



Service Auto

“TomService”

Std. Cap. Dumitru Andreea-Ioana

Grupa C112B

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1. Motivatia alegerii proiectului

Putem afirma ca cel putin o data in viata fiecare sofer a avut parte de un moment in care autovehiculul propriu a incetat sa mai functioneze la parametrii optimi.

Iar odata ce comoditatea, in ceea ce consta deplasarea dintr-un punct A pana in alt punct B, iti este sistata, putem spune ca timpul castigat in urma deplasarilor rapide este din nou pierdut, iar lipsa timpului util devine inca un factor de stres.

Decizia mea in ceea ce priveste alegerea proiectului, consta strict in faptul ca deplasarea fara un mijloc de transport propriu a devenit din ce in ce mai grea in ultimii ani.

Service-ul nostru auto “TomService” isi propune sa vina in ajutorul clientilor prin intermediul unei game largi de servicii printre care se numara: programul de functionare non-stop, transparenta totala in relatia cu clientii (acestia au posibilitatea de a viziona derularea reparatiilor in orice moment si de a fi informati si consiliati cu privire la deciziile ce trebuie luate pe parcursul reparatiilor), calitatea superioara a pieselor auto, o echipa de profesionisti pregatiti in acest domeniu, promptitudinea, preturi avantajoase, programarea rapida prin apelarea la numarul nostru, extinderea in mai multe orase din tara.

2. Crearea bazei de date si a tabelelor

1. Creati baza de date cu un nume corespunzator.

```
create database TomServ
```

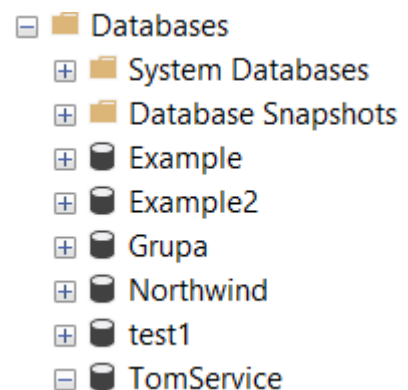
```
ON PRIMARY
```

```
(  
Name = TomServiceData1,  
Filename = 'D:\Proiect_BD_Dumitru_Andreea_Ioana_C112B\TomService.mdf',  
size = 10MB,  
maxsize = 50MB,  
filegrowth = 10MB  
)  
(  
Name = TomServiceData2,  
Filename = 'D:\Proiect_BD_Dumitru_Andreea_Ioana_C112B\TomService.ndf',  
size = 10MB,  
maxsize = 50MB,  
filegrowth = 10MB  
)
```

```
LOG ON
```

```
(  
Name = TomServiceLog1,  
Filename = 'D:\Proiect_BD_Dumitru_Andreea_Ioana_C112B\TomService.ldf',  
size = 10MB,  
maxsize = 50MB,  
filegrowth = 10MB)
```

Baza de date a fost creata cu success si o putem vedea in Object Explorer la Databases, alaturi de baza Northwind si celelalte baze create de mine pentru laborator.



Crearea tabelelor:

2. Creati tabelul SERVICE

CREATE TABLE Service

```
(  
  IdService INT not null PRIMARY KEY,  
  Adresa nvarchar(64) not null,  
  NrTelefon nvarchar(11) not null,  
  Oras nvarchar(16) not null,  
  Program nvarchar(16) not null  
)
```

3.Creati tabelul ANGAJATI

CREATE TABLE Angajati

```
(  
  idAngajat int not null PRIMARY KEY,  
  idService int not null FOREIGN KEY REFERENCES Service(IdService),  
  Nume nvarchar(16) not null,  
  Prenume nvarchar(16) not null,  
  Adresa nvarchar(64),  
  Oras nvarchar(32),  
  DataNastere date not null,  
  NrTelefon nvarchar(16) not null  
)
```

4.Creati tabelul FUNCTII

CREATE TABLE Functii

```
(  
  idFunctie int not null PRIMARY KEY,  
  Denumire nvarchar(64) not null,  
)
```

5. Creati tabelul FUNTII ANGAJATI

```
CREATE TABLE FunctiiAngajati
(
    idFunctieAngajat int not null PRIMARY KEY,
    idAngajat int not null FOREIGN KEY REFERENCES Angajati(idAngajat),
    idFunctie int not null FOREIGN KEY REFERENCES Functii(idFunctie),
    DataAngajare date not null,
    DataPlecare date,
    Sefi int
)
```

6. Creati tabelul PROPRIETAR

```
CREATE TABLE Proprietar
(
    idProprietar int not null PRIMARY KEY,
    Nume nvarchar(32) not null,
    Prenume nvarchar(32) not null,
    Adresa nvarchar(64),
    Oras nvarchar(32) not null,
    NrTelefon nvarchar(11) not null,
    Email nvarchar(32)
)
```

7. Creati tabelul AUTOVEHICUL

```
CREATE TABLE Autovehicul
(
    idAutovehicul int not null PRIMARY KEY,
    Categorie nvarchar(16) not null,
    Model nvarchar(32) not null,
    Culoare nvarchar(16),
    Carburant nvarchar(16) not null,
    NrKm nvarchar(16) not null,
    PutereMotor int not null,
    SerieSasiu nvarchar(32) not null
)
```

8. Creati tabelul AUTOVEHICULE PROPRIETAR

```
CREATE TABLE AutovehiculeProprietar
(
    idProprietate int not null PRIMARY KEY,
    idProprietar int not null FOREIGN KEY REFERENCES Proprietar(idProprietar),
    idAutovehicul int not null FOREIGN KEY REFERENCES
Autovehicul(idAutovehicul),
    NrInmatriculare nvarchar(10) not null
)
```

9. Creati tabelul PROGRAMARI

```
CREATE TABLE Programari
(
    idProgramare int not null PRIMARY KEY,
    idProprietate int not null FOREIGN KEY REFERENCES
AutovehiculeProprietar(idProprietate),
    idService int not null FOREIGN KEY REFERENCES Service(idService),
    DataVenire date not null,
    DataIesire date
)
```

10. Creati tabelul CATEGORIE

```
CREATE TABLE Categorie
(
    idCategorie int not null PRIMARY KEY,
    Tip nvarchar(32) not null,
    Pret decimal(18,2) not null,
    Cantitate int not null
)
```

11. Creati tabelul FURNIZORI

```
CREATE TABLE Furnizori
(
    idFurnizor int not null PRIMARY KEY,
```

Nume **nvarchar**(16) not null,
Adresa **nvarchar**(64) not null,
Oras **nvarchar**(32) not null,
CodPostal **nvarchar**(8) not null,
Tara **nvarchar**(16) not null,
NrTelefon **nvarchar**(11) not null
)

12.Creati tabelul PIESE

CREATE TABLE Piese
(
idPiesa **int** not null **PRIMARY KEY**,
idCategorie **int** not null **FOREIGN KEY REFERENCES** Categorie(idCategorie),
idFurnizor **int** not null **FOREIGN KEY REFERENCES** Furnizori(idFurnizor),
Denumire **nvarchar**(32) not null,
)

13. Creati tabelul REPARATII

CREATE TABLE Reparatii
(
idReparatie **int** not null **PRIMARY KEY**,
idProgramare **int** not null **FOREIGN KEY REFERENCES**
Programari(idProgramare),
idPiesa **int** not null **FOREIGN KEY REFERENCES** Piese(idPiesa),
Defectiune **nvarchar**(32) not null,
Taxa **decimal**(18,2) not null,
Manopera **decimal**(18,2) not null,
PretTotal **decimal**(18,2) not null
)

14. Creati tabelul REPARATII AUTOVEHICULE

```
CREATE TABLE ReparatiiAutovehicule  
(  
    idReparatie int not null FOREIGN KEY REFERENCES Reparatii(idReparatie),  
    idAngajat int not null FOREIGN KEY REFERENCES Angajati(idAngajat)  
)
```

15. Creati tabelul SALARIU

```
CREATE TABLE Salariu  
(  
    idSalariu int not null PRIMARY KEY,  
    idFunctieAngajat int not null FOREIGN KEY REFERENCES  
FunctiiAngajati(idFunctieAngajat),  
    SalariuBrut money not null,  
    DataIntrareVigoare date not null,  
    DataIesireVigoare date  
)
```

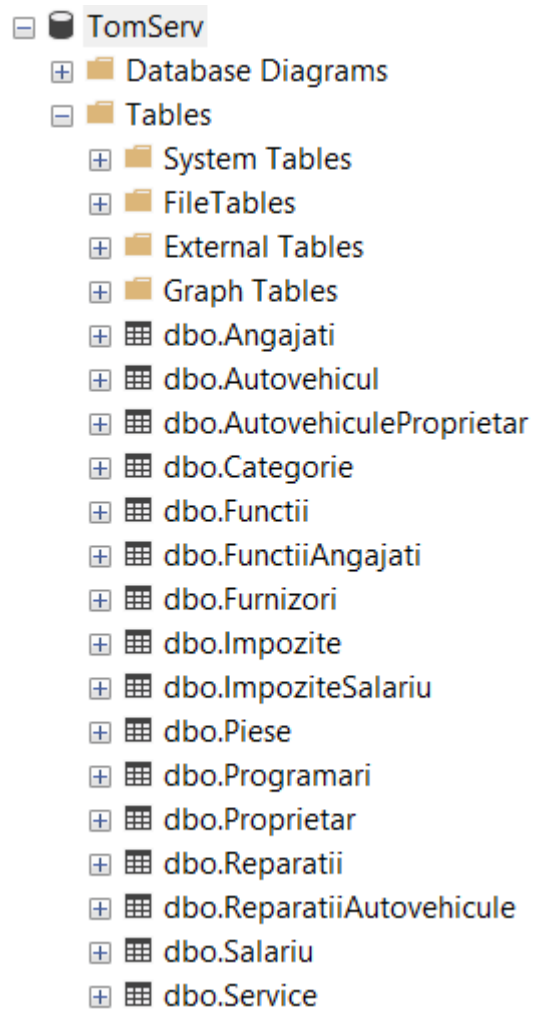
16. Creati tabelul IMPOZITE

```
CREATE TABLE Impozite  
(  
    idImpozit int not null PRIMARY KEY,  
    Nume nvarchar(32) not null,  
    Procent decimal(18,2) not null  
)
```

17. Creati tabelul IMPOZITE SALARIU

```
CREATE TABLE ImpoziteSalariu  
(  
    idImpoziteSalariu int not null PRIMARY KEY,  
    idSalariu int not null FOREIGN KEY REFERENCES Salariu(idSalariu),  
    idImpozit int not null FOREIGN KEY REFERENCES Impozite(idImpozit))
```

Dupa crearea tabelelor, acestea vor fi vizibile in Object Explorer prin expandarea bazei de date TomServ -> expandare Tables



3. Diagrama



4. Rezolvarea cerintelor legate de INSERT

18. Inserati inregistrari in tabelul SERVICE:

```
INSERT INTO Service(idService,Adresa,NrTelefon,Oras,Program) VALUES
(1,'str. Bobilna, nr. 12','0712345678','Ploiesti','Non-stop'),
(2,'str. Sforii, nr. 10','0798765432','Brasov','Non-stop'),
(3,'str. Viilor, nr. 30','0722334455','Bucuresti','Non-stop'),
(4,'str. Latina, nr.48','0799887766','Timisoara','Non-stop'),
(5,'str. Constructorilor, nr. 3','0744567788','Constanta','Non-stop')
```

19. Inserati inregistrari in tabelul PROPRIETAR:

```
INSERT INTO Proprietar(idProprietar,Nume,Prenume,Adresa,Oras,NrTelefon,Email) VALUES
(1,'Barbu','Madalina','str. Mihai Viteazu, nr.
3','Paulesti','0737658967','madalina.barbu@mta.ro'),
(2,'Craciun','Cristian','str. Patriei, nr.
10','Navodari','0788456723','cristian.craciun@mta.ro'),
(3,'Soare','Octavian','str. Fagului, nr.2','Brazii de
Jos','0723325665','soare.octavina@mta.ro'),
(4,'Ionita','Daniel','str. Merilor, nr.
19','Craiova','0733355578','daniel.ionita@mta.ro'),
(5,'Moise','Sarah','str. Fat-Frumos, nr. 12-13','Alba-
Iulia','0766688899','sarah.moise@mta.ro')
INSERT INTO Proprietar(idProprietar,Nume,Prenume,Adresa,Oras,NrTelefon,Email) VALUES
(6,'Toma','Cristina','str. Principala, nr.
34A','Mamaia','0722335566','cristina.toma@mta.ro'),
(7,'Chiva','Elena','str. Primaverii, nr. 90-
91','Galati','0712332145','elena.chiva@mta.ro'),
(8,'Petrea','Tudor','str. Muresului, nr. 7A','Iasi','0799999988','tudor.petrea@mta.ro'),
(9,'Ilie','Roxana','str. Fericirii, nr.
759','Ciorani','0766655534','roxana.ilie@mta.ro'),
(10,'Onea','George','str. Democratiei, nr.
11','Sighisoara','0777777788','george.onea@mta.ro')
```

