarket Express | Aleea Alimentara | 100 |
| 7 | 7 | Hipermarket Mega | Bulevardul Mare | 100 |
| 8 | 8 | Bazar Local | Strada Pietei | 180 |
| 9 | 9 | Depozit Logistic | Strada Transportului | 600 |
| 10 | 10 | Magazin de Nisa | Bulevardul Boutiquea | 500 |

```
INSERT INTO lorena__angajati (id_angajat,nume_angajat,pozitie,salariu,departament,id_locatie)
values (1,'mihaela','manager',10000,'vanzari',2);

INSERT INTO lorena__angajati (id_angajat,nume_angajat,pozitie,salariu,departament,id_locatie)
values (2,'andrei','intern',10000,'vanzari',1);

INSERT INTO lorena__angajati (id_angajat,nume_angajat,pozitie,salariu,departament,id_locatie)
values (3,'raul','muncitor',10000,'vanzari',5);

INSERT INTO lorena__angajati (id_angajat,nume_angajat,pozitie,salariu,departament,id_locatie)
values (4,'ioana','manager',10000,'vanzari',3);

INSERT INTO lorena__angajati (id_angajat,nume_angajat,pozitie,salariu,departament,id_locatie)
values (5,'elena','intern',10000,'vanzari',9);

INSERT INTO lorena__angajati (id_angajat,nume_angajat,pozitie,salariu,departament,id_locatie)
values (6,'mihai','intern',10000,'vanzari',4);

INSERT INTO lorena__angajati (id_angajat,nume_angajat,pozitie,salariu,departament,id_locatie)
values (7,'rebeca','secretara',10000,'vanzari',8);

INSERT INTO lorena__angajati (id_angajat,nume_angajat,pozitie,salariu,departament,id_locatie)
values (8,'stefan','intern',10000,'vanzari',7);

INSERT INTO lorena__angajati (id_angajat,nume_angajat,pozitie,salariu,departament,id_locatie)
values (9,'matei','manager',10000,'vanzari',10);

INSERT INTO lorena__angajati (id_angajat,nume_angajat,pozitie,salariu,departament,id_locatie)
values (10,'andreea','secretara',10000,'vanzari',6);
```

| | ID_ANGAJAT | NUME_ANGAJAT | POZITIE | SALARIU | DEPARTAMENT | ID_LOCATIE |
|---|---|---|---|---|---|---|
| 1 | 1 | mihaela | manager | 10000 | vanzari | 2 |
| 2 | 2 | andrei | intern | 10000 | vanzari | 1 |
| 3 | 3 | raul | muncitor | 10000 | vanzari | 5 |
| 4 | 4 | ioana | manager | 10000 | vanzari | 3 |
| 5 | 5 | elena | intern | 10000 | vanzari | 9 |
| 6 | 6 | mihai | intern | 10000 | vanzari | 4 |
| 7 | 7 | rebeca | secretara | 10000 | vanzari | 8 |
| 8 | 8 | stefan | intern | 10000 | vanzari | 7 |
| 9 | 9 | matei | manager | 10000 | vanzari | 10 |
| 10 | 10 | andreea | secretara | 10000 | vanzari | 6 |

Bookmarks

```
INSERT INTO lorena__clienti (id_client,nume_client,adresa,numar_contact,tip_client)
values(1,'vasile','ilfov',0720897678,'fizica');

INSERT INTO lorena__clienti (id_client,nume_client,adresa,numar_contact,tip_client)
values(2,'leon','bucuresti',072678332,'fizica');

INSERT INTO lorena__clienti (id_client,nume_client,adresa,numar_contact,tip_client)
values(3,'ion','ilfov',0730558971,'fizica');

INSERT INTO lorena__clienti (id_client,nume_client,adresa,numar_contact,tip_client)
values(4,'andrada','ilfov',0758007845,'juridica');

INSERT INTO lorena__clienti (id_client,nume_client,adresa,numar_contact,tip_client)
values(5,'laura','ilfov',0723341879,'juridica');

INSERT INTO lorena__clienti (id_client,nume_client,adresa,numar_contact,tip_client)
values(6,',marius','ilfov',07208777,'fizica');

INSERT INTO lorena__clienti (id_client,nume_client,adresa,numar_contact,tip_client)
values(7,'alina','ilfov',0739854799,'juridica');

INSERT INTO lorena__clienti (id_client,nume_client,adresa,numar_contact,tip_client)
values(8,'nicu','ilfov',0720897678,'fizica');

INSERT INTO lorena__clienti (id_client,nume_client,adresa,numar_contact,tip_client)
values(9,'andrei','ilfov',0720997425,'juridica');

INSERT INTO lorena__clienti (id_client,nume_client,adresa,numar_contact,tip_client)
values(10,'ionela','ilfov',0760789547,'fizica');
```

| | ID_CLIENT | NUME_CLIENT | ADRESA | NUMAR_CONTACT | TIP_CLIENT |
|---|---|---|---|---|---|
| 1 | 1 | vasile | ilfov | 720897678 | fizica |
| 2 | 2 | leon | bucuresti | 072678332 | fizica |
| 3 | 3 | ion | ilfov | 730558971 | fizica |
| 4 | 4 | andrada | ilfov | 758007845 | juridica |
| 5 | 5 | laura | ilfov | 723341879 | juridica |
| 6 | 6 | ,marius | ilfov | 07208777 | fizica |
| 7 | 7 | alina | ilfov | 739854799 | juridica |
| 8 | 8 | nicu | ilfov | 720897678 | fizica |
| 9 | 9 | andrei | ilfov | 720997425 | juridica |
| 10 | 10 | ionela | ilfov | 760789547 | fizica |

Bookmarks

```
INSERT INTO lorena__produse (id_produs,nume_produs,pret,cantitate_in_stoc,id_furnizor)
values(1,'pantofi',400,600,9);

INSERT INTO lorena__produse (id_produs,nume_produs,pret,cantitate_in_stoc,id_furnizor)
values(2,'accesori',700,60,1);

INSERT INTO lorena__produse (id_produs,nume_produs,pret,cantitate_in_stoc,id_furnizor)
values(3,'cosmetice',100,300,2);

INSERT INTO lorena__produse (id_produs,nume_produs,pret,cantitate_in_stoc,id_furnizor)
values(4,'carti',450,230,5);

INSERT INTO lorena__produse (id_produs,nume_produs,pret,cantitate_in_stoc,id_furnizor)
values(5,'alimente',230,60,4);

INSERT INTO lorena__produse (id_produs,nume_produs,pret,cantitate_in_stoc,id_furnizor)
values(6,'bauturi',460,90,3);

INSERT INTO lorena__produse (id_produs,nume_produs,pret,cantitate_in_stoc,id_furnizor)
values(7,'electronice',340,250,6);

INSERT INTO lorena__produse (id_produs,nume_produs,pret,cantitate_in_stoc,id_furnizor)
values(8,'mobilier',50,120,10);

INSERT INTO lorena__produse (id_produs,nume_produs,pret,cantitate_in_stoc,id_furnizor)
values(9,'serivii it',800,100,7);

INSERT INTO lorena__produse (id_produs,nume_produs,pret,cantitate_in_stoc,id_furnizor)
values(10,'bijuterii',70,200,8);
```

| | ID_PRODUS | NUME_PRODUS | PRET | CANTITATE_IN_STOC | ID_FURNIZOR |
|---|---|---|---|---|---|
| 1 | 1 | pantofi | 400 | 600 | 6 |
| 2 | 2 | accesori | 700 | 60 | 1 |
| 3 | 3 | cosmetice | 100 | 300 | 2 |
| 4 | 4 | carti | 450 | 230 | 5 |
| 5 | 5 | alimente | 230 | 60 | 4 |
| 6 | 6 | bauturi | 460 | 90 | 3 |
| 7 | 7 | electronice | 340 | 250 | 6 |
| 8 | 8 | mobilier | 50 | 120 | 10 |
| 9 | 9 | serivii it | 800 | 100 | 7 |
| 10 | 10 | bijuterii | 70 | 200 | 8 |

Bookmarks

```
INSERT INTO lorena__comenzi(id_comanda,data_comenzii,id_client,id_angajat,id_produs)
values(1,to_date('01-05-2023','dd-mm-yyyy'),2,4,6);

INSERT INTO lorena__comenzi(id_comanda,data_comenzii,id_client,id_angajat,id_produs)
values(2,to_date('08-07-2022','dd-mm-yyyy'),5,6,1);

INSERT INTO lorena__comenzi(id_comanda,data_comenzii,id_client,id_angajat,id_produs)
values(3,to_date('23-10-2023','dd-mm-yyyy'),1,1,2);

INSERT INTO lorena__comenzi(id_comanda,data_comenzii,id_client,id_angajat,id_produs)
values(4,to_date('04-12-2022','dd-mm-yyyy'),9,9,5);

INSERT INTO lorena__comenzi(id_comanda,data_comenzii,id_client,id_angajat,id_produs)
values(5,to_date('01-09-2023','dd-mm-yyyy'),4,8,10);

INSERT INTO lorena__comenzi(id_comanda,data_comenzii,id_client,id_angajat,id_produs)
values(6,to_date('09-04-2022','dd-mm-yyyy'),3,2,4);

INSERT INTO lorena__comenzi(id_comanda,data_comenzii,id_client,id_angajat,id_produs)
values(7,to_date('11-06-2023','dd-mm-yyyy'),7,3,8);

INSERT INTO lorena__comenzi(id_comanda,data_comenzii,id_client,id_angajat,id_produs)
values(8,to_date('30-11-2022','dd-mm-yyyy'),6,5,7);

INSERT INTO lorena__comenzi(id_comanda,data_comenzii,id_client,id_angajat,id_produs)
values(9,to_date('15-09-2023','dd-mm-yyyy'),8,10,3);

INSERT INTO lorena__comenzi(id_comanda,data_comenzii,id_client,id_angajat,id_produs)
values(10,to_date('21-02-2023','dd-mm-yyyy'),10,7,9);
```

