

Proiect Baze de Date – 1

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b)

```
CREATE TABLE Clienti (  
    NumarCont varchar(8) PRIMARY KEY NOT NULL,  
    Nume varchar(30) NOT NULL,  
    Prenume varchar(30) NOT NULL,  
    DataNasterii date NOT NULL  
);
```

```
CREATE TABLE Produse (  
    IdProdus int PRIMARY KEY NOT NULL,  
    Produs varchar(80) NOT NULL,  
    Garantie int CHECK (Garantie <= 5),  
    Stoc int CHECK (Stoc <= 200),  
    ValoareUnitara decimal(7,2) NOT NULL  
);
```

```
CREATE TABLE Vanzari (  
    NumarCont varchar(8) REFERENCES Clienti(NumarCont),  
    IdProdus int REFERENCES Produse(IdProdus),  
    CantitateVanduta int NOT NULL,  
    DataVanzarii date NOT NULL  
);
```

c)

```
insert into produse values(1,'Fujitsu Siemens Amilo Pro',1,10,2000);  
insert into produse values(2,'Indesit WLI1000',3,5,900);  
insert into produse values(3,'Gorenje RC400',3,4,1500);
```

```
insert into clienti values(11111111,'Popescu', 'Ion', '01-jan-1985');  
insert into clienti values(22222222,'Georgescu', 'Andreea', '23-aug-1983');  
insert into clienti values(33333333,'Ionescu', 'Robert', '08-mar-1982');
```

| NUMARCON | NUME | PRENUME | DATAINASTE |
|----------|-----------|---------|------------|
| 11111111 | Popescu | Ion | 01-JAN-85 |
| 22222222 | Georgescu | Andreea | 23-AUG-83 |
| 33333333 | Ionescu | Robert | 08-MAR-82 |

```
SQL> set linesize 250;
SQL> select * from produse;
```

| IDPRODUS | PRODUS | GARANTIE | STOC | VALOAREUNITARA |
|----------|---------------------------|----------|------|----------------|
| 1 | Fujitsu Siemens Amilo Pro | 1 | 10 | 2000 |
| 2 | Indesit ML1000 | 3 | 5 | 900 |
| 3 | Gorenje RC400 | 3 | 4 | 1500 |

d)

```
create trigger trigger_stoc
```

```
after insert on Vanzari
```

```
begin
```

```
    update Produse set Stoc = Stoc - noua.CantitateVanduta where IdProdus = noua.IdProdus
```

```
end;
```

e)

f)

```
select Distinct Clienti.Nume, Clienti.Prenume, Produse.Produs, Vanzari.CantitateVanduta, Vanzari.CantitateVanduta *
Produse.ValoareUnitara as ValoareTotala
```

```
from Clienti
```

```
inner join Vanzari on Clienti.NumarCont = Vanzari.NumarCont
```

```
inner join Produse on Vanzari.IdProdus = Produse.IdProdus
```

```
order by Clienti.Nume;
```

```
SQL> select Distinct Clienti.Nume, Clienti.Prenume, Produse.Produs, Vanzari.CantitateVanduta, Vanzari.CantitateVanduta * Produse.ValoareUnitara as ValoareTotala
2   from Clienti
3   inner join Vanzari on Clienti.NumarCont = Vanzari.NumarCont
4   inner join Produse on Vanzari.IdProdus = Produse.IdProdus
5   order by Clienti.Nume;
```

| NUME | PRENUME | PRODUS | CANTITATEVANDUTA | VALOARETOTALA |
|-----------|---------|---------------------------|------------------|---------------|
| Georgescu | Andreea | Fujitsu Siemens Amilo Pro | 5 | 10000 |
| Popescu | Ion | Fujitsu Siemens Amilo Pro | 3 | 6000 |

h)

```
SELECT p.Produs, SUM(v.CantitateVanduta) AS TotalVandut
```

```
FROM Vanzari v
```

```
JOIN Produse p ON v.IdProdus = p.IdProdus
```

```
GROUP BY p.Produs
```

```
ORDER BY TotalVandut DESC;
```

```
SQL> SELECT p.Produs, SUM(v.CantitateVanduta) AS TotalVandut
2 FROM Vanzari v
3 JOIN Produse p ON v.IdProdus = p.IdProdus
4 GROUP BY p.Produs
5 ORDER BY TotalVandut DESC;
```

| PRODUS | TOTALVANDUT |
|---------------------------|-------------|
| Fujitsu Siemens Amilo Pro | 11 |

i)

```
SELECT DataVanzarii, COUNT(*) AS NumarVanzari
FROM Vanzari
GROUP BY DataVanzarii
HAVING COUNT(*) = ( SELECT MAX(NumarVanzari)
FROM ( SELECT DataVanzarii, COUNT(*) AS NumarVanzari
FROM Vanzari
GROUP BY DataVanzarii
)
```

);

j)

```
SELECT c.Nume, c.Prenume, COUNT(*) AS NumarProduse, SUM(p.ValoareUnitara * v.CantitateVanduta) AS ValoareTotala
FROM Vanzari v
JOIN Clienti c ON v.NumarCont = c.NumarCont
JOIN Produse p ON v.IdProdus = p.IdProdus
GROUP BY c.Nume, c.Prenume
ORDER BY NumarProduse DESC, ValoareTotala DESC;
```

```
SQL> SELECT c.Nume, c.Prenume, COUNT(*) AS NumarProduse, SUM(p.ValoareUnitara * v.CantitateVanduta) AS ValoareTotala
2 FROM Vanzari v
3 JOIN Clienti c ON v.NumarCont = c.NumarCont
4 JOIN Produse p ON v.IdProdus = p.IdProdus
5 GROUP BY c.Nume, c.Prenume
6 ORDER BY NumarProduse DESC, ValoareTotala DESC;
```

| NUME | PRENUME | NUMARPRODUSE | VALOARETOTALA |
|-----------|---------|--------------|---------------|
| Popescu | Ion | 2 | 12000 |
| Georgescu | Andreea | 1 | 10000 |