20. Inserati inregistrari in tabelul AUTOVEHICUL:

```
INSERT INTO
Autovehicul(idAutovehicul,Categorie,Model,Culoare,Carburant,NrKm,PutereMotor,SerieSasiu)
VALUES
(1,'Autoturism','Peugeot 508','Negru','Benzina','198.123',112,'AB01CDE34F1234567'),
(2,'Autoturism','BMW Seria 3','Argintiu','Motorina','203.125',180,'WCDYC7CF8DX201851'),
(3,'Autoturism','Audi A5','Maro','Motorina','245.560',195,'WBAGG83461DN81194'),
(4,'Motocicleta','Honda VFR 800x','Alb','Motorina','150.255',102,'JH2PC35051M200020'),
(5,'Autoturism','Volkswagen Passat
CC','Maro','Benzina','199.000',170,'1G1YY24UX5X7120EX')
```

```
INSERT INTO
Autovehicul(idAutovehicul,Categorie,Model,Culoare,Carburant,NrKm,PutereMotor,SerieSasiu)
VALUES
(6,'Autoturism','Skoda Octavia','Verde','Motorina','178.980',115,'WAULC68E92A140677'),
```

```
(7, 'Autoturism', 'Citroen C4', 'Rosu', 'Electric', '150.000', 120, '1HGBH41JXMN109186'),
(8, 'Autoturism', 'Audi Q7', 'Albastru', 'Motorina', '50.000', 286, 'LJCPCBLCX1100237'),
(9, 'Autoturism', 'Mercedes GLC', 'Alb', 'Benzina', '103.520', 194, 'SGES000EX5CRC0199'),
(10, 'Autoturism', 'Peugeot 308', 'Negru', 'Benzina', '256.000', 108, 'WF04XXGBB4YS85432'),
(11, 'Autoturism', 'Dacia Logan', 'Negru', 'Motorina', '190.520', 100, 'SKES030ER5CP00189')
```

21. Inserati inregistrari in tabelul AUTOVEHICULE PROPRIETAR

INSERT INTO

AutovehiculeProprietar(idProprietate,idProprietar,idAutovehicul,NrInmatriculare) VALUES

```
(1,1,3, 'PX03BRB'),
(2,2,5, 'CT76CCC'),
(3,4,2, 'DJ32DNY'),
(4,3,8, 'PH18SUN')
```

INSERT INTO

AutovehiculeProprietar(idProprietate,idProprietar,idAutovehicul,NrInmatriculare) VALUES

```
(5,8,9, 'IS12TDR'),
(6,9,1, 'PH01RXV'),
(7,7,4, 'GL45ELE'),
(8,10,10, 'MS08NEA'),
(9,5,6, 'AB67SRA'),
(10,6,7, 'CT17CRS'),
(11,6,11, 'CT78CSS')
```

22. Inserati inregistrari in tabelul ANGAJATI

---angajati SERVICE cu id=1 cu locatia in Ploiesti

INSERT INTO Angajati(idAngajat,idService,Nume,Prenume,Adresa,Oras,DataNastere,NrTelefon) VALUES

```
(1,1, 'Dumitru', 'Victoria', 'str. Postei, nr. 89', 'Ploiesti', '1977-01-28', '0789898989'),
(2,1, 'Aciu', 'Lia', 'str. Rafiei, nr. 3', 'Ploiestiori', '1978-01-05', '0790909090'),
(3,1, 'Badic', 'Mihai', 'str. Plopeni, nr. 9', 'Paulesti', '1974-02-15', '0767676767'),
(4,1, 'Badea', 'Ion', 'str. Boldesti, nr. 178', 'Ploiesti', '1987-11-23', '0734343434'),
(5,1, 'Coca', 'Eugen', 'str. Bazaltului, nr. 19', 'Tantareni', '1989-11-20', '0723342356')
```

INSERT INTO Angajati(idAngajat,idService,Nume,Prenume,Adresa,Oras,DataNastere,NrTelefon) VALUES

```
(6,1, 'Lascu', 'Dan', 'str. Militari, nr. 46', 'Bucov', '1990-11-11', '0712333344'),
(7,1, 'Enache', 'Sorin', 'str. Crisu Alb, nr. 2', 'Albesti-Paleologu', '1998-02-17', '0737834155'),
(8,1, 'Munteanu', 'Adrian', 'str. Carpati, nr. 897', 'Ploiesti', '1985-02-28', '0721929239'),
(9,1, 'Ofrim', 'Dragos', 'str. Transilvaniei, nr. 27', 'Ploiesti', '1980-11-30', '0756677888'),
(10,1, 'Neamtu', 'Liviu', 'str. Bucegi, nr. 3A', 'Blejoii', '1986-04-18', '0756544332')
```

---angajati SERVICE cu id=2 cu locatia in Brasov

INSERT INTO Angajati(idAngajat,idService,Nume,Prenume,Adresa,Oras,DataNastere,NrTelefon) VALUES

```
(11,2, 'Munteanu', 'George', 'str. Zeicani, nr. 2', 'Predeal', '1987-03-28', '0789900988'),
(12,2, 'Radu', 'Sergei', 'str. Prasilei, nr. 178', 'Brasov', '1990-02-14', '0756776589'),
(13,2, 'Samoilescu', 'Gheorghe', 'str. Amara, nr. 9', 'Sinaia', '1984-11-26', '0767676769'),
(14,2, 'Stoian', 'Dan', 'str. Pansalelor, nr. 18', 'Azuga', '1991-09-25', '0756678790'),
(15,2, 'Topa', 'Vasile', 'str. Zambilelor, nr. 2', 'Brasov', '1982-01-09', '0734433443')
```

INSERT INTO Angajati(idAngajat,idService,Nume,Prenume,Adresa,Oras,DataNastere,NrTelefon) VALUES

```
(16,2,'Voncila','Ionel','str. Soarelui, nr. 456','Brasov','1996-12-13','0788888888'),
(17,2,'Voicu','Violeta','str. Garofitei, nr. 18','Brasov','1983-12-27','0723445665'),
(18,2,'Ursachi','Robert','str. Mierei, nr. 12A','Busteni','1981-02-02','0789987656'),
(19,2,'Teodor','Emanuel','str. Nicoarei, nr. 89','Brasov','1996-04-21','0711122231'),
(20,2,'Timoftei','Radu','str. Bucurei, nr. 9','Brasov','1974-02-15','0723472476')
```

---angajati SERVICE cu id=3 cu locatia in Bucuresti

```
INSERT INTO Angajati(idAngajat,idService,Nume,Prenume,Adresa,Oras,DataNastere,NrTelefon)
VALUES
```

```
(21,3,'Dima','Stefan','str. Urziceni, nr. 18','Bragadiru','1998-02-17','0721314151'),
(22,3,'Darie','George','str. Resita, nr. 8','Bucuresti','1994-06-19','0742526272'),
(23,3,'Herdea','Adrian','str. Stelelor, nr. 780','Pipera','1997-03-06','0753599787'),
(24,3,'Radu','Codrut','str. Principala, nr. 5','Bucuresti','1992-01-05','0789858412'),
(25,3,'David','Alexandru','str. Luica, nr. 8','Balotesti','1980-12-08','0789624153')
```

```
INSERT INTO Angajati(idAngajat,idService,Nume,Prenume,Adresa,Oras,DataNastere,NrTelefon)
VALUES
```

```
(26,3,'Miclaus','Marian','str. Zanoaga, nr. 46','Bucuresti','1996-12-13','0788778888'),
(27,3,'Petrea','Victor','str. Scropoasa, nr. 8','Gherghita','1983-12-27','0723435665'),
(28,3,'Popescu','Cornel','str. Odei, nr. 1','Bucuresti','1981-02-02','0789187656'),
(29,3,'Purcaru','Emil','str. Pogoanele, nr. 83','Pipera','1996-04-21','0731122231'),
(30,3,'Popovici','Andrei','str. Ciubarului, nr. 79','Balotesti','1974-02-15','0723572476')
```

---angajati SERVICE cu id=4 cu locatia in Timisoara

```
INSERT INTO Angajati(idAngajat,idService,Nume,Prenume,Adresa,Oras,DataNastere,NrTelefon)
VALUES
```

```
(31,4,'Dima','Cosmin','str. Lacului, nr. 128','Timisoara','1998-03-17','0722314151'),
(32,4,'Ursu','George','str. Simleu, nr. 38','Timisoara','1994-06-13','0742526282'),
(33,4,'Soare','Octavian','str. Morii, nr. 70','Timisoara','1997-08-05','0753599789'),
(34,4,'Radu','Toader','str. Zapezii, nr. 57','Timisoara','1992-05-13','0789858413'),
(35,4,'David','Ionut','str. Raureni, nr. 85','Timisoara','1980-08-17','0789637153')
```

```
INSERT INTO Angajati(idAngajat,idService,Nume,Prenume,Adresa,Oras,DataNastere,NrTelefon)
VALUES
```

```
(36,4,'Miclaus','Marin','str. Docuri, nr. 63','Timisoara','1996-12-11','0788677833'),
(37,4,'Petre','Victoras','str. Radacinei, nr. 81','Timisoara','1983-12-30','0723315661'),
(38,4,'Ionescu','Corneliu','str. Semanatorului, nr. 91','Timisoara','1981-02-22','078913256'),
(39,4,'Vasilache','Serbastian','str. Florica, nr. 283','Timisoara','1996-04-23','0741135231'),
(40,4,'Popescu','Vlad','str. Paunului, nr. 739','Timisoara','1974-02-15','0763586476')
```

---angajati SERVICE cu id=5 cu locatia in Constanta

```
INSERT INTO Angajati(idAngajat,idService,Nume,Prenume,Adresa,Oras,DataNastere,NrTelefon)
VALUES
```

```
(41,5,'Dumitrascu','Vasile','str. Veseliei, nr. 32','Constanta','1978-01-28','0789898999'),
(42,5,'Achim','Liliana','str. Stanescu, nr. 30','Navodari','1977-01-05','0790909091'),
(43,5,'Badea','Tudor','str. Stana de Vale, nr.89','Mamaia','1974-03-15','0767676777'),
(44,5,'Tudose','Mihai','str. Doina, nr. 18','Constanta','1987-12-23','0734343334'),
(45,5,'Raicu','Andrei','str. Telita, nr. 99','Mamaia','1997-11-20','0723342387')
```

```
INSERT INTO Angajati(idAngajat,idService,Nume,Prenume,Adresa,Oras,DataNastere,NrTelefon)
VALUES
```

```
(46,5,'Lascuzeanu','Daniel','str. Dunavat, nr. 66','Jupiter','1995-11-11','0735333344'),
```

```
(47,5,'Avram','Sorinel','str. Ferentari, nr. 22','Constanta','1998-07-18','0738934155'),
(48,5,'Aldea','Adrian','str. Rahovei, nr. 877','Mamaia','1985-04-28','0721929240'),
(49,5,'Iordache','Dragos','str. Barnova, nr. 277','Constanta','1988-12-30','0756678388'),
(50,5,'Rusu','Liviu','str.Iancu Jianu, nr. 33','Constanta','1986-07-18','0756544212')
```

23. Inserati inregistrari in tabelul FUNCTII:

```
INSERT INTO Functii(idFunctie,Denumire) VALUES
(1,'Vopsitor'),
(2,'Mecanic auto'),
(3,'Manager'),
(4,'Electrician'),
(5,'Contabil')
INSERT INTO Functii(idFunctie,Denumire) VALUES
(6,'Tinichigiu'),
(7,'Inginer diagnoza'),
(8,'Tehnician'),
(9,'Dispecer'),
(10,'Patron'),
(11,'Inspector ITP'),
(12,'Mecanic mentenanta')
```

24. Inserati inregistrari in tabelul FUNCTII ANGAJATI:

```
INSERT INTO
FunctiiAngajati(idFunctieAngajat,idAngajat,idFunctie,DataAngajare,DataPlecare,Sefi)
VALUES
(1,1,10,'2005-05-17',NULL,NULL),
(2,2,3,'2008-07-25',NULL,1),
(3,3,5,'2008-08-23',NULL,2),
(4,4,4,'2009-09-20',NULL,2),
(5,5,12,'2011-11-15',NULL,2)
INSERT INTO
FunctiiAngajati(idFunctieAngajat,idAngajat,idFunctie,DataAngajare,DataPlecare,Sefi)
VALUES
(6,6,1,'2008-02-06',NULL,2),
(7,7,2,'2010-12-30',NULL,2),
(8,8,11,'2012-01-04',NULL,2),
(9,9,8,'2009-03-23',NULL,2),
(10,10,7,'2018-04-04',NULL,2)
```

```
INSERT INTO
FunctiiAngajati(idFunctieAngajat,idAngajat,idFunctie,DataAngajare,DataPlecare,Sefi)
VALUES
(11,11,3,'2017-08-18',NULL,1),
(12,12,9,'2008-07-20',NULL,11),
(13,13,5,'2020-01-06',NULL,11),
(14,14,4,'2011-09-08',NULL,11),
(15,15,6,'2013-11-15',NULL,11)
INSERT INTO
FunctiiAngajati(idFunctieAngajat,idAngajat,idFunctie,DataAngajare,DataPlecare,Sefi)
VALUES
(16,16,1,'2021-02-06',NULL,11),
(17,17,2,'2020-12-30',NULL,11),
```

```
(18,18,11, '2004-01-04', NULL,11),
(19,19,8, '2008-03-23', NULL,11),
(20,20,7, '2005-04-04', NULL,11)
```

INSERT INTO

```
FunctiiAngajati(idFunctieAngajat,idAngajat,idFunctie,DataAngajare,DataPlecare,Sefi)
VALUES
```

```
(21,21,3, '2014-03-08', NULL,1),
(22,22,6, '2008-11-25', NULL,21),
(23,23,5, '2017-03-03', NULL,21),
(24,24,4, '2007-09-20', NULL,21),
(25,25,12, '2019-12-15', NULL,21)
```

INSERT INTO

```
FunctiiAngajati(idFunctieAngajat,idAngajat,idFunctie,DataAngajare,DataPlecare,Sefi)
VALUES
```

```
(26,26,1, '2010-01-06', NULL,21),
(27,27,2, '2011-08-29', NULL,21),
(28,28,9, '2014-02-02', NULL,21),
(29,29,8, '2020-07-20', NULL,21),
(30,30,7, '2016-05-19', NULL,21)
```

INSERT INTO

```
FunctiiAngajati(idFunctieAngajat,idAngajat,idFunctie,DataAngajare,DataPlecare,Sefi)
VALUES
```

```
(31,31,3, '2005-05-17', NULL,1),
(32,32,6, '2008-07-25', NULL,31),
(33,33,5, '2008-08-23', NULL,31),
(34,34,4, '2009-09-20', NULL,31),
(35,35,12, '2011-11-15', NULL,31)
```