SQL | All Rows Fetched: 10 in 0.006 seconds

| | ID_COMANDA | DATA_COMENZII | ID_CLIENT | ID_ANGAJAT | ID_PRODUS |
|---|---|---|---|---|---|
| 1 | 1 | 01-MAY-23 | 2 | 4 | 6 |
| 2 | 2 | 08-JUL-22 | 5 | 6 | 1 |
| 3 | 3 | 23-OCT-23 | 1 | 1 | 2 |
| 4 | 4 | 04-DEC-22 | 9 | 9 | 5 |
| 5 | 5 | 01-SEP-23 | 4 | 8 | 10 |
| 6 | 6 | 09-APR-22 | 3 | 2 | 4 |
| 7 | 7 | 11-JUN-23 | 7 | 3 | 8 |
| 8 | 8 | 30-NOV-22 | 6 | 5 | 7 |
| 9 | 9 | 15-SEP-23 | 8 | 10 | 3 |
| 10 | 10 | 21-FEB-23 | 10 | 7 | 9 |

Bookmarks

## 6.Actualizarea înregistrărilor (1p)

--pentru tablea lorena__angajati:

```
alter table lorena__angajati
add id_superior number(30);

update lorena__angajati
set id_superior=case
when id_angajat=1 then 1
when id_angajat=4 then 1
when id_angajat=9 then 1
else null
end;
```

| | ID_ANGAJAT | NUME_ANGAJAT | POZITIE | SALARIU | DEPARTAMENT | ID_LOCATIE | ID_SUPERIOR |
|---|---|---|---|---|---|---|---|
| 1 | 1 | mihaela | manager | 10000 | vanzari | 2 | 1 |
| 2 | 2 | andrei | intern | 10000 | vanzari | 1 | (null) |
| 3 | 3 | raul | muncitor | 10000 | vanzari | 5 | (null) |
| 4 | 4 | ioana | manager | 10000 | vanzari | 3 | 1 |
| 5 | 5 | elena | intern | 10000 | vanzari | 9 | (null) |
| 6 | 6 | mihai | intern | 10000 | vanzari | 4 | (null) |
| 7 | 7 | rebeca | secretara | 10000 | vanzari | 8 | (null) |
| 8 | 8 | stefan | intern | 10000 | vanzari | 7 | (null) |
| 9 | 9 | matei | manager | 10000 | vanzari | 10 | 1 |
| 10 | 10 | andreea | secretara | 10000 | vanzari | 6 | (null) |

Bookmarks

```
update lorena__angajati
 set nume_angajat='cristian lorena'
 where id_angajat=1;
```

| | ID_ANGAJAT | NUME_ANGAJAT | POZITIE | SALARIU | DEPARTAMENT | ID_LOCATIE | ID_SUPERIOR |
|---|---|---|---|---|---|---|---|
| 1 | 1 | cristian lorena | manager | 10000 | vanzari | 2 | 1 |
| 2 | 2 | andrei | intern | 10000 | vanzari | 1 | (null) |
| 3 | 3 | raul | muncitor | 10000 | vanzari | 5 | (null) |
| 4 | 4 | ioana | manager | 10000 | vanzari | 3 | 1 |
| 5 | 5 | elena | intern | 10000 | vanzari | 9 | (null) |
| 6 | 6 | mihai | intern | 10000 | vanzari | 4 | (null) |
| 7 | 7 | rebeca | secretara | 10000 | vanzari | 8 | (null) |
| 8 | 8 | stefan | intern | 10000 | vanzari | 7 | (null) |
| 9 | 9 | matei | manager | 10000 | vanzari | 10 | 1 |
| 10 | 10 | andreea | secretara | 10000 | vanzari | 6 | (null) |

Bookmarks

```
update lorena__angajati
set salariu=salariu *0.85
where id_angajat in(2,5,6,8);
```

| | ID_ANGAJAT | NUME_ANGAJAT | POZITIE | SALARIU | DEPARTA... | ID_LOCATIE | ID_SUPERIOR |
|---|---|---|---|---|---|---|---|
| 1 | 1 | cristian lorena | manager | 10000 | vanzari | 2 | 1 |
| 2 | 2 | andrei | intern | 8500 | vanzari | 1 | (null) |
| 3 | 3 | raul | muncitor | 10000 | vanzari | 5 | (null) |
| 4 | 4 | ioana | manager | 10000 | vanzari | 3 | 1 |
| 5 | 5 | elena | intern | 8500 | vanzari | 9 | (null) |
| 6 | 6 | mihai | intern | 8500 | vanzari | 4 | (null) |
| 7 | 7 | rebeca | secretara | 10000 | vanzari | 8 | (null) |
| 8 | 8 | stefan | intern | 8500 | vanzari | 7 | (null) |
| 9 | 9 | matei | manager | 10000 | vanzari | 10 | 1 |
| 10 | 10 | andreea | secretara | 10000 | vanzari | 6 | (null) |

Bookmarks

```
update lorena__angajati
set salariu=salariu *1.20
where id_angajat in(1,4,9);
```

| | ID_ANGAJAT | NUME_ANGAJAT | POZITIE | SALARIU | DEPARTAMENT | ID_LOCATIE | ID_SUPERIOR |
|---|---|---|---|---|---|---|---|
| 1 | 1 | cristian lorena | manager | 12000 | vanzari | 2 | 1 |
| 2 | 2 | andrei | intern | 8500 | vanzari | 1 | (null) |
| 3 | 3 | raul | muncitor | 10000 | vanzari | 5 | (null) |
| 4 | 4 | ioana | manager | 12000 | vanzari | 3 | 1 |
| 5 | 5 | elena | intern | 8500 | vanzari | 9 | (null) |
| 6 | 6 | mihai | intern | 8500 | vanzari | 4 | (null) |
| 7 | 7 | rebeca | secretara | 11500 | vanzari | 8 | (null) |
| 8 | 8 | stefan | intern | 8500 | vanzari | 7 | (null) |
| 9 | 9 | matei | manager | 12000 | vanzari | 10 | 1 |
| 10 | 10 | andreea | secretara | 11500 | vanzari | 6 | (null) |

```
update lorena__angajati
set salariu=salariu *1.15
where id_angajat in(10,7);
```

```
update lorena__angajati
set departament='marketing'
where lower(nume_angajat) like 'm%';
```

| ID_ANGAJAT | NUME_ANGAJAT | POZITIE | SALARIU | DEPARTAMENT | ID_LOCATIE | ID_SUPERIOR |
|---|---|---|---|---|---|---|
| 1 | cristian lorena | manager | 12000 | vanzari | 2 | 1 |
| 2 | andrei | intern | 8500 | vanzari | 1 | (null) |
| 3 | raul | muncitor | 10000 | vanzari | 5 | (null) |
| 4 | ioana | manager | 12000 | vanzari | 3 | 1 |
| 5 | elena | intern | 8500 | vanzari | 9 | (null) |
| 6 | mihai | intern | 8500 | marketing | 4 | (null) |
| 7 | rebeca | secretara | 11500 | vanzari | 8 | (null) |
| 8 | stefan | intern | 8500 | vanzari | 7 | (null) |
| 9 | matei | manager | 12000 | marketing | 10 | 1 |
| 10 | andreea | secretara | 11500 | vanzari | 6 | (null) |

```
update lorena__angajati
set departament='incasari'
where id_angajat in(2,3,5,10);
```

| | ID_ANGAJAT | NUME_ANGAJAT | POZITIE | SALARIU | DEPARTAMENT | ID_LOCATIE | ID_SUPERIOR |
|---|---|---|---|---|---|---|---|
| 1 | 1 | cristian lorena | manager | 12000 | vanzari | 2 | 1 |
| 2 | 2 | andrei | intern | 8500 | incasari | 1 | (null) |
| 3 | 3 | raul | muncitor | 10000 | incasari | 5 | (null) |
| 4 | 4 | ioana | manager | 12000 | vanzari | 3 | 1 |
| 5 | 5 | elena | intern | 8500 | incasari | 9 | (null) |
| 6 | 6 | mihai | intern | 8500 | marketing | 4 | (null) |
| 7 | 7 | rebeca | secretara | 11500 | vanzari | 8 | (null) |
| 8 | 8 | stefan | intern | 8500 | vanzari | 7 | (null) |
| 9 | 9 | matei | manager | 12000 | marketing | 10 | 1 |
| 10 | 10 | andreea | secretara | 11500 | incasari | 6 | (null) |