INSERT INTO

```
FunctiiAngajati(idFunctieAngajat,idAngajat,idFunctie,DataAngajare,DataPlecare,Sefi)
VALUES
```

```
(36,36,1, '2008-02-06', NULL,31),
(37,37,2, '2010-12-30', NULL,31),
(38,38,11, '2012-01-04', NULL,31),
(39,39,8, '2009-03-23', NULL,31),
(40,40,7, '2018-04-04', NULL,31)
```

INSERT INTO

```
FunctiiAngajati(idFunctieAngajat,idAngajat,idFunctie,DataAngajare,DataPlecare,Sefi)
VALUES
```

```
(41,41,3, '2010-05-17', NULL,1),
(42,42,9, '2016-07-25', NULL,41),
(43,43,5, '2015-08-23', NULL,41),
(44,44,4, '2009-10-20', NULL,41),
(45,45,12, '2011-05-15', NULL,41)
```

INSERT INTO

```
FunctiiAngajati(idFunctieAngajat,idAngajat,idFunctie,DataAngajare,DataPlecare,Sefi)
VALUES
```

```
(46,46,1, '2008-02-06', NULL,41),
(47,47,2, '2010-12-30', NULL,41),
(48,48,11, '2012-01-04', NULL,41),
(49,49,8, '2009-03-23', NULL,41),
(50,50,7, '2018-04-04', NULL,41)
```


25. Inserati inregistrari in tabelul CATEGORIE:

```
INSERT INTO Categorie(idCategorie,Tip,Pret,Cantitate) VALUES
(1,'Ulei',60,100),
(2,'Suruburi',5,350),
(3,'Vopsea',35,400),
(4,'Radiator',100,200),
(5,'Bujii',70,800)
INSERT INTO Categorie(idCategorie,Tip,Pret,Cantitate) VALUES
(6,'Antigel',150,417),
(7,'Parbriz',700,500),
(8,'Baterii',350,80),
(9,'Becuri',10,985),
(10,'Furtun',45,800)
INSERT INTO Categorie(idCategorie,Tip,Pret,Cantitate) VALUES
(11,'Filtre',100,652)
```

26. Inserati inregistrari in tabelul FURNIZORI:

```
INSERT INTO Furnizori(idFurnizor,Nume,Adresa,Oras,CodPostal,Tara,NrTelefon) VALUES
(1,'Total','str. Stejarilor, nr. 2','Brasov','507055','Romania','0268401711'),
(2,'Bosch','49 Gilbert St.','Munchen','EC1 4SD','Germania','1715552222'),
(3,'A.B.S.','Josef-Orlopp-Strabe 55','Berlin','10365','Germania','0316302230'),
(4,'Ridex','92 Setsuko Chuo-ku','Osaka','545','Japonia','064317877'),
(5,'Stark','Kaloadagatan 13','Göteborg','S-345 67','Suedia','0319876543'),
(6,'Van Wezel','Tiergartenstraße 5','Berlin','10785','Germania','0109984510'),
(7,'Mann Filter','Sales Representative','Ravenna','48100','Italia','054460323')
```

27. Inserati inregistrari in tabelul PIESE:

```
INSERT INTO Piese(idPiesa,idCategorie,idFurnizor,Denumire) VALUES
(1,1,1,'Ulei motor'),
(2,2,4,'Suruburi metrice'),
(3,3,6,'Vopsea Neagra'),
(4,3,6,'Vopsea Alba'),
(5,3,6,'Vopsea Gri'),
(6,3,6,'Vopsea Rosie'),
(7,3,6,'Vopsea Albastra'),
(8,4,4,'Radiator de racire auto'),
(9,5,2,'Bujii'),
(10,6,7,'Antigel')
INSERT INTO Piese(idPiesa,idCategorie,idFurnizor,Denumire) VALUES
(11,7,5,'Parbriz'),
(12,7,5,'Geamuri laterale'),
(13,7,5,'Luneta'),
(14,8,2,'Acumulator auto'),
(15,9,3,'Becuri auto'),
(16,10,7,'Furtun'),
(17,11,7,'Filtru polen'),
(18,11,7,'Filtru aer'),
(19,11,7,'Filtru ulei'),
(20,11,7,'Filtru combustibil')
```

28. Inserati inregistrari in tabelul IMPOZITE:

```
INSERT INTO Impozite(idImpozit,Nume,Procent) VALUES
(1,'Asigurare Sanatate',25),
(2,'Asigurare Sociala',10),
(3,'Impozit pe Venit',10),
(4,'CAM',2.25)
```

29. Inserati inregistrari in tabelul SALARIU:

```
INSERT INTO
Salariu(idSalariu,idFuncctieAngajat,SalariuBrut,DataIntrareVigoare,DataIesireVigoare)
VALUES
(1,1,2200,'2020-02-23',NULL),
(2,2,3000,'2021-05-26',NULL),
(3,3,6000,'2022-03-17',NULL),
(4,4,2300,'2021-02-23','2021-10-29'),
(5,4,2500,'2021-10-30',NULL),
(6,5,4675,'2022-03-25',NULL),
(7,6,2000,'2021-12-14',NULL)
INSERT INTO
Salariu(idSalariu,idFuncctieAngajat,SalariuBrut,DataIntrareVigoare,DataIesireVigoare)
VALUES
(8,7,2460,'2019-09-01',NULL),
(9,8,2030,'2020-08-26',NULL),
(10,9,1950,'2020-10-10',NULL),
(11,10,7800,'2021-04-04',NULL),
(12,11,2840,'2020-06-02',NULL),
(13,12,2610,'2017-05-02','2020-05-05'),
(14,12,2715,'2020-05-06',NULL)
```

30. Inserati inregistrari in tabelul IMPOZITE SALARIU:

```
INSERT INTO ImpoziteSalariu(idImpoziteSalariu,idSalariu,idImpozit) VALUES
(1,1,1),
(2,1,2),
(3,1,3),
(4,1,4),
(5,2,1),
(6,2,2),
(7,2,3),
(8,2,4),
(9,3,1),
(10,3,2),
(11,3,3),
(12,3,4)
INSERT INTO ImpoziteSalariu(idImpoziteSalariu,idSalariu,idImpozit) VALUES
(13,4,1),
(14,4,2),
(15,4,3),
(16,4,4),
(17,5,1),
(18,5,2),
(19,5,3),
```

```

(20,5,4),
(21,6,1),
(22,6,2),
(23,6,3),
(24,6,4),
(25,7,1),
(26,7,2),
(27,7,3),
(28,7,4),
(29,8,1)
INSERT INTO ImpoziteSalariu(idImpoziteSalariu,idSalariu,idImpozit) VALUES
(30,8,2),
(31,8,3),
(32,8,4),
(33,9,1),
(34,9,2),
(35,9,3),
(36,9,4),
(37,10,1),
(38,10,2),
(39,10,3),
(40,10,4),
(41,11,1),
(42,11,2),
(43,11,3),
(44,11,4),
(45,12,1),
(46,12,2),
(47,12,3),
(48,12,4)

```

31. Inserati inregistrari in tabelul PROGRAMARI

```

INSERT INTO Programari(idProgramare,idProprietate,idService,DataVenire,DataIesire) VALUES
(1,1,1, '2022-04-20', NULL),
(2,2,5, '2022-04-20', NULL),
(3,3,4, '2022-04-10', '2022-04-20'),
(4,4,1, '2022-03-02', '2022-03-18'),
(5,5,2, '2022-01-23', '2022-01-29'),
(6,6,1, '2022-04-20', NULL)
INSERT INTO Programari(idProgramare,idProprietate,idService,DataVenire,DataIesire) VALUES
(7,7,2, '2021-12-25', '2022-01-05'),
(8,8,4, '2021-11-23', '2021-12-03'),
(9,9,4, '2021-08-08', '2021-09-01'),
(10,10,5, '2022-02-17', '2022-02-19'),
(11,11,5, '2022-04-20', NULL)

```

32. Inserati inregistrari in tabelul REPARATII

```

INSERT INTO Reparatii(idReparatie,idProgramare,idPiesa,Defectiune,Taxa,Manopera) VALUES
(1,1,1, 'Schimb ulei', 0.1, 12),
(2,1,19, 'Schimb ulei', 0.1, 20),
(3,2,13, 'Inlocuire luneta', 0.5, 50),
(4,3,3, 'Vopsire si polish', 0.6, 48),
(5,4,15, 'Inlocuire baterie auto', 0.2, 21),

```

```

(6,5,10,'Completare antigel',0.1,5),
(7,6,17,'Schimbare filtre',0.1,10),
(8,6,18,'Schimbare filtre',0.1,10)
INSERT INTO Reparatii(idReparatie,idProgramare,idPiesa,Defectiune,Taxa,Manopera) VALUES
(9,6,20,'Schimbare filtre',0.1,10),
(10,7,9,'Inlocuire bujii',0.05,5),
(11,7,2,'Inlocuire suruburi',0.02,5),
(12,8,15,'Schimbare becuri',0.1,5),
(13,9,8,'Inlocuire radiator',0.2,30),
(14,9,18,'Schimbare filtru aer',0.1,10),
(15,10,16,'Schimb furtun lichid parbriz',0.1,5),
(16,11,11,'Inlocuire parbriz',0.5,50)

```

33. Inserati inregistrari in tabelul REPARATII AUTOVEHICULE

```

INSERT INTO ReparatiiAutovehicule(idReparatieAuto,idReparatie,idAngajat) VALUES
(1,1,10),
(2,1,10),
(3,2,49),
(4,2,44),
(5,3,36),
(6,4,4),
(7,5,17),
(8,6,10),
(9,6,7),
(10,6,8),
(11,6,10),
(12,7,17),
(13,8,34),
(14,9,35),
(15,9,34),
(16,10,47),
(17,11,44),
(18,11,45)

```

5. Rezolvarea cerintelor legate de SELECT

```
select * from Autovehicul
select * from AutovehiculeProprietar
select * from Proprietar
select * from Angajati
select * from Functii
select * from FunctiiAngajati
select * from Service
select * from Piese
select * from Furnizori
select * from Categorie
select * from Salariu
select * from Impozite
select * from ImpoziteSalariu
```

34. Afisati toti numele si prenumele angajatilor ce au functia de manager.

```
select a.Nume as NumeAngajati, a.Prenume as PrenumeAngajati
from FunctiiAngajati as fa
inner join Angajati as a on fa.idAngajat=a.idAngajat
inner join Functii as f on fa.idFunctie=f.idFunctie
where f.Denumire='Manager'
```

	NumeAngajati	PrenumeAngajati
1	Aciu	Lia
2	Munteanu	Andrei
3	Dima	Stefan
4	Dima	Cosmin
5	Dumitrascu	Vasile

35. Afisati numele si prenumele angajatilor care s-au angajat dupa anul 2008.

```
select a.Nume as NumeAngajati,a.Prenume as PrenumeAngajati,fa.DataAngajare as
DataAngajare
from FunctiiAngajati as fa
inner join Angajati as a on fa.idAngajat=a.idAngajat
where year(fa.DataAngajare) > 2008
```

	NumeAngajati	PrenumeAngajati	DataAngajare
1	Badea	Ion	2009-09-20
2	Coca	Eugen	2011-11-15
3	Enache	Sorin	2010-12-30
4	Munteanu	Adrian	2012-01-04
5	Ofrim	Dragos	2009-03-23
6	Neamtu	Liviu	2018-04-04
7	Munteanu	Andrei	2017-08-18
8	Samoilescu	Gheorghe	2020-01-06
9	Stoian	Dan	2011-09-08
10	Topa	Vasile	2013-11-15
11	Voncila	Ionel	2021-02-06
12	Voicu	Violeta	2020-12-30
13	Dima	Stefan	2014-03-08
14	Herdea	Adrian	2017-03-03
15	David	Alexandru	2019-12-15
16	Miclaus	Marian	2010-01-06
17	Petrea	Victor	2011-08-29
18	Popescu	Cornel	2014-02-02
19	Purcaru	Emil	2020-07-20
20	Popovici	Andrei	2016-05-19
21	Radu	Toader	2009-09-20
22	David	Ionut	2011-11-15
23	Petre	Victoras	2010-12-30
24	Ionescu	Corneliu	2012-01-04
25	Vasilache	Serbastian	2009-03-23
26	Popescu	Vlad	2018-04-04
27	Dumitrascu	Vasile	2010-05-17
28	Achim	Liliana	2016-07-25
29	Badea	Tudor	2015-08-23
30	Tudose	Mihai	2009-10-20
31	Raicu	Andrei	2011-05-15
32	Avram	Sorinel	2010-12-30
33	Aldea	Adrian	2012-01-04
34	Iordache	Dragos	2009-03-23
35	Rusu	Liviu	2018-04-04
36	Enache	Sorin	2010-12-30

36. Afisati toate vehiculele din categoria motocicletă.

```
select *
from Autovehicul
where Categorie='Motocicleta'
```

	idAutovehicul	Categorie	Model	Culoare	Carburant	NrKm	PutereMotor	SerieSasiu
1	4	Motocicleta	Honda VFR 800x	Alb	Motorina	150.255	102	JH2PC35051M200020

37. Afisati proprietarii ce detin autovehicule din categoria motocicletă.

```
select p.Nume as Nume,p.Prenume as Prenume,a.Categorie as Categorie
from AutovehiculeProprietar as ap
inner join Proprietar p on ap.idProprietar=p.idProprietar
inner join Autovehicul a on ap.idAutovehicul=a.idAutovehicul
where a.Categorie='Motocicleta'
```

	Nume	Prenume	Categorie
1	chiva	elena	Motocicleta

38. Afisati angajatii ce lucreaza la service-ul din Bucuresti.

```
select a.Nume as NumeAngajati, a.Prenume as PrenumeAngajati,s.Oras as Oras
from Angajati a
inner join Service s on a.idService=s.idService
where s.Oras='Bucuresti'
```

	NumeAngajati	PrenumeAngajati	Oras
1	Dima	Stefan	Bucuresti
2	Darie	Andrei	Bucuresti
3	Herdea	Adrian	Bucuresti
4	Radu	Codrut	Bucuresti
5	David	Alexandru	Bucuresti
6	Miclaus	Marian	Bucuresti
7	Petrea	Victor	Bucuresti
8	Popescu	Cornel	Bucuresti
9	Purcaru	Emil	Bucuresti
10	Popovici	Andrei	Bucuresti

39. Afisati numele si prenumele patronului ce detine lantul de service-uri auto.

```
select a.Nume as NumePatron, a.Prenume as PrenumePatron
from FunctiiAngajati as fa
inner join Angajati as a on fa.idAngajat=a.idAngajat
inner join Functii as f on fa.idFunctie=f.idFunctie
where f.Denumire='Patron'
```

--sau

```
select distinct a.Nume+' '+a.Prenume as Sef
from FunctiiAngajati fa
inner join Angajati as a on fa.idAngajat=a.idAngajat
inner join Functii as f on fa.idFunctie=f.idFunctie
where fa.Sefi is null
```

	NumePatron	PrenumePatron
1	Dumitru	Victoria

40. Selectati toate autovehiculele ce au carburantul benzina.

```
select a.Model as Model, a.Carburant as Carburant
from Autovehicul a
where a.Carburant='#Benzina'
```

	Model	Carburant
1	Peugeot 508	#Benzina
2	Volkswagen Passat CC	#Benzina
3	Mercedes GLC	#Benzina
4	Peugeot 308	#Benzina
5	BMW Seria 1	#Benzina

41. Afisati toti proprietarii ce detin autovehicule ce au carburantul motorina.

```
select p.Nume as Nume,p.Prenume as Prenume,a.Model as Model,a.Carburant as Carburant
from AutovehiculeProprietar as ap
inner join Proprietar p on ap.idProprietar=p.idProprietar
inner join Autovehicul a on ap.idAutovehicul=a.idAutovehicul
where a.Carburant='Motorina'
```

	Nume	Prenume	Model	Carburant
1	barbu	georgiana	Audi A5	Motorina
2	ionita	daniel	BMW Seria 3	Motorina
3	soare	octavian	Audi Q7	Motorina
4	chiva	elena	Honda VFR 800x	Motorina
5	moise	sarah	Skoda Octavia	Motorina
6	toma	cristina	Dacia Logan	Motorina
7	toma	cristina	Opel Astra	Motorina

42. Selectati autoturismele ce au peste 120 CP si numele proprietarilor lor.

```
select p.Nume as Nume,p.Prenume as Prenume,a.Model as Model, a.PutereMotor as PutereMotor
from AutovehiculeProprietar as ap
inner join Proprietar p on ap.idProprietar=p.idProprietar
inner join Autovehicul a on ap.idAutovehicul=a.idAutovehicul
where a.PutereMotor > 120
```


	Nume	Prenume	Model	PutereMotor
1	barbu	georgiana	Audi A5	195
2	craciun	cristian	Volkswagen Passat CC	170
3	ionita	daniel	BMW Seria 3	180
4	soare	octavian	Audi Q7	286
5	petrea	tudor	Mercedes GLC	194

43. Afisati toti angajatii cu varsta peste 30 de ani.

```
select a.Nume as Nume, a.Prenume as Prenume, year(a.DataNastere) as AnNastere,
DATEDIFF(year, a.DataNastere, current_timestamp) as Varsta
from Angajati a
where DATEDIFF(year, a.DataNastere, current_timestamp) > 30
```

	Nume	Prenume	AnNastere	Varsta
1	Dumitru	Victoria	1977	45
2	Aciu	Lia	1978	44
3	Badic	Mihai	1974	48
4	Badea	Ion	1987	35
5	Coca	Eugen	1989	33
6	Lascu	Dan	1990	32
7	Munteanu	Adrian	1985	37
8	Ofrim	Dragos	1980	42
9	Neamtu	Liviu	1986	36
10	Munteanu	Andrei	1987	35
11	Radu	Serghei	1990	32
12	Samoilescu	Gheorghe	1984	38
13	Stoian	Dan	1991	31
14	Topa	Vasile	1982	40
15	Voicu	Violeta	1983	39
16	Ursachi	Robert	1981	41
17	Timoftei	Radu	1974	48
18	David	Alexandru	1980	42
19	Petrea	Victor	1983	39
20	Popescu	Cornel	1981	41
21	Popovici	Andrei	1974	48
22	David	Ionut	1980	42
23	Petre	Victoras	1983	39
24	Ionescu	Corneliu	1981	41
25	Popescu	Vlad	1974	48
26	Dumitrascu	Vasile	1978	44
27	Achim	Liliana	1977	45
28	Badea	Tudor	1974	48
29	Tudose	Mihai	1987	35
30	Aldea	Adrian	1985	37
31	Iordache	Dragos	1988	34
32	Rusu	Liviu	1986	36

44. Afisati toate piesele din categoria 'Filtre'.

```
select p.Denumire as Filtre
from Piese p
inner join Categorie c on p.idCategorie=c.idCategorie
where c.Tip='Filtre'
```

	Filtre
1	Filtru polen
2	Filtru aer
3	Filtru ulei
4	Filtru combustibil

45. Afisati numele furnizorului care livreaza piese din categoria 'Parbriz'.

```
select distinct f.Nume as Nume
from Piese p
inner join Categorie c on p.idCategorie=c.idCategorie
inner join Furnizori f on p.idFurnizor=f.idFurnizor
where c.Tip='Parbriz'
```

Results	
	Nume
1	Stark

46. Scrieti o interogare care sa afiseze numarul de produse din fiecare categorie si numele categoriei.

```
select c.Tip as Categorie, c.Cantitate as Cantitate
from Categorie c
```

Results		
	Categorie	Cantitate
1	Ulei	100
2	Suruburi	350
3	Vopsea	400
4	Radiator	200
5	Bujii	800
6	Antigel	417
7	Parbriz	500
8	Baterii	80
9	Becuri	985
10	Furtun	800
11	Filtre	652
12	Anvelope	100

47. Afisati toate orasele din 'Germania' in care furnizorii de piese au sediul.

```
select f.Oras as Oras
from Furnizori f
where f.Tara='Germania'
```

Results	
	Oras
1	Munchen
2	Munchen

48. Afisati toate orasele din 'Germania' in care furnizorii de piese au sediul. Afisati si categoriile de piese pe care le fabrica si denumirea furnizorului.

```
select distinct f.Oras as Oras, c.Tip as Categorie,
f.Nume as Furnizor
from Piese p
inner join Categorie c on p.idCategorie=c.idCategorie
inner join Furnizori f on p.idFurnizor=f.idFurnizor
where f.Tara='Germania'
```

Results			
	Oras	Categorie	Furnizor
1	Munchen	Baterii	Bosch
2	Munchen	Bujii	Bosch

49. Afisati toate salariile ce au suferit modificari.

```
select s.SalariuBrut as Salariu
from Salariu s
inner join FunctiiAngajati fa on s.idFunctieAngajat=fa.idFunctieAngajat
where s.DataIesireVigoare is not null
```

Results	
	Salariu
1	2300.00
2	2610.00

50. Afisati toate impozitele pentru functiile angajatilor cu id=3.

```
select i.Nume as Impozite
from ImpoziteSalariu imp
inner join Salariu s on imp.idSalariu=s.idSalariu
inner join Impozite i on imp.idImpozit=i.idImpozit
where s.idFunctieAngajat=3
```

Results	
	Impozite
1	Asigurare Sanatate
2	Asigurare Sociala
3	Impozit pe Venit
4	CAM

51. Afisati salariile brute ordonate descrescator.

```
select SalariuBrut
from Salariu
order by SalariuBrut desc
```

Results	
	SalariuBrut
1	7800.00
2	6000.00
3	5000.00
4	4840.00
5	4675.00
6	2715.00
7	2610.00
8	2500.00
9	2460.00
10	2332.80
11	2300.00
12	2030.00
13	2000.00
14	1950.00

52. Selectati toti angajatii nascuti in data de '1996-04-21'

```
select a.Nume+' '+a.Prenume as NumeAngajati
from Angajati a
where a.DataNastere='1996-04-21'
```

Results	
	NumeAngajati
1	Teodor Emanuel
2	Purcaru Emil

53. Afisati toti angajati ai caror nume incepe cu 'A'.

```
select *  
from Angajati  
where Nume like 'A%'
```

	idAngajat	idService	Nume	Prenume	Adresa	Oras	DataNastere	NrTelefon
1	2	1	Aciu	Lia	str. Rafiei, nr. 3	Ploiestiori	1978-01-05	0790909090
2	42	5	Achim	Liliana	str. Stanescu, nr. 30	Navodari	1977-01-05	0790909091
3	47	5	Avram	Sorinel	str. Ferentari, nr. 22	Constanta	1998-07-18	0738934155
4	48	5	Aldea	Adrian	str. Rahovei, nr. 877	Mamaia	1985-04-28	0721929240

54. Afisati toate masinile inregistrate in service-ul cu id=1 si numele proprietarilor acestora.

```
select prop.Nume+' '+prop.Prenume as Proprietar, auto.Model as Model, ap.NrInmatriculare  
as NrInmatriculare  
from AutovehiculeProprietar ap  
inner join Programari p on ap.idProprietate=p.idProprietate  
inner join Proprietar prop on ap.idProprietar=prop.idProprietar  
inner join Autovehicul auto on ap.idAutovehicul=auto.idAutovehicul  
where p.idService=1
```

	Proprietar	Model	NrInmatriculare
1	barbu georgiana	Audi A5	PX03BRB
2	soare octavian	Audi Q7	PH18SUN
3	ilie roxana	Peugeot 508	PH01RXV

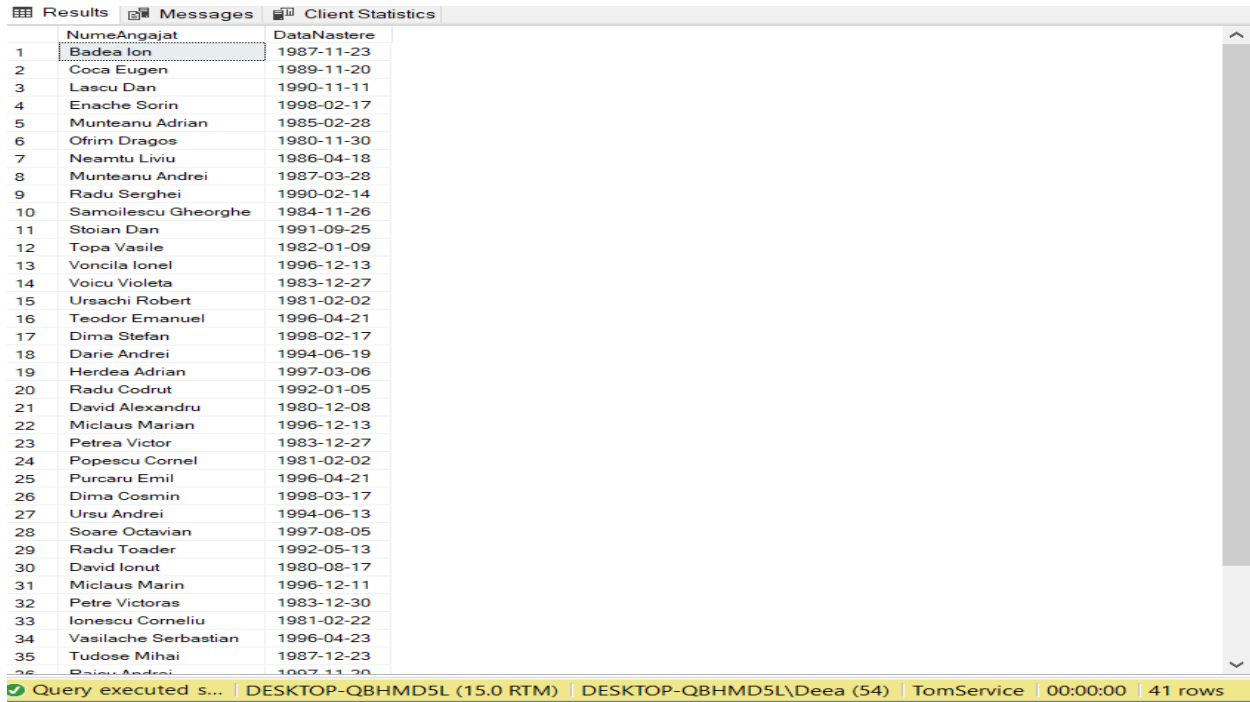
55. Sa se afiseze toti angajatii al caror nume incepe cu "Dum".

```
select a.Nume+' '+a.Prenume as NumeAngajat  
from Angajati a  
where a.Nume like 'Dum%'
```

	NumeAngajat
1	Dumitru Victoria
2	Dumitrascu Vasile

56. Sa se afiseze toti angajatii nascuti dupa data de '1980-01-01'.

```
select a.Nume+' '+a.Prenume as NumeAngajat, a.DataNastere
from Angajati a
where a.DataNastere > '1980-01-01'
```

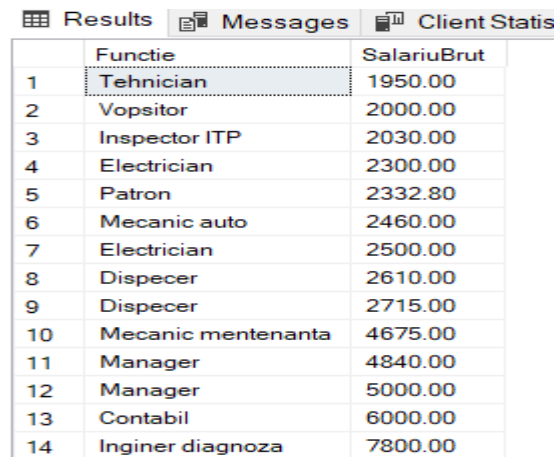


The screenshot shows the 'Results' tab of a SQL query. The query filters employees born after 1980-01-01. The results table has two columns: 'NumeAngajat' and 'DataNastere'. The status bar at the bottom indicates 'Query executed s...' and '41 rows'.