Bookmarks

```
update lorena__clienti
set numar_contact='073058962'
where id_client=2;
```

| | ID_CLIENT | NUME_CLIENT | ADRESA | NUMAR_CONTACT | TIP_CLIENT |
|---|---|---|---|---|---|
| 1 | 1 | vasile | ilfov | 720897678 | fizica |
| 2 | 2 | leon | bucuresti | 073058962 | fizica |
| 3 | 3 | ion | ilfov | 730558971 | fizica |
| 4 | 4 | andrada | ilfov | 758007845 | juridica |
| 5 | 5 | laura | ilfov | 723341879 | juridica |
| 6 | 6 | ,marius | ilfov | 07208777 | fizica |
| 7 | 7 | alina | ilfov | 739854799 | juridica |
| 8 | 8 | nicu | ilfov | 720897678 | fizica |
| 9 | 9 | andrei | ilfov | 720997425 | juridica |
| 10 | 10 | ionela | ilfov | 760789547 | fizica |

```
update lorena__clienti
set numar_contact='073089662'
where lower(nume_client)=',marius';
```

| | ID_CLIENT | NUME_CLIENT | ADRESA | NUMAR_CONTACT | TIP_CLIENT |
|---|---|---|---|---|---|
| 1 | 1 | vasile | ilfov | 720897678 | fizica |
| 2 | 2 | leon | bucuresti | 073058962 | fizica |
| 3 | 3 | ion | ilfov | 730558971 | fizica |
| 4 | 4 | andrada | ilfov | 758007845 | juridica |
| 5 | 5 | laura | ilfov | 723341879 | juridica |
| 6 | 6 | ,marius | ilfov | 07208777 | fizica |
| 7 | 7 | alina | ilfov | 739854799 | juridica |
| 8 | 8 | nicu | ilfov | 720897678 | fizica |
| 9 | 9 | andrei | ilfov | 720997425 | juridica |
| 10 | 10 | ionela | ilfov | 760789547 | fizica |

Bookmarks

```
update lorena__clienti
set nume_client='marius'
where id_client=6;
```

| | ID_CLIENT | NUME_CLIENT | ADRESA | NUMAR_CONTACT | TIP_CLIENT |
|---|---|---|---|---|---|
| 1 | 1 | vasile | ilfov | 720897678 | fizica |
| 2 | 2 | leon | bucuresti | 073058962 | fizica |
| 3 | 3 | ion | ilfov | 730558971 | fizica |
| 4 | 4 | andrada | ilfov | 758007845 | juridica |
| 5 | 5 | laura | ilfov | 723341879 | juridica |
| 6 | 6 | marius | ilfov | 07208777 | fizica |
| 7 | 7 | alina | ilfov | 739854799 | juridica |
| 8 | 8 | nicu | ilfov | 720897678 | fizica |
| 9 | 9 | andrei | ilfov | 720997425 | juridica |
| 10 | 10 | ionela | ilfov | 760789547 | fizica |

```
update lorena__clienti
set adresa='sector3'
where id_client between 3 and 7;
```

All Rows Fetched: 10 in 0.017 seconds

| | ID_CLIENT | NUME_CLIENT | ADRESA | NUMAR_CONTACT | TIP_CLIENT |
|---|---|---|---|---|---|
| 1 | 1 | vasile | ilfov | 720897678 | fizica |
| 2 | 2 | leon | bucuresti | 073058962 | fizica |
| 3 | 3 | ion | sector3 | 730558971 | fizica |
| 4 | 4 | andrada | sector3 | 758007845 | juridica |
| 5 | 5 | laura | sector3 | 723341879 | juridica |
| 6 | 6 | marius | sector3 | 073089662 | fizica |
| 7 | 7 | alina | sector3 | 739854799 | juridica |
| 8 | 8 | nicu | ilfov | 720897678 | fizica |
| 9 | 9 | andrei | ilfov | 720997425 | juridica |
| 10 | 10 | ionela | ilfov | 760789547 | fizica |

---

***Obtiune MERGE -chat gpt**

```
MERGE INTO Lorena__Furnizori target
USING (  SELECT     1 AS ID_furnizor, 'Updated Supplier' AS Nume_furnizor FROM dual)
 source
ON (target.ID_furnizor = source.ID_furnizor)
WHEN MATCHED THEN
   UPDATE
SET     target.Nume_furnizor = source.Nume_furnizor
WHEN NOT MATCHED THEN
   INSERT (ID_furnizor, Nume_furnizor)
```

```
VALUES (source.ID_furnizor, source.Nume_furnizor);


select * from lorena__furnizori;
```

Script Output | Query Result

All Rows Fetched: 11 in 0.004 seconds

| | ID_FURNIZOR | NUME_FURNIZOR |
|---|---|---|
| 1 | 1 | Updated Supplier |
| 2 | 2 | Shopify |
| 3 | 3 | Toast |
| 4 | 4 | Vend |
| 5 | 5 | Lightspeed |
| 6 | 6 | NCR Retail |
| 7 | 7 | Microsoft Dynamics 365 Retail |
| 8 | 8 | Oracle Retail |
| 9 | 9 | Clover |
| 10 | 10 | Epicor Retail |

Bookmarks

## 7. Ștergerea și recuperarea unei tabele (1p)

```
DROP TABLE Lorena__Furnizori CASCADE CONSTRAINTS;

FLASHBACK TABLE Lorena__Furnizori TO BEFORE DROP;
```

```
Table LORENA__FURNIZORI dropped.


Flashback succeeded.
```

8. Exemple de interogări variate, menționate mai sus (1,5p)

--1

--Sa se afiseze numele furnizorului si vloarea produselor vandute  unui client

```
select * from lorena__produse;
SELECT f.nume_furnizor,sum(p.cantitate_in_stoc*p.pret) as valoare
from lorena__furnizori f,lorena__produse p
where f.id_furnizor=p.id_furnizor
group by f.nume_furnizor;
```

Script Output | Query Result | Query Result 1

SQL | All Rows Fetched: 10 in 0.004 seconds

| | NUME_FURNIZOR | VALOARE |
|---|---|---|
| 1 | Square | 42000 |
| 2 | Shopify | 30000 |
| 3 | Toast | 41400 |
| 4 | Vend | 13800 |
| 5 | Lightspeed | 103500 |
| 6 | NCR Retail | 325000 |
| 7 | Microsoft Dynamics 365 Retail | 80000 |
| 8 | Oracle Retail | 14000 |
| 9 | Epicor Retail | 6000 |
| 10 | Epicor | 1400 |

Bookmarks

--2

--Sa se afisez id_locatie si denumire_locatie pentru anagjatii care au salariul mai mare decat 10000

```
SELECT a.id_locatie,l.nume_locatie
from lorena__angajati a,lorena__locati l
where a.id_locatie=l.id_locatie
group  by  a.id_locatie,l.nume_locatie
having max(salariu)>10000;
```

Script Output | Query Result | Query Result 1 | Query Result

SQL | All Rows Fetched: 5 in 0.013 seconds

| | ID_LOCATIE | NUME_LOCATIE |
|---|---|---|
| 1 | 3 | Locatie de Cartier |
| 2 | 10 | Magazin de Nisa |
| 3 | 6 | Supermarket Express |
| 4 | 8 | Bazar Local |
| 5 | 2 | Magazin Sud |

--3

--Sa se afiseze numele,salariul,pozitia,locatia pentru angajati care au departamentul cuprinde cuvantul vanzari sau marketing si locatie este intre 7 si 9.

```
SELECT a.nume_angajat,a.salariu,a.pozitie,l.id_locatie
from lorena__angajati a,lorena__locati l
 where a.id_locatie=l.id_locatie
 and (lower(a.departament )like '%vanzari%' or lower(a.departament)like '%marketing%')
 and l.id_locatie in(7,8,9);
```

Script Output | Query Result | Query Result 1 | Query Result 2

SQL | All Rows Fetched: 2 in 0.008 seconds

| | NUME_ANGAJAT | SALARIU | POZITIE | ID_LOCATIE |
|---|---|---|---|---|
| 1 | rebeca | 11600 | secretara | 8 |
| 2 | stefan | 8600 | intern | 7 |

--4

--sa se afiseze numarul comenzii,data comenzii,valoarea totala(sum(cantitate*pret) si numarul de produse pentru anul 2022 si sa contina cel putin un produse comandate

```
select c.id_comanda,c.data_comenzii,sum(p.cantitate_in_stoc*p.pret)as valoareTotala
,count(p.id_produs) as numarProduse

from lorena__comenzi c ,lorena__produse p

where c.id_produs=p.id_produs

and extract(year from c.data_comenzii)=2022

group by c.id_comanda,c.data_comenzii

having count(p.id_produs)>=1;
```

--sa se afiseze numele locatiei,capacitatea si numele angajataului care isi incepe

Script Output | Query Result | Query Result 1 | Query Result 2

SQL | All Rows Fetched: 4 in 0.017 seconds

| | ID_COMANDA | DATA_COMENZII | VALOARETOTALA | NUMARPRODUSE |
|---|---|---|---|---|
| 1 | 2 | 08-JUL-22 | 240000 | 1 |
| 2 | 4 | 04-DEC-22 | 13800 | 1 |
| 3 | 6 | 09-APR-22 | 103500 | 1 |
| 4 | 8 | 30-NOV-22 | 85000 | 1 |

--5

--sa se afiseze numele locatiei,capacitatea si  numele angajataului care isi incepe numele cu litera A .

```
SELECT l.nume_locatie,l.capacitate,a.nume_angajat,a.salariu
from lorena__angajati a,lorena__locati l
where a.id_locatie=l.id_locatie
and lower(a.nume_angajat) like 'a%' ;
```