	NumeAngajat	DataNastere
1	Badea Ion	1987-11-23
2	Coca Eugen	1989-11-20
3	Lascu Dan	1990-11-11
4	Enache Sorin	1998-02-17
5	Munteanu Adrian	1985-02-28
6	Ofrim Dragos	1980-11-30
7	Neamtu Liviu	1986-04-18
8	Munteanu Andrei	1987-03-28
9	Radu Serghei	1990-02-14
10	Samoilescu Gheorghe	1984-11-26
11	Stoian Dan	1991-09-25
12	Topa Vasile	1982-01-09
13	Voncila Ionel	1996-12-13
14	Voicu Violeta	1983-12-27
15	Ursachi Robert	1981-02-02
16	Teodor Emanuel	1996-04-21
17	Dima Stefan	1998-02-17
18	Darie Andrei	1994-06-19
19	Herdea Adrian	1997-03-06
20	Radu Codrut	1992-01-05
21	David Alexandru	1980-12-08
22	Miclaus Marian	1996-12-13
23	Petrea Victor	1983-12-27
24	Popescu Cornel	1981-02-02
25	Purcaru Emil	1996-04-21
26	Dima Cosmin	1998-03-17
27	Ursu Andrei	1994-06-13
28	Soare Octavian	1997-08-05
29	Radu Toader	1992-05-13
30	David Ionut	1980-08-17
31	Miclaus Marin	1996-12-11
32	Petre Victoras	1983-12-30
33	Ionescu Corneliu	1981-02-22
34	Vasilache Serbastian	1996-04-23
35	Tudose Mihai	1987-12-23
36	Radu Andrei	1997-11-20

57. Sa se afiseze toate salariile pentru fiecare functie, ordonate crescator.

```
select distinct f.Denumire as Functie, s.SalariuBrut
from FunctiiAngajati fa
inner join Salariu s on fa.idFunctieAngajat=s.idFunctieAngajat
inner join Functii f on fa.idFunctie=f.idFunctie
order by s.SalariuBrut asc
```



The screenshot shows the 'Results' tab of a SQL query. The query displays distinct salaries for each function, ordered by salary. The results table has two columns: 'Functie' and 'SalariuBrut'. The status bar at the bottom indicates 'Query executed s...' and '41 rows'.

	Functie	SalariuBrut
1	Tehnician	1950.00
2	Vopsitor	2000.00
3	Inspector ITP	2030.00
4	Electrician	2300.00
5	Patron	2332.80
6	Mecanic auto	2460.00
7	Electrician	2500.00
8	Dispecer	2610.00
9	Dispecer	2715.00
10	Mecanic mentenanta	4675.00
11	Manager	4840.00
12	Manager	5000.00
13	Contabil	6000.00
14	Inginer diagnoza	7800.00

58. Sa se afiseze urmatoarele 5 programari in ordine crescatoare.

```
select top(5) *
from Programari p
order by p.DataVenire asc
```

	idProgramare	idProprietate	idService	DataVenire	DataIesire
1	9	9	4	2021-08-08	2021-09-01
2	8			2021-11-23	2021-12-03
3	7	7	2	2021-12-25	2022-01-05
4	5	5	2	2022-01-23	2022-01-29
5	10	10	5	2022-02-17	2022-02-19

59. Sa se afiseze angajatii nascuti in luna februarie, august, octombrie sau decembrie, ordonati crescator dupa anul nasterii.

```
select *
from Angajati a
where DATEPART(m,a.DataNastere) IN (2,8,10,12)
order by DATEPART(year,a.DataNastere) asc
```

	idAngajat	idService	Nume	Prenume	Adresa	Oras	DataNastere	NrTelefon
1	3	1	Badic	Mihai	str. Plopeni, nr. 9	Paulesti	1974-02-15	0767676767
2	20	2	Timoftei	Radu	str. Bucurei, nr. 9	Brasov	1974-02-15	0723472476
3	30	3	Popovici	Andrei	str. Ciubarului, nr. 79	BALOTESTI	1974-02-15	0723572476
4	40	4	Popescu	Vlad	str. Paunului, nr. 739	Timisoara	1974-02-15	0763586476
5	35	4	David	Ionut	str. Raureni, nr. 85	Timisoara	1980-08-17	0789637153
6	25	3	David	Alexandru	str. Luica, nr. 8	BALOTESTI	1980-12-08	0789624153
7	28	3	Popescu	Cornel	str. Odei, nr. 1	BUCURESTI	1981-02-02	0789187656
8	18	2	Ursachi	Robert	str. Mierei, nr. 12A	Busteni	1981-02-02	0789987656
9	38	4	Ionescu	Corneliu	str. Semanatorului,...	Timisoara	1981-02-22	078913256
10	37	4	Petre	Victoras	str. Radacinei, nr. 81	Timisoara	1983-12-30	0723315661
11	17	2	Voicu	Violeta	str. Garofitei, nr. 18	Brasov	1983-12-27	0723445665
12	27	3	Petrea	Victor	str. Scropoasa, nr. 8	GHERGHITA	1983-12-27	0723435665
13	8	1	Munte...	Adrian	str. Carpati, nr. 897	Ploiesti	1985-02-28	0721929239
14	44	5	Tudose	Mihai	str. Doina, nr. 18	Constanta	1987-12-23	0734343334
15	49	5	Iordache	Dragos	str. Barnova, nr. 277	Constanta	1988-12-30	0756678388
16	12	2	Radu	Serghei	str. Prasilei, nr. 178	Brasov	1990-02-14	0756776589
17	16	2	Voncila	Ionel	str. Soarelui, nr. 456	Brasov	1996-12-13	0788888888
18	26	3	Miclaus	Marian	str. Zanoaga, nr. 46	BUCURESTI	1996-12-13	0788778888
19	36	4	Miclaus	Marin	str. Docuri, nr. 63	Timisoara	1996-12-11	0788677833
20	33	4	Soare	Octavian	str. Morii, nr. 70	Timisoara	1997-08-05	0753599789
21	7	1	Enache	Sorin	str. Crisu Alb, nr. 2	Albesti-Pal...	1998-02-17	0737834155
22	21	3	Dima	Stefan	str. Urziceni, nr. 18	BRAGADIRU	1998-02-17	0721314151

60. Sa se afiseze cati proprietari sunt al caror nume incepe cu 'I'.

```
select count(distinct p.Nume)
from Proprietar p
where p.Nume like 'I%'
```

Results		Messages	
	(No column name)		
1	2		

61. Sa se afiseze service-urile ce contin in numarul de telefon '56' si orasul in care se afla.

```
select s.Oras,s.NrTelefon
from Service s
where s.NrTelefon like '%56%'
```

Results		Messages	Client
	Oras	NrTelefon	
1	Ploiesti	0712345678	
2	Constanta	0744567788	
3	Cluj-Napoca	0745678788	

62. Sa se afiseze numele proprietarilor ce detin masini aduse in service intr-o luna para si sa fie intr-o zi cuprinsa intre 10-21.

```
select p.Nume+' '+p.Prenume as Proprietar,ap.NrInmatriculare
from AutovehiculeProprietar ap
inner join Autovehicul a on ap.idAutovehicul=a.idAutovehicul
inner join Proprietar p on ap.idProprietar=p.idProprietar
inner join Programari prog on ap.idProprietate=prog.idProprietate
where month(prog.DataVenire)%2=0 and day(prog.DataVenire) between 10 and 20
```

Results		Messages	Client Statistic
	Proprietar	NrInmatriculare	
1	barbu georgiana	PX03BRB	
2	craciun cristian	CT76CCC	
3	ionita daniel	DJ32DNY	
4	ilie roxana	PH01RXV	
5	toma cristina	CT17CRS	
6	toma cristina	CT78CSS	

63. Sa se afiseze media salariilor, numai primele 4 cifre.

```
select left(avg(s.SalariuBrut),4) as Salariu
from Salariu s
```

Results		Messages
	Salariu	
1	3515	

SUBINTEROGARI

64. Sa se afiseze toate numele companiilor care furnizeaza produse cu un pret pe unitate mai mic decat 20.

```
select f.Nume
from Furnizori f
where EXISTS
( select p.Denumire
  from Piese p
    inner join Categorie c on p.idCategorie=c.idCategorie
   where p.idFurnizor=f.idFurnizor and c.Pret<20
)
```

Results		Messages
	Nume	
1	A.B.S.	
2	Ridex	

65. Sa se afiseze doar service-urile(numele orasului) care au programari.

```
select s.Oras
from Service s
where EXISTS
(select p.idProgramare
 from Programari p
 where p.idService=s.idService
)
```

Results		Messages
	Oras	
1	Ploiesti	
2	Brasov	
3	Timisoara	
4	Constanta	

66. Sa se afiseze doar nr. de inmatriculare al masinilor a caror reparatie a durat mai putin de 5 zile.

```
select ap.NrInmatriculare,ap.idProprietate
from AutovehiculeProprietar ap
where EXISTS
( select p.idProgramare
  from Programari as p
   where DATEDIFF(day,p.DataVenire,p.DataIesire) < 5 and
    p.idProprietate=ap.idProprietate and p.DataIesire is not
    null
)
```

Results			Messages
	NrInmatriculare	idProprietate	
1	CT17CRS	10	

67. Sa se afiseze nr. de inmatriculare al masinilor care au fost reparate.

```
select ap.NrInmatriculare,ap.idProprietate
```



```

from AutovehiculeProprietar ap
where EXISTS
( select p.idProgramare
  from Programari as p
  where p.idProprietate=ap.idProprietate and p.DataIesire is not null
)

```

	NrInmatriculare	idProprietate
1	DJ32DNY	3
2	PH18SUN	4
3	IS12TDR	5
4	GL45ELE	7
5	MS08NEA	8
6	AB67SRA	9
7	CT17CRS	10

68. Sa se afiseze angajatii cu functia de 'manager' din fiecare service.

```

select a.Nume+' '+a.Prenume as Manageri
from Angajati a
where EXISTS
(
  select fa.idFuncctie
  from FunctiiAngajati fa
  inner join Functii f on fa.idFuncctie=f.idFuncctie
  where fa.idAngajat=a.idAngajat and
  f.Denumire='Manager'
)

```

	Manageri
1	Aciu Lia
2	Munteanu George
3	Dima Stefan
4	Dima Cosmin
5	Dumitrascu Vasile

69. Sa se afiseze piesele care sunt in cantitati mai mari de 800 bucati.

```

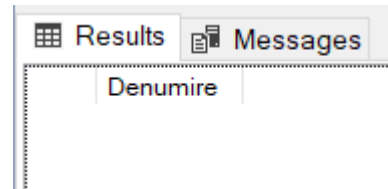
select p.Denumire
from Piese p
where p.idCategorie=any
(select c.idCategorie
 from Categorie c
 where c.Cantitate > 800
)

```

	Denumire
1	Becuri auto

70. Afisati toate piesele daca au toate cantitatea egala cu 800 bucati.

```
select p.Denumire
from Piese p
where p.idCategorie=all
(select c.idCategorie
from Categorie c
where c.Cantitate = 800
)
```

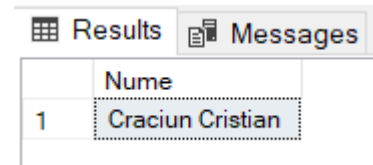


Denumire

!! Aceasta interogare va returna FALSE deoarece nu toate piesele au aceeasi cantitate, si anume 800 bucati.

71. Sa se afiseze numele proprietarilor care au lungimea mai mare de 6 litere in ordine alfabetica.


```
select p.Nume+' '+p.Prenume as Nume
from Proprietar p
where p.idProprietar=any
(
select p.idProprietar
from Proprietar p
where len(p.Nume)>6
)
order by p.Nume asc
```



Nume
1 Craciun Cristian

72. Sa se afiseze numele angajatilor al caror nume de telefon se termina cu 7.

```
select a.Nume+' '+a.Prenume,a.NrTelefon
from Angajati a
where a.idAngajat=any
(select a.idAngajat
from Angajati a
where a.NrTelefon like '%7')
```



	(No column name)	NrTelefon
1	Badic Mihai	0767676767
2	Herdea Adrian	0753599787
3	Badea Tudor	0767676777
4	Raicu Andrei	0723342387

73. Sa se afiseze angajatii nascuti in an impar.

```
select a.Nume+' '+a.Prenume,a.NrTelefon,year(a.DataNastere) as An
from Angajati a
where a.idAngajat=any
(
select a.idAngajat
from Angajati a
where year(a.DataNastere)%2=1
)
```

)

Results Messages			
	(No column name)	NrTelefon	An
1	Dumitru Victoria	0789898989	1977
2	Badea Ion	0734343434	1987
3	Coca Eugen	0723342356	1989
4	Munteanu Adrian	0721929239	1985
5	Munteanu George	0789900988	1987
6	Stoian Dan	0756678790	1991
7	Voicu Violeta	0723445665	1983
8	Ursachi Robert	0789987656	1981
9	Herdea Adrian	0753599787	1997
10	Petrea Victor	0723435665	1983
11	Popescu Cornel	0789187656	1981
12	Soare Octavian	0753599789	1997
13	Petre Victoras	0723315661	1983
14	Ionescu Corneliu	078913256	1981
15	Achim Liliana	0790909091	1977
16	Tudose Mihai	0734343334	1987
17	Raicu Andrei	0723342387	1997
18	Lascuzeanu Dani...	0735333344	1995
19	Aldea Adrian	0721929240	1985

---73. Sa se afiseze toti angajatii al caror nume incepe cu "Dum".

```
select a.Nume+' '+a.Prenume as NumeAngajat
from Angajati a
where a.Nume like 'Dum%'---
```

Results Messages	
	NumeAngajat
1	Dumitru Victoria
2	Dumitrascu Vasile

OPERATORI PE SETURI DE DATE

74. Sa se afiseze orasele din care provin clientii si angajatii.

```
select p.Oras --10 rows
from Proprietar p
UNION
select a.Oras --50 rows
from Angajati a
```

--total: 29 rows, elimina duplicatele

!! Operatorul UNION aplicat asupra celor doua interogari va elimina duplicatele.

Results		Messages
Oras		
1	Alba-Iulia	
2	Albesti-Paleologu	
3	Azuga	
4	Balotesti	
5	Blejoi	
6	Bragadiru	
7	Brasov	
8	Brazii de Jos	
9	Bucov	
10	Bucuresti	
11	Busteni	
12	Ciorani	
13	Constanta	
14	Craiova	
15	Galati	
16	Gherghita	
17	Iasi	
18	Jupiter	
19	Mamaia	
20	Navodari	
21	Paulesti	
22	Pipera	
23	Ploiesti	
24	Ploiestiori	
25	Predeal	
26	Sighisoara	
27	Sinaia	
28	Tantareni	
29	Timisoara	

75. Sa se afiseze orasele comune pentru clienti si angajati.

```
select p.Oras --10 rows
from Proprietar p
INTERSECT
select a.Oras --50 rows
from Angajati a
--total: 3 rows
```

Results		Messages
Oras		
1	Mamaia	
2	Navodari	
3	Paulesti	

76. Sa se afiseze angajatii care au functia de 'Mecanic auto' si 'Mecanic mentenanta'.

```
select a.Nume+' '+a.Prenume as NumeAngajat
from FunctiiAngajati fa
inner join Angajati a on a.idAngajat=fa.idAngajat
inner join Functii f on fa.idFunctie=f.idFunctie
where f.Denumire='Mecanic auto'
INTERSECT
select a.Nume+' '+a.Prenume as NumeAngajat
from FunctiiAngajati fa
inner join Angajati a on a.idAngajat=fa.idAngajat
inner join Functii f on fa.idFunctie=f.idFunctie
where f.Denumire='Mecanic mentenanta'
```

Results		Messages
NumeAngajat		
1	Enache Sorin	

77. Sa se afiseze angajatii care au functia de 'Mecanic auto', dar nu si de 'Mecanic mentenanta'.

```
select a.Nume+' '+a.Prenume as NumeAngajat
from FunctiiAngajati fa
inner join Angajati a on a.idAngajat=fa.idAngajat
inner join Functii f on fa.idFunctie=f.idFunctie
where f.Denumire='Mecanic auto'
EXCEPT
select a.Nume+' '+a.Prenume as NumeAngajat
from FunctiiAngajati fa
inner join Angajati a on a.idAngajat=fa.idAngajat
inner join Functii f on fa.idFunctie=f.idFunctie
where f.Denumire='Mecanic mentenanta'
```

Results		Messages
	NumeAngajat	
1	Avram Sorinel	
2	Petre Victoras	
3	Petrea Victor	
4	Voicu Violeta	

78. Sa se afiseze proprietarii care au programare si au masinile reparate.

```
select p.Nume+' '+p.Prenume as NumeProprietar
from AutovehiculeProprietar ap
inner join Proprietar p on ap.idProprietar=p.idProprietar
inner join Programari prog on ap.idProprietate=prog.idProgramare
where prog.DataIesire is not null
INTERSECT
select p.Nume+' '+p.Prenume
from Proprietar p
```

Results		Messages
	NumeProprietar	
1	Chiva Elena	
2	Ionita Daniel	
3	Moise Sarah	
4	Onea George	
5	Petrea Tudor	
6	Soare Octavian	
7	Toma Cristina	

79. Sa se afiseze orasul service-urile care nu au programari.

```
select s.Oras
from Service s
EXCEPT
select s.Oras
from Service s
inner join Programari p on s.idService=p.idService
```

Results		Messages
	Oras	
1	Bucuresti	
2	Sibiu	

GRUPAREA DATELOR

80. Afisati numele celei mai scumpe piese si categoria din care face parte.

```
select c.idCategorie as ID, MAX(p.Denumire) as Piesa, MAX(c.Tip) as Categorie,
MAX(c.Pret) as Pret
from Categorie c
inner join Piese p on c.idCategorie=p.idCategorie
group by c.idCategorie
```

	ID	Piesa	Categorie	Pret
1	1	Ulei motor	Ulei	60.00
2	2	Suruburi metrice	Suruburi	5.00
3	3	Vopsea Rosie	Vopsea	35.00
4	4	Radiator de racire auto	Radiator	100.00
5	5	Bujii	Bujii	70.00
6	6	Antigel	Antigel	180.00
7	7	Parbriz	Parbriz	830.00
8	8	Acumulator auto	Baterii	380.00
9	9	Becuri auto	Becuri	10.00
10	10	Furtun	Furtun	45.00
11	11	Filtru ulei	Filtre	100.00

81. Scrieti o interogare care sa afiseze pentru fiecare categorie ID-ul si valoarea totala a acesteia.

```
select c.idCategorie as ID, SUM(c.Pret*c.Cantitate) as SumaTotala
from Categorie c
group by c.idCategorie
```

	ID	SumaTotala
1	1	6000.00
2	2	1750.00
3	3	14000.00
4	4	20000.00
5	5	56000.00
6	6	75060.00
7	7	415000.00
8	8	30400.00
9	9	9850.00
10	10	36000.00
11	11	65200.00
12	12	29000.00

82. Sa se afiseze cate comenzi a livrat fiecare furnizor.

```
select p.idFurnizor, f.Nume as Furnizor, count(*) as NrComenzi
from Piese p
```

```
inner join Furnizori f on p.idFurnizor=f.idFurnizor
group by p.idFurnizor,f.Nume
```

	idFurnizor	Furnizor	NrComenzi
1	1	Total	1
2	2	Bosch	2
3	3	A.B.S.	1
4	4	Ridex	2
5	5	Stark	3
6	6	Van Wezel	5
7	7	Mann Filter	6

83. Sa se scrie o interogare care calculeaza pretul total pentru fiecare categorie de piese.

```
select p.idPiesa,c.Tip as Categorie,sum(c.Cantitate*c.Pret) as PretTotal
from Piese p
inner join Categorie c on p.idCategorie=c.idCategorie
group by p.idPiesa,c.Tip
```

	idCategorie	Categorie	PretTotal
1	1	Ulei	6000.00
2	2	Suruburi	1750.00
3	3	Vopsea	70000.00
4	4	Radiator	20000.00
5	5	Bujii	56000.00
6	6	Antigel	62550.00
7	7	Parbriz	1050000.00
8	8	Baterii	28000.00
9	9	Becuri	9850.00
10	10	Furtun	36000.00
11	11	Filtre	260800.00

84. Sa se afiseze cate programari are fiecare service.

```
select s.idService,s.Oras as OrasService, count(*) as NrProgramari
from Service s
inner join Programari p on s.idService=p.idService
```

```
group by s.idService,s.Oras
```

	idService	OrasService	NrProgramari
1	1	Ploiesti	3
2	2	Brasov	2
3	4	Timisoara	3
4	5	Constanta	3

FILTRAREA DE GRUP

85. Sa se afiseze tara furnizorilor de piese dintr-un oras ce incepe cu litera 'B' si au un nr. de bucati pe care le-au livrat mai mic decat 500 bucati.

```
select f.Tara
from Piese p
inner join Furnizori f on p.idFurnizor=f.idFurnizor
inner join Categorie c on p.idCategorie=c.idCategorie
where f.Oras like 'B%'
group by f.Tara
having max(c.Cantitate)<500
```

!!! Nu se afiseaza nimic pentru ca nu exista inregistrari care sa corespunda cerintei.

86. Sa se afiseze piesele care au fost livrate in cantitati de mai mult de 100 bucati de cel putin 3 tipuri, grupate dupa denumirea categoriei.

```
select c.Tip, count(*) as NrPiese
from Piese p
inner join Categorie c on p.idCategorie=c.idCategorie
where c.Cantitate>100
group by c.Tip
having count(*)>3
```

	Tip	NrPiese
1	Filtre	4
2	Vopsea	5

87. Selectati orasul service-urilor cu mai putin de 2 programari de dupa 23 februarie 2022, grupate dupa numele orasului.

```
select s.Oras, count(*) as NrProgramari
from Service s
inner join Programari p on s.idService=p.idService
where p.DataVenire > '2022-02-23'
group by s.Oras
having count(*)<2
```

Results		
Messages		
	Oras	NrProgramari
1	Constanta	1

88. Sa se afiseze functiile angajatilor care au cel putin 3 functii cu salariul mai mare de 2500 lei, grupate dupa denumirea functiei.

```
select count(*) as NrFunctii, f.Denumire as Functie
from FunctiiAngajati fa
inner join Salariu s on
fa.idFunctieAngajat=s.idFunctieAngajat
inner join Functii f on fa.idFunctie=f.idFunctie
inner join Angajati a on fa.idAngajat=a.idAngajat
where s.SalariuBrut>2500
group by f.Denumire
having count(*)<3
```

	NrFunctii	Functie
1	1	Contabil
2	2	Dispecer
3	1	Inginer diagnoza
4	2	Manager
5	1	Mecanic mentenanta

89. Afisati proprietarii care au mai mult de o masina al caror nr. de telefon se termina in cifra 6.

```
select p.Nume, p.Prenume, count(*) as NrMasini
from Proprietar p
inner join AutovehiculeProprietar ap on
p.idProprietar=ap.idProprietar
where p.NrTelefon like '%6'
group by p.Nume, p.Prenume
having count(*)>1
```

	Nume	Prenume	NrMasini
1	TOMA	CRISTINA	2

90. Sa se afiseze autovehiculele de culoare negru care au maxim 2 proprietari, grupate dupa numele proprietarilor.

```
select a.Model, a.Culoare, p.Nume, p.Prenume, count(*) as NrMasini
from AutovehiculeProprietar ap
inner join Proprietar p on ap.idProprietar=p.idProprietar
```

```

inner join Autovehicul a on ap.idAutovehicul=a.idAutovehicul
where a.Culoare='Negru'
group by p.Nume,p.Prenume, a.model,a.culoare
having count(*)=2

```

Results

Messages

Model	Culoare	Nume	Prenume	NrMasini
-------	---------	------	---------	----------

!!! Nu se afiseaza nimic pentru ca nu exista inregistrari care sa corespunda cerintei.

GRUPAREA DATELOR FILTRATE

92. Scrieți o interogare care sa afiseze pentru fiecare categorie ID-ul și valoarea totala a acesteia. Afisati si denumirea categoriei si toate piesele din categoria 'Vopsea'.

```

select c.idCategorie as ID,SUM(c.Pret*c.Cantitate) as SumaTotala, p.Denumire as
Piesa,c.Tip as Categorie
from Categorie c
inner join Piese p on
c.idCategorie=p.idCategorie
where c.Tip='Vopsea'
group by c.idCategorie,p.Denumire,c.Tip

```

Results

Messages

	ID	SumaTotala	Piesa	Categorie
1	3	14000.00	Vopsea Alba	Vopsea
2	3	14000.00	Vopsea Albastra	Vopsea
3	3	14000.00	Vopsea Gri	Vopsea
4	3	14000.00	Vopsea Neagra	Vopsea
5	3	14000.00	Vopsea Rosie	Vopsea

93. Sa se afiseze orasul pt fiecare service si cate programari au.

```

select s.Oras,count(s.idService) as NrProgramari
from Service s,Programari p
where s.idService=p.idService
group by s.Oras

```

Results

Messages

	Oras	NrProgramari
1	Brasov	2
2	Constanta	3
3	Ploiesti	3
4	Timisoara	3

94. Afisati cate produse are fiecare categorie, grupate in functie de id-ul categoriei.

```
select c.idCategorie, count(*) as NrPiese, c.Tip as Categorie
from Piese p
inner join Categorie c on c.idCategorie=p.idCategorie
group by c.idCategorie, c.Tip
```

	idCategorie	NrPiese	Categorie
1	1	1	Ulei
2	2	1	Suruburi
3	3	5	Vopsea
4	4	1	Radiator
5	5	1	Bujii
6	6	1	Antigel
7	7	3	Parbriz
8	8	1	Baterii
9	9	1	Becuri
10	10	1	Furtun
11	11	4	Filtre

95. Sa se afiseze service-urile care au programari in intervalul '2022-01-01' si '2022-05-09', grupate dupa numele orasului.

```
select s.Oras
from Service s
inner join Programari p on s.idService=p.idService
where p.DataVenire>'2022-01-01' and p.DataIesire<'2022-05-09'
group by s.Oras
```

	Oras
1	Brasov
2	Constanta
3	Ploiesti
4	Timisoara

96. Afisati pentru fiecare angajat de la Ploiesti numarul de masini pe care le-au reparat, grupate dupa numele angajatului.

```
select a.Nume, a.Prenume, count(*) as NrReparatii
from ReparatiiAutovehicule ra
inner join Angajati a on a.idAngajat=ra.idAngajat
inner join Service s on a.idService=s.idService
where s.Oras='Ploiesti'
group by a.Nume, a.Prenume
```

	Nume	Prenume	NrReparatii
1	Badea	Ion	1
2	Enache	Sorin	1
3	Munteanu	Adrian	1
4	Neamtu	Liviu	4

97. Sa se afiseze orasul pt fiecare service si cate programari au.

```
select s.Oras,count(s.idService) as NrProgramari
from Service s,Programari p
where s.idService=p.idService
group by s.Oras
```

	Oras	NrProgramari
1	Brasov	2
2	Constanta	3
3	Ploiesti	3
4	Timisoara	3

6. Rezolvarea cerintelor legate de VIEWS

98. Creati o vedere in care sa stocati numele, prenumele si varsta angajatilor de peste 35 ani, orasul service-ului la care sunt angajati, numarul lor de telefon, functia si salariul lor. Sa se afiseze angajatii cu varsta de peste 35 de ani.

```
if OBJECT_ID('DetaliiAngajati','V') is not null
drop view DetaliiAngajati
go
create view DetaliiAngajati
as
select a.Nume,a.Prenume, f.Denumire as Functie,
s.Oras,DATEDIFF(year,a.DataNastere,CURRENT_TIMESTAMP) as Varsta,
a.NrTelefon,sl.SalariuBrut
from Angajati a
inner join Service s on a.idService=s.idService
inner join FunctiiAngajati fa on a.idAngajat=fa.idAngajat
inner join Functii f on fa.idFunctie=f.idFunctie
inner join Salariu sl on sl.idFunctieAngajat=fa.idFunctieAngajat
where DATEDIFF(year,a.DataNastere,CURRENT_TIMESTAMP)>35
```

```
select * from DetaliiAngajati
```