Script Output × | Query Result × | Query Result 1 × | Query Result 2 × | Query Result 3 × | Query Result 4 × | Q

SQL | All Rows Fetched: 2 in 0.02 seconds

| | NUME_LOCATIE | CAPACITATE | NUME_ANGAJAT | SALARIU |
|---|---|---|---|---|
| 1 | Locatie Centrala | 100 | andrei | 10000 |
| 2 | Supermarket Express | 100 | andreea | 10000 |

--6

--Sa se afiseze numele,departamentul si numarul de comenzi incheiate de angajatii din departamentul vanzari sau incasari in luna sepetembrie.

```
select a.nume_angajat,a.departament,count(c.id_comanda) as numarComenzi
from lorena__angajati a,lorena__comenzi c
where c.id_angajat=a.id_angajat
and (a.departament like 'vanzari' or a.departament like 'incasari')
and extract(month from c.data_comenzii)=9
group by a.nume_angajat,a.departament;
```

All Rows Fetched: 4 in 0.018 seconds

| | NUME_ANGAJAT | DEPARTAMENT | NUMARCOMENZI |
|---|---|---|---|
| 1 | stefan | vanzari | 1 |
| 2 | andreea | incasari | 1 |
| 3 | maria | vanzari | 1 |
| 4 | roxana | vanzari | 1 |

--7

--Sa se afiseze toti angajatii care au incheiat comenzi precum si cei care nu au incheiat comenzi.

```
INSERT INTO
lorena__comenzi(id_comanda,data_comenzii,id_client,id_angajat,id_produs)
values(11,to_date('21-09-2023','dd-mm-yyyy'),10,null,9);


select a.id_angajat,c.id_comanda

from lorena__angajati a,lorena__comenzi c

where c.id_angajat=a.id_angajat(+);
```

Script Output × | Query Result × | Que

All Rows Fetched: 15 in 0

| | ID_ANGAJAT | ID_COMANDA |
|---|---|---|
| 3 | 4 | 1 |
| 4 | 6 | 2 |
| 5 | 1 | 3 |
| 6 | 9 | 4 |
| 7 | 8 | 5 |
| 8 | 2 | 6 |
| 9 | 3 | 7 |
| 10 | 5 | 8 |
| 11 | 10 | 9 |

--8

-- se afişeze comenzile incheiate intre 15 sepemebrie si 20 octombrie 2022.

```
SELECT id_comanda,data_comenzii from lorena__comenzi
where data_comenzii between to_date('September 15,2023','month dd,yyyy')and
to_date('october 25,2023','month dd,yyyy');
```

Script Output | Query Result | Query Result 1

SQL | All Rows Fetched: 5 in 0.007 seconds

| | ID_COMANDA | DATA_COMENZII |
|---|---|---|
| 1 | 3 | 23-OCT-23 |
| 2 | 9 | 15-SEP-23 |
| 3 | 11 | 29-SEP-23 |
| 4 | 12 | 29-SEP-23 |
| 5 | 13 | 29-SEP-23 |

--9

--Selectați cantitatea medie din stoc pentru fiecare categorie de produse

```
INSERT INTO lorena__comenzi(id_comanda,data_comenzii,id_client,id_angajat,id_produs)
values(11,to_date('29-09-2023','dd-mm-yyyy'),11,11,11);
SELECT c.id_comanda,p.id_produs,p.nume_produs,avg(to_number(p.cantitate_in_stoc))as
cantitateMedie
from lorena__produse p,lorena__comenzi c
where c.id_produs=p.id_produs
group by c.id_comanda,p.id_produs,p.nume_produs;
```

Script Output × | Query Result × | Query Result 1 × | Query Result 2 ×

SQL | All Rows Fetched: 13 in 0.008 seconds

| | ID_COMANDA | ID_PRODUS | NUME_PRODUS | CANTITATEMEDIE |
|---|---|---|---|---|
| 1 | 2 | 1 | pantofi | 600 |
| 2 | 3 | 2 | accesori | 60 |
| 3 | 9 | 3 | cosmetice | 300 |
| 4 | 6 | 4 | carti | 230 |
| 5 | 4 | 5 | alimente | 60 |
| 6 | 1 | 6 | bauturi | 90 |
| 7 | 8 | 7 | electronice | 250 |
| 8 | 7 | 8 | mobilier | 120 |
| 9 | 10 | 9 | serivii it | 100 |
| 10 | 110 | 10 | bijuterii | 200 |
| 11 | 50 | 10 | bijuterii | 200 |
| 12 | 5 | 10 | bijuterii | 200 |
| 13 | 11 | 11 | ceasuri | 20 |

--10

--Selectați primii 3 clienți care au cheltuit cel mai mult pe comenzi:

```
INSERT INTO lorena__clienti (id_client,nume_client,adresa,numar_contact,tip_client)
values(11,'ionica','bucuresti',0765659547,'fizica');

SELECT c.id_client,c.nume_client,sum(p.pret) as sumaCheltuita

from lorena__clienti c,lorena__produse p,lorena__comenzi co

where c.id_client =co.id_client and co.id_produs=p.id_produs

group by c.id_client,c.nume_client

order by sum(p.pret) desc;
```

Script Output × | Query Result × | Query Result 1 × | Query Result 2 ×

SQL | All Rows Fetched: 11 in 0.108 seconds

| | ID_CLIENT | NUME_CLIENT | SUMACHELTUITA |
|---|---|---|---|
| 1 | 10 | ionela | 800 |
| 2 | 1 | vasile | 700 |
| 3 | 5 | laura | 540 |
| 4 | 2 | leon | 460 |
| 5 | 3 | ion | 450 |
| 6 | 6 | marius | 340 |
| 7 | 9 | andrei | 230 |
| 8 | 8 | nicu | 100 |
| 9 | 4 | andrada | 70 |
| 10 | 11 | ionica | 70 |
| 11 | 7 | alina | 50 |

--11

--Selectați vânzările totale pentru fiecare lună din ultimul an

```
SELECT to_char(c.data_comenzii,'yyyy-mm') as month ,sum(p.pret) as chetuieliTotale

from lorena__comenzi c,lorena__produse p

where p.id_produs=c.id_produs

and data_comenzii>=add_months(sysdate,-12)

group by to_char(data_comenzii,'yyyy-mm')

order by month;
```

--12

--Selectați structura ierarhică a angajaților din cadrul fiecărui departament, arătând numele angajatului, funcția și numărul de niveluri din ierarhie

```
INSERT INTO lorena__angajati
(id_angajat,nume_angajat,pozitie,salariu,departament,id_locatie) values
(11,'maria','secretara',10000,'vanzari',6);

INSERT INTO lorena__angajati
(id_angajat,nume_angajat,pozitie,salariu,departament,id_locatie) values
(12,'roxana','manager',10000,'vanzari',10);

SELECT connect_by_root a.nume_angajat as superior,a.pozitie,level

from lorena__angajati a

connect by prior a.id_angajat=a.id_superior

start with a.id_superior is null;

select *from lorena__angajati;
```

Script Output | Query Result | Query Result 1 | Query Result 2 | Query Result 3

SQL | All Rows Fetched: 12 in 0.006 seconds

| | ID_ANGAJAT | NUME_ANGAJAT | POZITIE | SALARIU | DEPARTAMENT | ID_LOCATIE | ID_SUPERIOR |
|---|---|---|---|---|---|---|---|
| 1 | 1 | cristian lorena | manager | 12100 | vanzari | 2 | 1 |
| 2 | 2 | andrei | intern | 8500 | incasari | 1 | (null) |
| 3 | 3 | raul | muncitor | 10000 | incasari | 5 | (null) |
| 4 | 4 | ioana | manager | 12100 | vanzari | 3 | 1 |
| 5 | 5 | elena | intern | 8500 | incasari | 9 | (null) |
| 6 | 6 | mihai | intern | 8500 | marketing | 4 | (null) |
| 7 | 7 | rebeca | secretara | 11600 | vanzari | 8 | (null) |
| 8 | 8 | stefan | intern | 8600 | vanzari | 7 | (null) |
| 9 | 9 | matei | manager | 12000 | marketing | 10 | 1 |
| 10 | 10 | andreea | secretara | 11500 | incasari | 6 | (null) |
| 11 | 11 | maria | secretara | 10100 | vanzari | 6 | (null) |
| 12 | 12 | roxana | manager | 10100 | vanzari | 10 | (null) |

Bookmarks

--.13 Sa se selecteze toti angajai care nu au pozitie de manager dar fac parte din departamentul de vanzari

```
SELECT id_angajat,nume_angajat, id_superior ,pozitie ,departament ,level from lorena__angajati

WHERE CONNECT_BY_ISLEAF = 1

connect by prior  id_angajat=id_superior

start with  id_superior is null and lower(departament) like 'vanzari'

order by level;
```

| | ID_ANGAJAT | NUME_ANGAJAT | ID_SUPERIOR | POZITIE | DEPARTAMENT | LEVEL |
|---|---|---|---|---|---|---|
| 1 | 7 | rebeca | (null) | secretara | vanzari | 1 |
| 2 | 12 | roxana | (null) | manager | vanzari | 1 |
| 3 | 11 | maria | (null) | secretara | vanzari | 1 |
| 4 | 8 | stefan | (null) | intern | vanzari | 1 |

--14

--Sa se afiseze numele, numarul de comenzi, salariul si prima de craciun  fiecarui angajat.Prima de craciun

--se va calcula in functie de numarul de comenzi incheiate, astfel:

-- intre 1-2 comenzi – 5% din salariul lunar;

-- intre 3-5 comenzi – 7% din salariul lunar;

-- mai mult de 5 comenzi – 10% din salariul lunar.

```
SELECT a.nume_angajat,count(c.id_comanda) as numarulDeComenzi,a.salariu,
case
when count(c.id_comanda)=1 then 0.10
when count (c.id_comanda)=null then 0.05
else 0.20
end  * a.salariu as primaCraciun
from lorena__angajati a,lorena__comenzi c
where c.id_angajat=a.id_angajat
group by a.nume_angajat,a.salariu;
```

Script Output | Query Result | Query Result 1 | Query Result 2 | Query Result 3 | Query Result 4

SQL | All Rows Fetched: 12 in 0.024 seconds

| | NUME_ANGAJAT | NUMARULDECOMENZI | SALARIU | PRIMACRACIUN |
|---|---|---|---|---|
| 1 | cristian lorena | 1 | 12100 | 1210 |
| 2 | andrei | 1 | 8500 | 850 |
| 3 | raul | 1 | 10000 | 1000 |
| 4 | ioana | 1 | 12100 | 1210 |
| 5 | elena | 1 | 8500 | 850 |
| 6 | mihai | 1 | 8500 | 850 |
| 7 | rebeca | 3 | 11600 | 2320 |
| 8 | stefan | 1 | 8600 | 860 |
| 9 | matei | 1 | 12000 | 1200 |
| 10 | andreea | 1 | 11500 | 1150 |
| 11 | maria | 1 | 10100 | 1010 |
| 12 | roxana | 1 | 10100 | 1010 |

--15

--Selectati id_anagajtului ,numele ,pozitia si salariul unui angajat ,iar pe baza salariului sa se realizeze un "grafic"care ii clasifica in 3 categorii dupa suma inacasata

```
SELECT id_angajat,  nume_angajat,pozitie, salariu,
 CASE
WHEN TO_NUMBER(SUBSTR(salariu, 1)) <= 8500 THEN 'Low'
WHEN TO_NUMBER(SUBSTR(salariu, 1)) <= 10000 THEN 'Medium'
ELSE 'High'
 END AS grafic
FROM  lorena__angajati;
```

SQL | All Rows Fetched: 12 in 0.011 seconds

| | ID_ANGAJAT | NUME_ANGAJAT | POZITIE | SALARIU | GRAFIC |
|---|---|---|---|---|---|
| 1 | 1 | cristian lorena | manager | 12100 | High |
| 2 | 2 | andrei | intern | 8500 | Low |
| 3 | 3 | raul | muncitor | 10000 | Medium |
| 4 | 4 | ioana | manager | 12100 | High |
| 5 | 5 | elena | intern | 8500 | Low |
| 6 | 6 | mihai | intern | 8500 | Low |
| 7 | 7 | rebeca | secretara | 11600 | High |
| 8 | 8 | stefan | intern | 8600 | Medium |
| 9 | 9 | matei | manager | 12000 | High |
| 10 | 10 | andreea | secretara | 11500 | High |
| 11 | 11 | maria | secretara | 10100 | High |
| 12 | 12 | roxana | manager | 10100 | High |

--16

--Sa se afiseze angajatii care au salariul cuprins intre 8500 si 12000 fara cei care au salariul 10000

```
SELECT * from lorena__angajati where salariu between 8500 and 12000
minus
SELECT * from lorena__angajati where salariu =10000;
```

SQL | All Rows Fetched: 9 in 0.01 seconds

| | ID_ANGAJAT | NUME_ANGAJAT | POZITIE | SALARIU | DEPARTAMENT | ID_LOCATIE | ID_SUPERIOR |
|---|---|---|---|---|---|---|---|
| 1 | 2 | andrei | intern | 8500 | incasari | 1 | (null) |
| 2 | 5 | elena | intern | 8500 | incasari | 9 | (null) |
| 3 | 6 | mihai | intern | 8500 | marketing | 4 | (null) |
| 4 | 7 | rebeca | secretara | 11600 | vanzari | 8 | (null) |
| 5 | 8 | stefan | intern | 8600 | vanzari | 7 | (null) |
| 6 | 9 | matei | manager | 12000 | marketing | 10 | 1 |
| 7 | 10 | andreea | secretara | 11500 | incasari | 6 | (null) |
| 8 | 11 | maria | secretara | 10100 | vanzari | 6 | (null) |
| 9 | 12 | roxana | manager | 10100 | vanzari | 10 | (null) |

--17

--sa se afiseze numele si id ul produsului ,id si numele furnizorului in care se gaseste fiecare produs si sa se  calculeze TVA  ul pentru toate produsele astfel:

--daca pretul este intre 0 si 200 tva ul va fii 10%

--daca pretul este intre 200 si 400 tva ul va fii 15%

--daca pretul va fii peste 400 tva ul va fii 20%

**--asa facem cu case**

```
SELECT p.id_produs,p.nume_produs ,f.id_furnizor,f.nume_furnizor,p.pret,
case
when p.pret between 0 and 200 then 0.1
when p.pret between 200 and 400 then 0.15
when p.pret >400 then 0.2
else 0
end *p.pret as TVA
from lorena__produse p,lorena__furnizori f
where p.id_furnizor=f.id_furnizor;
```

SQL | All Rows Fetched: 11 in 0.013 seconds

| | ID_PRODUS | NUME_PRODUS | ID_FURNIZOR | NUME_FURNIZOR | PRET | TVA |
|---|---|---|---|---|---|---|
| 1 | 2 | accesori | 1 | Square | 700 | 140 |
| 2 | 3 | cosmetice | 2 | Shopify | 100 | 10 |
| 3 | 6 | bauturi | 3 | Toast | 460 | 92 |
| 4 | 5 | alimente | 4 | Vend | 230 | 34.5 |
| 5 | 4 | carti | 5 | Lightspeed | 450 | 90 |
| 6 | 7 | electronice | 6 | NCR Retail | 340 | 51 |
| 7 | 1 | pantofi | 6 | NCR Retail | 400 | 60 |
| 8 | 9 | serivii it | 7 | Microsoft Dynamics 365 Retail | 800 | 160 |
| 9 | 10 | bijuterii | 8 | Oracle Retail | 70 | 7 |
| 10 | 8 | mobilier | 10 | Epicor Retail | 50 | 5 |
| 11 | 11 | ceasuri | 11 | Epicor | 70 | 7 |

**--union**

```
SELECT p.id_produs,p.nume_produs ,f.id_furnizor,f.nume_furnizor,p.pret,0.1*p.pret as TVA

from lorena__produse p,lorena__furnizori f

where p.id_furnizor=f.id_furnizor and  P.PRET BETWEEN 0 AND 200

UNION

SELECT p.id_produs,p.nume_produs ,f.id_furnizor,f.nume_furnizor,p.pret,0.15*p.pret as TVA

from lorena__produse p,lorena__furnizori f

where p.id_furnizor=f.id_furnizor and  P.PRET BETWEEN 200 AND 400

UNION

SELECT p.id_produs,p.nume_produs ,f.id_furnizor,f.nume_furnizor,p.pret,0.2*p.pret as TVA

from lorena__produse p,lorena__furnizori f

where p.id_furnizor=f.id_furnizor and  P.PRET  >400;
```

Script Output | Query Result | Query Result 1 | Query Result 2 | Query Result 3 | Query Result 4 | Query Result 5 | Query Resu

SQL | All Rows Fetched: 11 in 0.023 seconds

| | ID_PRODUS | NUME_PRODUS | ID_FURNIZOR | NUME_FURNIZOR | PRET | TVA |
|---|---|---|---|---|---|---|
| 1 | 5 | alimente | 4 | Vend | 230 | 34.5 |
| 2 | 1 | pantofi | 6 | NCR Retail | 400 | 60 |
| 3 | 7 | electronice | 6 | NCR Retail | 340 | 51 |
| 4 | 2 | accesori | 1 | Square | 700 | 140 |
| 5 | 3 | cosmetice | 2 | Shopify | 100 | 10 |
| 6 | 6 | bauturi | 3 | Toast | 460 | 92 |
| 7 | 4 | carti | 5 | Lightspeed | 450 | 90 |
| 8 | 9 | serivii it | 7 | Microsoft Dynamics 365 Retail | 800 | 160 |
| 9 | 10 | bijuterii | 8 | Oracle Retail | 70 | 7 |
| 10 | 8 | mobilier | 10 | Epicor Retail | 50 | 5 |
| 11 | 11 | ceasuri | 11 | Epicor | 70 | 7 |

--18

--Sa se afiseze produsele care au pretul mai mare de 150 iar cantitatea disponibila este mai mare de 50;

**SELECT id_produs,nume_produs from lorena__produse**

**where pret>100;**

***intersect***

**SELECT id_produs,nume_produs from lorena__produse**

**where cantitate_in_stoc>150;**

Script Output | Query Result | Query Result 1 | Query Result 2 | Query Result 3 | Quer

SQL | All Rows Fetched: 3 in 0.016 seconds

| | ID_PRODUS | NUME_PRODUS |
|---|---|---|
| 1 | 1 | pantofi |
| 2 | 4 | carti |
| 3 | 7 | electronice |