	Nume	Prenume	Functie	Oras	Varsta	NrTelefon	SalariuBrut
1	Dumitru	Victoria	Patron	Ploiesti	45	0789898989	2200.00
2	Acu	Lia	Manager	Ploiesti	44	0790909090	5000.00
3	Badic	Mihai	Contabil	Ploiesti	48	0767676767	6000.00
4	Munteanu	Adrian	Inspector ITP	Ploiesti	37	0721929239	2030.00
5	Ofrim	Dragos	Tehnician	Ploiesti	42	0756677888	1950.00
6	Neamtu	Liviu	Inginer diagnoza	Ploiesti	36	0756544332	7800.00

99. Creati o vedere in care sa inserati categoria, tipul pieselor din acea categorie, suma totala si furnizorii ce le-au livrat

```
if OBJECT_ID('DetaliiPiese','V') is not null
drop view DetaliiPiese
go
create view DetaliiPiese
as
select c.Tip as Categorie, p.Denumire as Piesa,
SUM(c.Pret*c.Cantitate) as SumaTotala, f.Nume as
Furnizor
from Categorie c
inner join Piese p on
c.idCategorie=p.idCategorie
inner join Furnizori f on
f.idFurnizor=p.idFurnizor
group by c.Tip, p.Denumire,f.Nume

select * from DetaliiPiese
```

	Categorie	Piesa	SumaTotala	Furnizor
1	Antigel	Antigel	62550.00	Mann Filter
2	Baterii	Acumulator auto	28000.00	Bosch
3	Becuri	Becuri auto	9850.00	A.B.S.
4	Bujii	Bujii	56000.00	Bosch
5	Filtre	Filtru aer	65200.00	Mann Filter
6	Filtre	Filtru combustibil	65200.00	Mann Filter
7	Filtre	Filtru polen	65200.00	Mann Filter
8	Filtre	Filtru ulei	65200.00	Mann Filter
9	Furtun	Furtun	36000.00	Mann Filter
10	Parbriz	Geamuri laterale	350000.00	Stark
11	Parbriz	Luneta	350000.00	Stark
12	Parbriz	Parbriz	350000.00	Stark
13	Radiator	Radiator de rac...	20000.00	Ridex
14	Suruburi	Suruburi metrice	1750.00	Ridex
15	Ulei	Ulei motor	6000.00	Total
16	Vopsea	Vopsea Alba	14000.00	Van Wezel
17	Vopsea	Vopsea Albastra	14000.00	Van Wezel
18	Vopsea	Vopsea Gri	14000.00	Van Wezel
19	Vopsea	Vopsea Neagra	14000.00	Van Wezel
20	Vopsea	Vopsea Rosie	14000.00	Van Wezel

100. Sa se creeze un view in care sa se stocheze proprietarii ce au adus masini la reparat, nr. de inmatriculare, modelul, orasul service-ului, nr de zile cat au durat reparatiile, costurile reparatiilor si numele angajatilor care au contribuit la repararea masinilor.

```
if OBJECT_ID('CosturiReparatii','V') is not null
drop view CosturiReparatii
go
create view CosturiReparatii as
select p.Nume,p.Prenume,ap.NrInmatriculare,a.Model,s.Oras as
Service,DATEDIFF(DAY,prog.DataVenire,prog.DataIesire) as NrZileReparatie,
SUM((c.Pret+r.Manopera)+r.Taxa*(c.Pret+r.Manopera)) as PretReparatie
from Proprietar p
inner join AutovehiculeProprietar ap on ap.idProprietar=p.idProprietar
inner join Autovehicul a on a.idAutovehicul=ap.idAutovehicul
inner join Programari prog on prog.idProprietate=ap.idProprietate
inner join Service s on s.idService=prog.idService
inner join Angajati ang on ang.idService=s.idService
inner join ReparatiiAutovehicule ra on ra.idAngajat=ang.idAngajat
inner join Reparatii r on r.idReparatie=ra.idReparatie
inner join Piese pie on pie.idPiesa=r.idPiesa
inner join Categorie c on c.idCategorie=pie.idCategorie
where prog.DataIesire is not null
group by
p.Nume,p.Prenume,ap.NrInmatriculare,a.Model,s.Oras,prog.DataIesire,prog.DataVenire
```

```
select * from CosturiReparatii
```

	Nume	Prenume	NrInmatriculare	Model	Service	NrZileReparatie	PretReparatie
1	CHIVA	ELENA	GL45ELE	Honda VFR 800x	Brasov	11	158.2000
2	IONITA	DANIEL	DJ32DNY	BMW Seria 3	Timisoara	10	1488.0000
3	MOISE	SARAH	AB67SRA	Skoda Octavia	Timisoara	24	1488.0000
4	ONEA	GEORGE	MS08NEA	Peugeot 308	Timisoara	10	1488.0000
5	PETREA	TUDOR	IS12TDR	Mercedes GLC	Brasov	6	158.2000
6	SOARE	OCTAVIAN	PH18SUN	Audi Q7	Ploiesti	16	973.2000
7	TOMA	CRISTINA	CT17CRS	Citroen C4	Constanta	2	363.1500

101. Creati o vedere in care sa stocati toate autoturismele ce au carburantul 'Benzina' si au peste 110 CP, proprietarii acestora, nr. de inmatriculare, modelul si culoarea.

```
if OBJECT_ID('MasiniBenzina','V') is not null
drop view MasiniBenzina
go
create view MasiniBenzina as
select p.Nume+' '+p.Prenume as Proprietar,
a.Model,a.Carburant,a.Culoare,a.PutereMotor,ap.NrInmatriculare
from Autovehicul a
inner join AutovehiculeProprietar ap on ap.idAutovehicul=a.idAutovehicul
inner join Proprietar p on p.idProprietar=ap.idProprietar
where a.Carburant='Benzina' and a.PutereMotor>110
select * from MasiniBenzina
```

	Proprietar	Model	Carburant	Culoare	PutereMotor	NrInmatriculare
1	Craciun Cristian	Volkswagen Passat CC	Benzina	Maro	170	CT76CCC
2	PETREA TUDOR	Mercedes GLC	Benzina	Alb	194	IS12TDR
3	Ilie Roxana	Peugeot 508	Benzina	Negru	112	PH01RXV

102. Creati o vedere in care sa afisati anagajatii care au reparat mai mult de 1 masina, numele acestora, numarul de telefon, functia si service-ul.

```
if OBJECT_ID('MasiniReparate','V') is not null
drop view MasiniReparate
go
create view MasiniReparate as
select a.Nume+' '+a.Prenume as Angajat,a.NrTelefon,f.Denumire as
Functie,s.Oras,count(*) as NrReparatii
```

```

from Angajati a
inner join FunctiiAngajati fa on fa.idAngajat=a.idAngajat
inner join Functii f on f.idFunctie=fa.idFunctie
inner join ReparatiiAutovehicule ra on ra.idAngajat=a.idAngajat
inner join Service s on s.idService=a.idService
group by a.Nume,a.Prenume,a.NrTelefon,f.Denumire,s.Oras
having count(*)>1
select * from MasiniReparate

```

	Angajat	NrTelefon	Functie	Oras	NrReparatii
1	Neamtu Liviu	0756544332	Inginer diagnoza	Ploiesti	4
2	Radu Toader	0789858413	Electrician	Timisoara	2
3	Tudose Mihai	0734343334	Electrician	Constanta	2
4	Voicu Violeta	0723445665	Mecanic auto	Brasov	2

7.Rezolvarea cerintelor legate de CTEs

103. Sa se creeze o expresie care afiseaza cea mai ieftina categorie de piese.

```

with PretMin as
(
    select min(c.Pret) as PretMin,c.Tip as Categorie
    from categorie c
    group by c.Tip
)
select top(1) p.PretMin,p.Categorie
from PretMin p
order by p.PretMin asc

```

	PretMin	Categorie
1	5.00	Suruburi

104. Creati un CTE care sa afiseze numarul de programari si orasul pentru service-ul cu cele mai multe programari.

```

with NrProgramari as --calculez pt fiecare service nr de programari
(
    select count(*) as NrProgramari, s.Oras
    from Programari p
    inner join Service s on s.idService=p.idService
    group by s.Oras
),
MaxProg as --aflu maximul din toate
(
    select max(NrProgramari) as NrMaxProg
    from NrProgramari
)

```

	NrMaxProg	Oras
1	3	Brasov
2	3	Constanta
3	3	Ploiesti
4	3	Timisoara

```

select  NrMaxProg, nr.Oras
from MaxProg
inner join NrProgramari nr on nr.NrProgramari=NrProgramari

```

105. Creati un CTE care sa afiseze pentru fiecare functie salariul net.

```

with ProcentImpozite as
(
    select i.Nume as Impozit,i.Procent, s.SalariuBrut,f.Denumire as Functie
    from ImpoziteSalariu imps
    inner join Impozite i on i.idImpozit=imps.idImpozit
    inner join Salariu s on s.idSalariu=imps.idSalariu
    inner join FunctiiAngajati fa on fa.idFunctieAngajat=s.idFunctieAngajat
    inner join Functii f on f.idFunctie=fa.idFunctie
),
SalariuNet as
(
    select imp.Functie, sum(imp.SalariuBrut-(imp.Procent*imp.SalariuBrut)/100) as
SalariuTotal
    from ProcentImpozite imp
    group by imp.Functie
)
select sn.Functie,sn.SalariuTotal
from SalariuNet sn

```

106. Sa se creeze un CTE care sa afiseze numarul de programari(mai mult decat una) pentru fiecare luna din anul 2022.

```

with ProgramariLunare(LunaProgramare,NrProgramari) as
(
    select count(*) as NrProgramari, convert(nvarchar(32),month(p.DataVenire),6)
    from Programari p
    group by month(p.DataVenire)
    having count(*)>1
)
select * from ProgramariLunare

```

	LunaProgramare	NrProgramari
1	5	4

107. Sa se afiseze doar nr. de inmatriculare al masinilor a caror reparatie a durat mai putin de 10 zile.

```

with MasiniReparate as
(
    select ap.NrInmatriculare, DATEDIFF(day,p.DataVenire,p.DataIesire) as NrZile
    from AutovehiculeProprietar ap
    inner join Programari p on p.idProprietate=ap.idProprietate
    where DATEDIFF(day,p.DataVenire,p.DataIesire) < 10 and p.idProprietate=ap.idProprietate
    and p.DataIesire is not null
)

```



```
select *
from MasiniReparate
```

Results Messages		
	NrInmatriculare	NrZile
1	IS12TDR	6
2	CT17CRS	2

108. Creati un CTE in care sa afisati modelul masinilor de culoare negru si carburant benzina, proprietarul acestora si nr de inmatriculare.

```
with MasiniBenzina as
(
    select p.Nume+' '+p.Prenume as
    Proprietar,a.Model,a.Culoare,a.Carburant,ap.NrInmatriculare
    from Autovehicul a
    inner join AutovehiculeProprietar ap on a.idAutovehicul=ap.idAutovehicul
    inner join Proprietar p on p.idProprietar=ap.idProprietar
    where a.Carburant='Benzina' and a.Culoare='Negru'
)
select *
from MasiniBenzina
```

Results Messages					
	Proprietar	Model	Culoare	Carburant	NrInmatriculare
1	Ilie Roxana	Peugeot 508	Negru	Benzina	PH01RXV
2	ONEA GEORGE	Peugeot 308	Negru	Benzina	MS08NEA

109. Sa se creeze un CTE care sa afiseze angajatii, denumirea service-ului de care apartin si seful acestora.

```
with Sefi as
(
    select s.Oras,a2.Nume+' '+a2.Prenume as Angajati,a.Nume+' '+a.Prenume as Sefi
    from FunctiiAngajati fa
    inner join Angajati a on a.idAngajat=fa.idAngajat
    inner join Service s on s.idService=a.idService
    inner join FunctiiAngajati fa2 on fa.idAngajat=fa2.Sefi
```

```

inner join Angajati a2 on a2.idAngajat=fa2.idAngajat
)
select * from Sefi

```

	Oras	Angajati	Sefi
1	Ploiesti	Aciu Lia	Dumitru Victoria
2	Ploiesti	Badic Mihai	Aciu Lia
3	Ploiesti	Badea Ion	Aciu Lia
4	Ploiesti	Coca Eugen	Aciu Lia
5	Ploiesti	Lascu Dan	Aciu Lia
6	Ploiesti	Enache S...	Aciu Lia
7	Ploiesti	Munteanu ...	Aciu Lia
8	Ploiesti	Ofrim Dra...	Aciu Lia
9	Ploiesti	Neamtu Li...	Aciu Lia
10	Ploiesti	Munteanu ...	Dumitru Victoria
11	Brasov	Radu Serg...	Munteanu Ge...
12	Brasov	Samoilesc...	Munteanu Ge...
13	Brasov	Stoian Dan	Munteanu Ge...
14	Brasov	Topa Vasile	Munteanu Ge...
15	Brasov	Voncila Io...	Munteanu Ge...
16	Brasov	Voicu Viol...	Munteanu Ge...
17	Brasov	Ursachi R...	Munteanu Ge...
18	Brasov	Teodor E...	Munteanu Ge...
19	Brasov	Timoftei R...	Munteanu Ge...
20	Ploiesti	Dima Stefan	Dumitru Victoria
21	Bucur...	Darie Geo...	Dima Stefan
22	Bucur...	Herdea Ad...	Dima Stefan
23	Bucur...	Radu Codr...	Dima Stefan
24	Bucur...	David Alex...	Dima Stefan
25	Bucur...	Miclaus M...	Dima Stefan
26	Bucur...	Petrea Vict...	Dima Stefan
27	Bucur...	Popescu C...	Dima Stefan
28	Bucur...	Purcaru E...	Dima Stefan
29	Bucur...	Popovici A...	Dima Stefan
30	Ploiesti	Dima Cos...	Dumitru Victoria
31	Timis...	Ursu Geor...	Dima Cosmin
32	Timis...	Soare Oct...	Dima Cosmin
33	Timis...	Radu Toa...	Dima Cosmin
34	Timis...	David Ionut	Dima Cosmin
35	Timis...	Miclaus M...	Dima Cosmin
36	Timis...	Petre Victo...	Dima Cosmin
37	Timis...	Ionescu C...	Dima Cosmin
38	Timis...	Vasilache ...	Dima Cosmin
39	Timis...	Popescu V...	Dima Cosmin
40	Ploiesti	Dumitrasc...	Dumitru Victoria
41	Const...	Achim Lili...	Dumitrascu V...
42	Const...	Badea Tu...	Dumitrascu V...
43	Const...	Tudose Mi...	Dumitrascu V...
44	Const...	Raicu And...	Dumitrascu V...
45	Const...	Lascuzea...	Dumitrascu V...
46	Const...	Avram Sori...	Dumitrascu V...
47	Const...	Aldea Adri...	Dumitrascu V...
48	Const...	Iordache ...	Dumitrascu V...
49	Const...	Rusu Liviu	Dumitrascu V...
50	Ploiesti	Enache S...	Aciu Lia

Query executed successfully.