--19

--Selectarea angajaților care au un salariu mai mare decât media salariilor

**SELECT id_angajat,nume_angajat,departament from lorena__angajati**

**where salariu>(select avg(salariu) from lorena__angajati ) and lower(departament) like '%vanzari%';**

| | ID_ANGAJAT | NUME_ANGAJAT | DEPARTAMENT |
|---|---|---|---|
| 1 | 1 | cristian lorena | vanzari |
| 2 | 4 | ioana | vanzari |
| 3 | 7 | rebeca | vanzari |

--20

--AFisati  produsele cu cel mai mic stoc pentru fiecare furnizor

```
SELECT f.nume_furnizor ,p.nume_produs,p.cantitate_in_stoc

from lorena__produse p,lorena__furnizori f

where p.id_furnizor=f.id_furnizor

and p.cantitate_in_stoc=(select MIN(p2.cantitate_in_stoc)from lorena__produse p2 where p2.id_furnizor=f.id_furnizor);
```

SQL | All Rows Fetched: 10 in 0.01 seconds

| | NUME_FURNIZOR | NUME_PRODUS | CANTITATE_IN_STOC |
|---|---|---|---|
| 1 | Square | accesori | 60 |
| 2 | Shopify | cosmetice | 300 |
| 3 | Toast | bauturi | 90 |
| 4 | Vend | alimente | 60 |
| 5 | Lightspeed | carti | 230 |
| 6 | NCR Retail | electronice | 250 |
| 7 | Microsoft Dynamics 365 Retail | serivii it | 100 |
| 8 | Oracle Retail | bijuterii | 200 |
| 9 | Epicor Retail | mobilier | 120 |
| 10 | Epicor | ceasuri | 20 |

--21

----Sa se afiseze id_comanda, data, valoarea comenzii, pentru comenzile incheiate in 1999 cu valoarea totala (sum(cantitate*pret)) mai mare de 200, în ordinea datei.

```
SELECT c.id_comanda ,c.data_comenzii,sum(p.pret*p.cantitate_in_stoc) as valoare

from lorena__comenzi c,lorena__produse p

where c.id_produs=p.id_produs

and extract (year from c.data_comenzii)=2022

group by c.id_comanda,c.data_comenzii

having sum(p.pret*p.cantitate_in_stoc)>200

order by c.data_comenzii;
```

--

Script Output | Query Result | Query Result 1 | Query Result 2

SQL | All Rows Fetched: 4 in 0.099 seconds

| | ID_COMANDA | DATA_COMENZII | VALOARE |
|---|---|---|---|
| 1 | 6 | 09-APR-22 | 103500 |
| 2 | 2 | 08-JUL-22 | 240000 |
| 3 | 8 | 30-NOV-22 | 85000 |
| 4 | 4 | 04-DEC-22 | 13800 |

--22

-- Afișati  numele angajaților care au un salariu mai mare de 3000 și care au gestionat cel puțin o comandă în anul 2023, împreună cu numărul total de comenzi pe care le-au gestionat în acest interval de timp.

```
SELECT a.Nume_angajat, COUNT(c.ID_comanda) AS Numar_Comezi

FROM Lorena__Angajati a,lorena__comenzi c

where a.id_angajat=c.id_angajat

 and a.Salariu > 3000 AND c.Data_comenzii BETWEEN TO_DATE('2023-01-01', 'YYYY-MM-DD') AND TO_DATE('2023-12-31', 'YYYY-MM-DD')

GROUP BY a.Nume_angajat

HAVING COUNT(c.ID_comanda) >= 1;
```

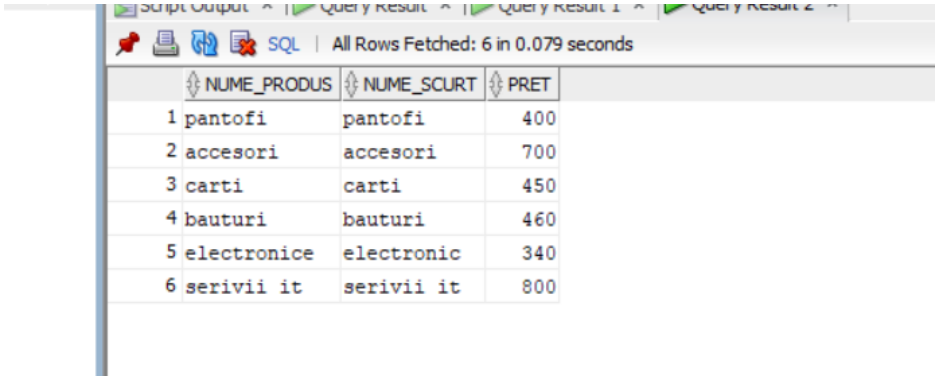
SQL | All Rows Fetched: 8 in 0.073 seconds

| | NUME_ANGAJAT | NUMAR_COMEZI |
|---|---|---|
| 1 | cristian lorena | 1 |
| 2 | raul | 1 |
| 3 | ioana | 1 |
| 4 | rebeca | 1 |
| 5 | stefan | 1 |
| 6 | andreea | 1 |
| 7 | maria | 1 |
| 8 | roxana | 1 |

--23

--Selectati numele, o versiune scurtată a numelui și prețul produselor care sunt mai scumpe decât media prețurilor tuturor produselor și ale căror stocuri sunt mai vechi de 5 ani.

```
SELECT Nume_produs, SUBSTR(Nume_produs, 1, 10) AS Nume_Scurt, Pret

FROM Lorena__Produse

WHERE Pret > (SELECT AVG(Pret) FROM Lorena__Produse)

AND EXTRACT(YEAR FROM SYSDATE) - EXTRACT(YEAR FROM TO_DATE(Cantitate_in_stoc, 'YYYY')) > 5;
```



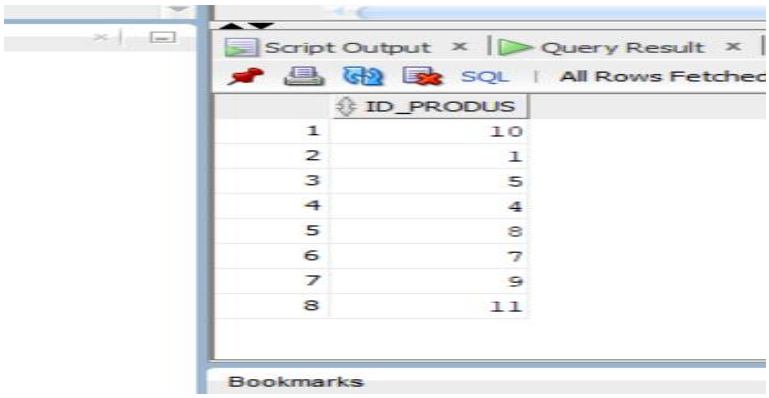
All Rows Fetched: 6 in 0.079 seconds

| | NUME_PRODUS | NUME_SCURT | PRET |
|---|---|---|---|
| 1 | pantofi | pantofi | 400 |
| 2 | accesori | accesori | 700 |
| 3 | carti | carti | 450 |
| 4 | bauturi | bauturi | 460 |
| 5 | electronice | electronic | 340 |
| 6 | serivii it | serivii it | 800 |

--24

--Afisati toate  id-urile produselor mai putin cele care au asociat id_durnizorului=1,2,3

```
SELECT ID_produs FROM Lorena__Comenzi

INTERSECT

SELECT ID_produs FROM Lorena__Produse

MINUS

SELECT ID_produs FROM Lorena__Produse WHERE ID_furnizor IN (1, 2, 3);
```



Script Output | Query Result

All Rows Fetched

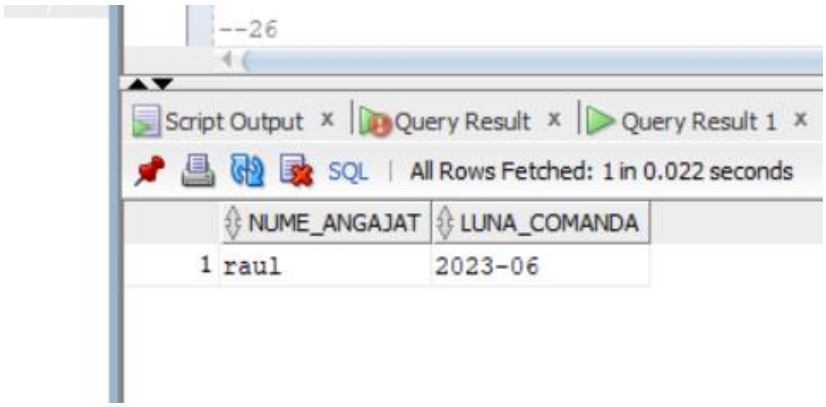
| | ID_PRODUS |
|---|---|
| 1 | 10 |
| 2 | 1 |
| 3 | 5 |
| 4 | 4 |
| 5 | 8 |
| 6 | 7 |
| 7 | 9 |
| 8 | 11 |

Bookmarks

--25

--Sa se selecteze numele angajatului si luna in care acesta a realizat comanda ,daca aceasta a fost lansata in luna iunie iar salariul angajatului este mai mare de 3500

```
SELECT Nume_angajat, TO_CHAR(Data_comenzii, 'YYYY-MM') AS Luna_Comanda

FROM Lorena__Angajati a,lorena__comenzi c

where a.ID_angajat = c.ID_angajat

and EXTRACT(MONTH FROM c.Data_comenzii) = 6 AND

    a.ID_angajat IN (SELECT ID_angajat FROM Lorena__Angajati WHERE Salariu > 3500);
```




--26

--Afisati deparamentul,salariul mediu si numarul de manageri din acel departament astfel incat salariul mediu sa fie mai mare de 4000

```
SELECT Departament, AVG(Salariu) AS Salariu_Mediu,

SUM(

CASE

WHEN Pozitie = 'Manager' THEN 1 ELSE 0 END) AS Numar_Managers

FROM Lorena__Angajati

GROUP BY Departament

HAVING AVG(Salariu) >4000;
```

Script Output × | Query Result × | Query Result 1 × | Query Result 2 × | Query Result 3 ×

SQL | All Rows Fetched: 1 in 0.012 seconds

| | DEPARTAMENT | SALARIU_MEDIU | NUMAR_MANAGERS |
|---|---|---|---|
| 1 | vanzari | 10000 | 0 |

--27

--Sa se afiseze anul  si numarul de comenzii at cand id_clientului nu este null

```
SELECT EXTRACT(YEAR FROM Data_comenzii) AS Anul,
    SUM(CASE WHEN ID_client IS NOT NULL THEN 1 ELSE 0 END) AS Numar_Comenzi
FROM Lorena__Comenzi
GROUP BY EXTRACT(YEAR FROM Data_comenzii);
```

Script Output × | Query Result × | Query Result 1 × | Query Result 2 × | Que

SQL | All Rows Fetched: 3 in 0.027 seconds

| | ANUL | NUMAR_COMENZI |
|---|---|---|
| 1 | 2009 | 2 |
| 2 | 2023 | 7 |
| 3 | 2022 | 4 |

--28

--SA se afiseze  o lista de fie de clienti fie de  angajati dar numai pt clientii care au lasat comenzii in ultimele 300 de zile si angajatii care au asociate comenzi.

```
SELECT Nume_client, 'Client' AS Tip FROM Lorena__Clienti
WHERE ID_client IN (SELECT ID_client FROM Lorena__Comenzi WHERE Data_comenzii >
SYSDATE - 300)
UNION
SELECT Nume_angajat, 'Angajat' FROM Lorena__Angajati
WHERE ID_angajat IN (SELECT ID_angajat FROM Lorena__Comenzi co,lorena__clienti cl
WHERE co.ID_client = cl.ID_client)
ORDER BY Nume_client;
```

SQL | All Rows Fetched: 17 in 0.065 seconds

| | NUME_CLIENT | TIP |
|---|---|---|
| 1 | alina | Client |
| 2 | andrada | Client |
| 3 | andreea | Angajat |
| 4 | andrei | Angajat |
| 5 | elena | Angajat |
| 6 | ioana | Angajat |
| 7 | ionica | Client |
| 8 | leon | Client |
| 9 | maria | Angajat |
| 10 | matei | Angajat |
| 11 | mihaela | Angajat |
| 12 | mihai | Angajat |
| 13 | nicu | Client |
| 14 | raul | Angajat |
| 15 | rebeca | Angajat |
| 16 | stefan | Angajat |
| 17 | vasile | Client |

--29

-- afisati angajații din departamentele:vanzari si marketing si arată numărul total de comenzi gestionate de fiecare angajat în ultimul an.

```
SELECT a.Nume_angajat,  a.Pozitie,
   DECODE(a.Departament, 'vanzari', 'marketing') AS Departament,
 (SELECT COUNT(*) FROM Lorena__Comenzi co
 WHERE co.ID_angajat = a.ID_angajat AND co.Data_comenzii > SYSDATE - 365) AS Comenzi_Ultimul_An
FROM  Lorena__Angajati a
ORDER BY  Comenzi_Ultimul_An DESC, a.Nume_angajat;
```

SQL | All Rows Fetched: 12 in 0.034 seconds

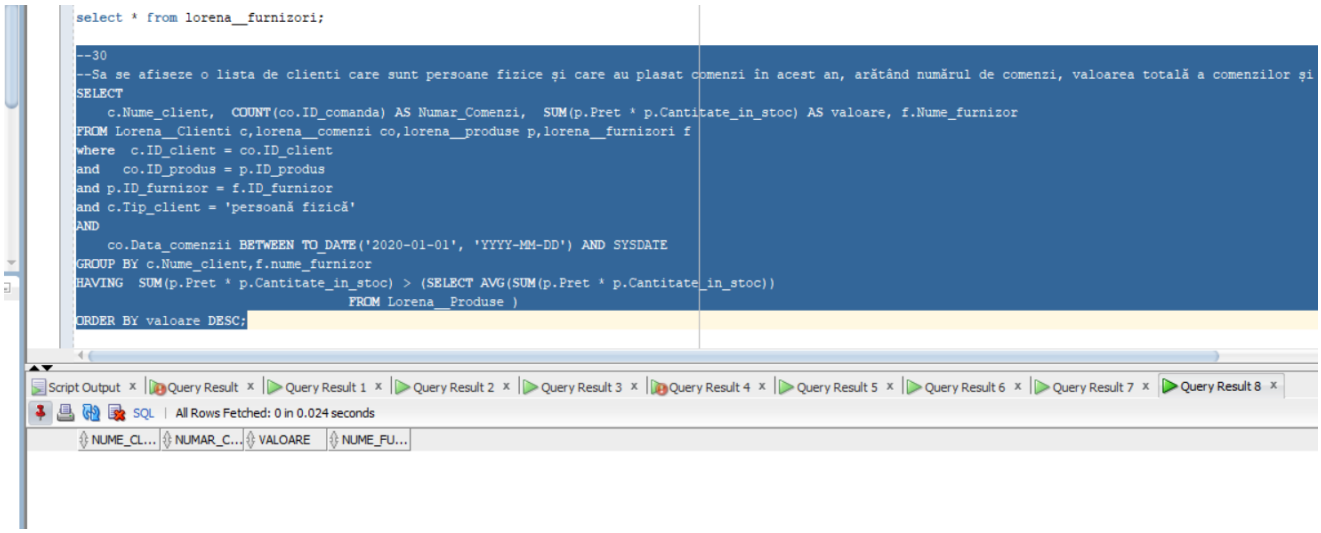
| | NUME_ANGAJAT | POZITIE | DEPARTAMENT | COMENZI_ULTIMUL_AN |
|---|---|---|---|---|
| 1 | andreea | secretara | marketing | 1 |
| 2 | ioana | manager | marketing | 1 |
| 3 | maria | secretara | marketing | 1 |
| 4 | mihaela | manager | marketing | 1 |
| 5 | raul | muncitor | marketing | 1 |
| 6 | rebeca | secretara | marketing | 1 |
| 7 | roxana | manager | marketing | 1 |
| 8 | stefan | intern | marketing | 1 |
| 9 | andrei | intern | marketing | 0 |
| 10 | elena | intern | marketing | 0 |
| 11 | matei | manager | marketing | 0 |
| 12 | mihai | intern | marketing | 0 |

Bookmarks

--30

--Sa se afiseze o lista de clienti care sunt persoane fizice și care au plasat comenzi în acest an, arătând numărul de comenzi, valoarea totală a comenzilor și numele furnizorului

```
SELECT

   c.Nume_client,  COUNT(co.ID_comanda) AS Numar_Comenzi,  SUM(p.Pret *
p.Cantitate_in_stoc) AS valoare, f.Nume_furnizor

FROM Lorena__Clienti c,lorena__comenzi co,lorena__produse p,lorena__furnizori f

where  c.ID_client = co.ID_client

and   co.ID_produs = p.ID_produs

and p.ID_furnizor = f.ID_furnizor

and c.Tip_client = 'persoană fizică'

AND

   co.Data_comenzii BETWEEN TO_DATE('2020-01-01', 'YYYY-MM-DD') AND SYSDATE

GROUP BY c.Nume_client,f.nume_furnizor

HAVING  SUM(p.Pret * p.Cantitate_in_stoc) > (SELECT AVG(SUM(p.Pret *
p.Cantitate_in_stoc))

                          FROM Lorena__Produse )

ORDER BY valoare DESC;
```



## 9. Gestiunea altor obiecte ale bazei de date: vederi, indecși, sinonime, secvențe

-- Sa realizeze o **tabela virtuala** cu toti angajatii din departamentul vanzari. Actualizăm salariul.

```
CREATE OR REPLACE VIEW v_lorena__angajati_vanzari
AS SELECT * FROM lorena__angajati
WHERE departament like 'vanzari';
```

```
4 rows updated.

View V_LORENA__ANGAJATI_VANZARI created.
```

```
SELECT * FROM v_lorena__angajati_vanzari;
```

SQL | All Rows Fetched: 6 in 0.007 seconds

| | ID_ANGAJAT | NUME_ANGAJAT | POZITIE | SALARIU | DEPARTAMENT | ID_LOCATIE | ID_SUPERIOR |
|---|---|---|---|---|---|---|---|
| 1 | 1 | cristian lorena | manager | 12100 | vanzari | 2 | 1 |
| 2 | 4 | ioana | manager | 12100 | vanzari | 3 | 1 |
| 3 | 7 | rebeca | secretara | 11600 | vanzari | 8 | (null) |
| 4 | 8 | stefan | intern | 8600 | vanzari | 7 | (null) |
| 5 | 11 | maria | secretara | 10100 | vanzari | 6 | (null) |

```
UPDATE v_lorena__angajati_vanzari
SET salariu = salariu + 100;
```

| | ID_ANGAJAT | NUME_ANGAJAT | POZITIE | SALARIU | DEPARTAMENT | ID_LOCATIE | ID_SUPERIOR |
|---|---|---|---|---|---|---|---|
| 1 | 1 | cristian lorena | manager | 12200 | vanzari | 2 | 1 |
| 2 | 4 | ioana | manager | 12200 | vanzari | 3 | 1 |
| 3 | 7 | rebeca | secretara | 11700 | vanzari | 8 | (null) |
| 4 | 8 | stefan | intern | 8700 | vanzari | 7 | (null) |
| 5 | 11 | maria | secretara | 10200 | vanzari | 6 | (null) |

--Opţiunea WITH READ ONLY

```
CREATE OR REPLACE VIEW v_lorena__comenzi
 as select id_comanda,data_comenzii from lorena__comenzi
 with read only;
```

```
View V_LORENA__COMENZI created.
```

```
select * from v_lorena__comenzi;
```

| | ID_COMANDA | DATA_COMENZII |
|---|---|---|
| 1 | 50 | 19-JAN-09 |
| 2 | 110 | 19-JAN-09 |
| 3 | 1 | 01-MAY-23 |
| 4 | 2 | 08-JUL-22 |
| 5 | 3 | 23-OCT-23 |
| 6 | 4 | 04-DEC-22 |
| 7 | 5 | 01-SEP-23 |
| 8 | 6 | 09-APR-22 |
| 9 | 7 | 11-JUN-23 |
| 10 | 8 | 30-NOV-22 |
| 11 | 9 | 15-SEP-23 |
| 12 | 10 | 21-FEB-23 |
| 13 | 11 | 29-SEP-23 |
| 14 | 12 | 29-SEP-23 |

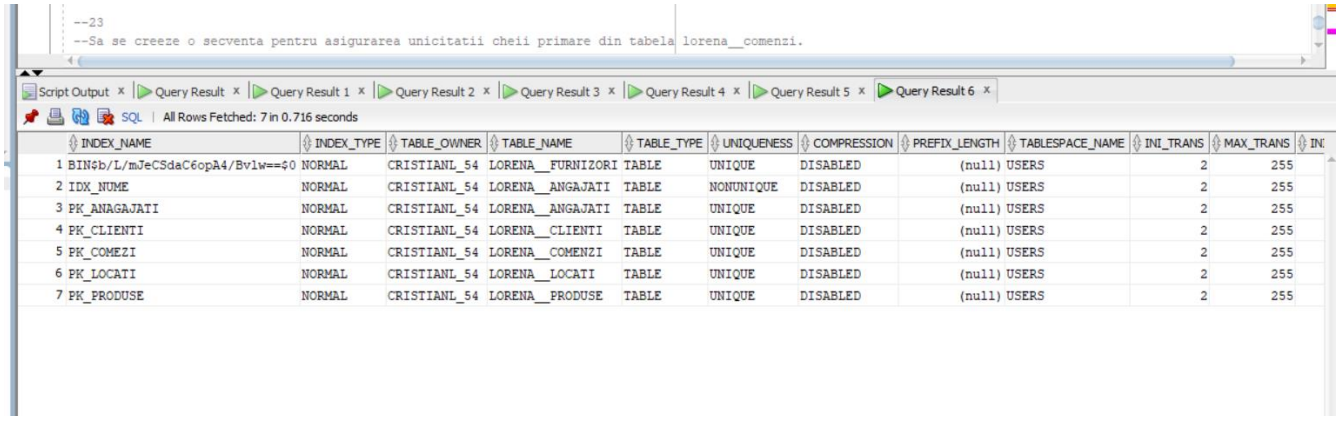
Bookmarks

--Sa se creeze un **index** pe tabela angajati pe coloana prenume

```
SELECT * FROM lorena__angajati where nume_angajat like 'm%';

cost 3

CREATE INDEX idx_nume on lorena__angajati(nume_angajat);

SELECT * from lorena__angajati where nume_angajat like 'm%';

cost 2
```

--Vizualizarea indecşilor unui anumit utilizator:

```
SELECT * FROM user_indexes;
```



```
--23
--Sa se creeze o secventa pentru asigurarea unicitatii cheii primare din tabela lorena__comenzi.
```

Script Output | Query Result | Query Result 1 | Query Result 2 | Query Result 3 | Query Result 4 | Query Result 5 | Query Result 6

SQL | All Rows Fetched: 7 in 0.716 seconds

| | INDEX_NAME | INDEX_TYPE | TABLE_OWNER | TABLE_NAME | TABLE_TYPE | UNIQUENESS | COMPRESSION | PREFIX_LENGTH | TABLESPACE_NAME | INI_TRANS | MAX_TRANS | IN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | BIN$b/L/mJeCSdaC6opA4/Bvlw==$0 | NORMAL | CRISTIANL_54 | LORENA__FURNIZORI | TABLE | UNIQUE | DISABLED | (null) | USERS | 2 | 255 | |
| 2 | IDX_NUME | NORMAL | CRISTIANL_54 | LORENA__ANGAJATI | TABLE | NONUNIQUE | DISABLED | (null) | USERS | 2 | 255 | |
| 3 | PK_ANAGAJATI | NORMAL | CRISTIANL_54 | LORENA__ANGAJATI | TABLE | UNIQUE | DISABLED | (null) | USERS | 2 | 255 | |
| 4 | PK_CLIENTI | NORMAL | CRISTIANL_54 | LORENA__CLIENTI | TABLE | UNIQUE | DISABLED | (null) | USERS | 2 | 255 | |
| 5 | PK_COMEZI | NORMAL | CRISTIANL_54 | LORENA__COMENZI | TABLE | UNIQUE | DISABLED | (null) | USERS | 2 | 255 | |
| 6 | PK_LOCATI | NORMAL | CRISTIANL_54 | LORENA__LOCATI | TABLE | UNIQUE | DISABLED | (null) | USERS | 2 | 255 | |
| 7 | PK_PRODUSE | NORMAL | CRISTIANL_54 | LORENA__PRODUSE | TABLE | UNIQUE | DISABLED | (null) | USERS | 2 | 255 | |

--Sa se creeze o **secventa** pentru asigurarea unicitatii cheii primare din tabela lorena__comenzi.

```
CREATE SEQUENCE seq_id_comanda

START WITH 50 INCREMENT BY 10

MAXVALUE 100 NOCYCLE;
```

```
INSERT INTO lorena__comenzi VALUES (seq_id_comanda.NEXTVAL, TO_DATE('jan 19,09', 'mon dd,yy'), 5, 7, 10);
```

--Sa se afiseze valoarea curenta a secventei

```
SELECT seq_id_comanda.CURRVAL FROM DUAL;
```

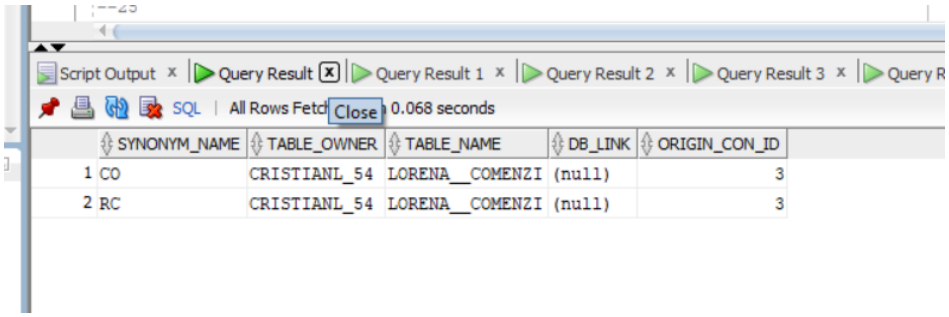
--Să se modifice pasul de incrementare şi valoarea maximă pentru secvenţa anterioară

```
ALTER SEQUENCE seq_id_comanda INCREMENT BY 100;

ALTER SEQUENCE seq_id_comanda MAXVALUE 200;


INSERT INTO lorena__comenzi VALUES (seq_id_comanda.NEXTVAL, TO_DATE('jan 19,09',
'mon dd,yy'), 5, 7, 10);
```

--Sa se creeze un **sinonim** pentru tabela rând_comenzi

```
CREATE SYNONYM RC FOR lorena__comenzi;

CREATE SYNONYM CO FOR lorena__comenzi;
```

```
SELECT * FROM USER_SYNONYMS;
```




| | SYNONYM_NAME | TABLE_OWNER | TABLE_NAME | DB_LINK | ORIGIN_CON_ID |
|---|---|---|---|---|---|
| 1 | CO | CRISTIANL_54 | LORENA__COMENZI | (null) | 3 |
| 2 | RC | CRISTIANL_54 | LORENA__COMENZI | (null) | 3 |

```
DROP SYNONYM RC;
```

```
Synonym RC dropped.
```

SQL | All Rows Fetched: 1 in 0.019 seconds

| | SYNONYM_NAME | TABLE_OWNER | TABLE_NAME | DB_LINK | ORIGIN_CON_ID |
|---|---|---|---|---|---|
| 1 | CO | CRISTIANL_54 | LORENA__COMENZI | (null) | 3 |