	Oras	Angajati	Sefi
22	Bucur...	Herdea Ad...	Dima Stefan
23	Bucur...	Radu Codr...	Dima Stefan
24	Bucur...	David Alex...	Dima Stefan
25	Bucur...	Miclaus M...	Dima Stefan
26	Bucur...	Petrea Vict...	Dima Stefan
27	Bucur...	Popescu C...	Dima Stefan
28	Bucur...	Purcaru E...	Dima Stefan
29	Bucur...	Popovici A...	Dima Stefan
30	Ploiesti	Dima Cos...	Dumitru Victoria
31	Timis...	Ursu Geor...	Dima Cosmin
32	Timis...	Soare Oct...	Dima Cosmin
33	Timis...	Radu Toa...	Dima Cosmin
34	Timis...	David Ionut	Dima Cosmin
35	Timis...	Miclaus M...	Dima Cosmin
36	Timis...	Petre Victo...	Dima Cosmin
37	Timis...	Ionescu C...	Dima Cosmin
38	Timis...	Vasilache ...	Dima Cosmin
39	Timis...	Popescu V...	Dima Cosmin
40	Ploiesti	Dumitrasc...	Dumitru Victoria
41	Const...	Achim Lili...	Dumitrascu V...
42	Const...	Badea Tu...	Dumitrascu V...
43	Const...	Tudose Mi...	Dumitrascu V...
44	Const...	Raicu And...	Dumitrascu V...
45	Const...	Lascuzea...	Dumitrascu V...
46	Const...	Avram Sori...	Dumitrascu V...
47	Const...	Aldea Adri...	Dumitrascu V...
48	Const...	Iordache ...	Dumitrascu V...
49	Const...	Rusu Liviu	Dumitrascu V...
50	Ploiesti	Enache S...	Aciu Lia

8.Rezolvarea cerintelor legate de TRIGGERS

110. Sa se creeze un trigger pentru identificarea duplicatelor oraselor in tabelul Service.

```
if OBJECT_ID('DuplicateService','TR') is not null
drop trigger DuplicateService
go
create trigger DuplicateService
on Service
after insert, update
as
begin
    if @@ROWCOUNT=0 return;
    set nocount on;
    if exists(
        select count(*)
        from inserted as i
        inner join Service s
        on i.Oras=s.Oras
        group by i.Oras
        having count(*) >1
    )
    begin
        print('Service-ul exista deja in baza de date');
        rollback
    end
end
```

```
INSERT INTO Service(idService,Adresa,NrTelefon,Oras,Program) VALUES
(7,'str. Gh. Doja, nr. 189','0789987667','Sibiu','Inchis')
```

Messages

```
Service-ul exista deja in baza de date
Msg 3609, Level 16, State 1, Line 29
The transaction ended in the trigger. The batch has been aborted.

Completion time: 2022-05-09T23:28:14.6126813+03:00
```

111. Sa se creeze un trigger pentru tabelul Proprietari. Sa se afiseze un mesaj corespunzator dupa orice modificare a datelor.

```
if OBJECT_ID('UpdateProprietari','TR') is not null
drop trigger UpdateProprietari
go
create trigger UpdateProprietari
```

Messages

```
Commands completed successfully.

Completion time: 2022-05-09T23:25:01.1424389+03:00
```


```

on Proprietar
after update
as
    print 'Modificarile au fost efectuate cu
succes!'

update Proprietar
set Prenume='Georgiana'
where Nume='Barbu'

select * from Proprietar

```

 Messages

Modificarile au fost efectuate cu succes!

(1 row affected)


Completion time: 2022-05-09T23:30:29.1602518+03:00

112. Creati un declansator care sa afiseze un mesaj dupa un delete din tabelul Autovehicul.

```

if OBJECT_ID('AfterDeleteAutovehicule','TR') is not null
drop trigger AfterDeleteAutovehicule
go
create trigger AfterDeleteAutovehicule
on Autovehicul
after delete
as
    print 'A fost efectuata stergerea din tabelul Autovehicule'

```

 Messages

Commands completed successfully.


Completion time: 2022-05-09T23:42:06.3770182+03:00

```

INSERT INTO
Autovehicul(idAutovehicul,Categorie,Model,Culoare,Carburant,NrKm,PutereMotor,SerieSasiu)
VALUES
(12,'Autoturism','Dacia Duster','Negru','Motorina','152.123',150,'SKES030ER5CPI0189')

delete from Autovehicul
where idAutovehicul=12

```

 Messages

A fost efectuata stergerea din tabelul Autovehicule

(1 row affected)

Completion time: 2022-05-09T23:40:52.2318758+03:00

113. Creati un trigger care sa selecteze service-ul in care o programare a fost actualizata.

```
if OBJECT_ID('UpdateProgramare','TR') is not null
drop trigger UpdateProgramare
go
create trigger UpdateProgramare
on Programari
for update
as
begin
    declare @upd as int
    if @@ROWCOUNT=0 return;
    set nocount on;
    begin
        select @upd=inserted.idProgramare from inserted
        select s.Oras
        from Service s
        inner join Programari p on s.idService=p.idService
        where p.idProgramare=@upd
    end
end
```

Messages

Commands completed successfully.

Completion time: 2022-05-09T23:57:19.3856645+03:00

114. Creati un trigger care sa afiseze pretul maxim al unei piese inserate sau modificate.

```
if OBJECT_ID('PretMaxPiesa','TR') is not null
drop trigger PretMaxPiesa
go
create trigger PretMaxPiesa
on Categorie
after insert, update
as
begin
    if @@rowcount=0 return;
    set nocount on;
    begin
        select max(Pret) from Categorie
    end
end

update Categorie
set Pret+=100
where Tip='Parbriz'
```

Messages

Commands completed successfully.

Completion time: 2022-05-10T00:03:01.3111693+03:00

Results		Messages	
		(No column name)	
1	800.00		

115. Creati un trigger care sa completeze automat tara Furnizorilor ca fiind Romania.

```
if OBJECT_ID('SetTaraFurnizor','TR') is not
null
drop trigger SetTaraFurnizor
```

Messages

Commands completed successfully.

Completion time: 2022-05-10T10:03:00.8922352+03:00

```

go
create trigger SetTaraFurnizor
on Furnizori
after insert, update
as
begin
    if @@ROWCOUNT=0 return;
    set nocount on;
    update Furnizori
    set Tara='Romania'
end

```

```

INSERT INTO Furnizori(idFurnizor,Nume,Adresa,Oras,CodPostal,Tara,NrTelefon) VALUES
(8,'Ajax','50 Gilbert St.','Munchen','EC1 4SE','Germania','1715552992')

```

Messages

(1 row affected)

Completion time: 2022-05-10T10:06:24.5481013+03:00

	idFurnizor	Nume	Adresa	Oras	CodPostal	Tara	NrTelefon
1	8	Ajax	50 Gilbert St.	Munchen	EC1 4SE	Romania	1715552992

116. Creati un trigger care sa permita doar inserarea salariului brut mai mare de 2500 lei.

```

if OBJECT_ID('TriggerSalariu','TR') is not null
drop trigger TriggerSalariu
go
create trigger TriggerSalariu
on Salariu
after insert, update
as
begin
    if @@ROWCOUNT=0 return;
    set nocount on;

    declare @salariu int,
            @nume nvarchar(32)

    select @salariu=i.SalariuBrut,@nume=a.Nume+' '+a.Prenume

```

Messages

Commands completed successfully.

Completion time: 2022-05-10T10:38:14.1799941+03:00

```

from Inserted i, Salariu s
inner join FunctiiAngajati fa on fa.idFunctieAngajat=s.idFunctieAngajat
inner join Angajati a on a.idAngajat=fa.idAngajat
where s.SalariuBrut=i.SalariuBrut

if(@salariu<2500)
begin
    raiserror('Angajatul %s are salariul %d < 2500 lei',16,1,@nume,@salariu)
    rollback
end
else
begin
    raiserror('Angajatul %s are salariul de %d lei',16,1,@nume,@salariu)
end
end

INSERT INTO
Salariu(idSalariu,idFunctieAngajat,SalariuBrut,DataIntrareVigoare,DataIesireVigoare)
VALUES
(15,7,1900,'2019-09-01',NULL)

```

Messages

```

Msg 50000, Level 16, State 1, Procedure TriggerSalariu, Line 20 [Batch Start Line 164]
Angajatul Enache Sorin are salariul 1900 < 2500 lei

```

```
(1 row affected)
```

```
Completion time: 2022-05-10T10:39:47.2518920+03:00
```

117. Sa se verifice daca la introducerea numarului de telefon acesta contine 10 cifre.

```

if OBJECT_ID('VerificareNrTelef','TR') is not null
drop trigger VerificareNrTelef
go
create trigger VerificareNrTelef
on Angajati
for insert,update
as
begin
    if @@rowcount=0 return;
    set nocount on;

    declare @nrTelef nvarchar(11)

    select @nrTelef=i.NrTelefon
    from Angajati a,inserted i
    where i.NrTelefon=a.NrTelefon

    if(len(@nrTelef)>10)

```

Messages

```
Commands completed successfully.
```

```
Completion time: 2022-05-10T10:54:52.7143932+03:00
```

```


begin
    raiserror('Nr de telefon %s este invalid',16,1,@nrTelef)
    rollback
end
else
begin
    raiserror('Nr de telefon %s este valid',16,1,@nrTelef)
end
end

```

```

INSERT INTO Angajati(idAngajat,idService,Nume,Prenume,Adresa,Oras,DataNastere,NrTelefon)
VALUES
(51,5,'Popescu','Vlad','str. Dunarea, nr. 6','Slatina','1995-11-11','0735333344555')

```

 Messages

```

Msg 50000, Level 16, State 1, Procedure VerificareNrTelef, Line 17 [Batch Start Line 199]
Nr de telefon 07353333445 este invalid
Msg 3609, Level 16, State 1, Line 201
The transaction ended in the trigger. The batch has been aborted.

Completion time: 2022-05-10T10:56:35.7052304+03:00

```

118. Sa se creeze un trigger care la inserarea unei piese acesteia sa i se scada pretul cu 10 lei.

```

if OBJECT_ID('ScaderePretPiesa','TR') is not null
drop trigger ScaderePretPiesa
go
create trigger ScaderePretPiesa
on Categorie
after insert
as
begin
    if @@ROWCOUNT=0 return;
    set nocount on;

    update Categorie
    set Pret+=10
    from inserted
    where Categorie.Pret=inserted.Pret
end

```

```


INSERT INTO
Categorie(idCategorie,Tip,Pret,Cantitate)
VALUES
(12,'Anvelope',250,100)

```

```

select * from Categorie
where Tip='Anvelope'

```

 Messages

```

Commands completed successfully.

Completion time: 2022-05-10T11:11:18.4718007+03:00

```

Results		Messages		
	idCategorie	Tip	Pret	Cantitate
1	12	Anvelope	260.00	100

119. Sa se creeze un declansator care dupa stergerea unei valori din tabelul Reparatii sa afiseze un mesaj corespunzator.

```
if OBJECT_ID('StergereReparatii','TR') is not null
drop trigger StergereReparatii
go
create trigger StergereReparatii
on Reparatii
after delete
as
    print 'A fost efectuata stergerea din tabelul Reparatii'
```

Messages

Commands completed successfully.

Completion time: 2022-05-10T11:26:17.3186618+03:00

```
INSERT INTO Reparatii(idReparatie,idProgramare,idPiesa,Defectiune,Taxa,Manopera) VALUES
(17,6,20,'Schimbare filtre',0.1,10)
```

```
delete from Reparatii
where idReparatie=17
```

Messages

A fost efectuata stergerea din tabelul Reparatii

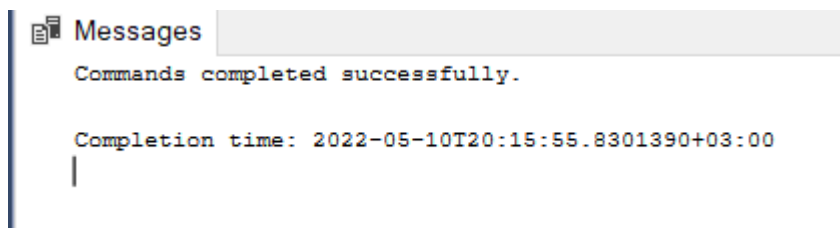
(1 row affected)

Completion time: 2022-05-10T11:27:05.8363175+03:00

9.Rezolvarea cerintelor legate de STORED PROCEDURES

120. Creati o procedura care presupune aflarea unei programari intr-un anumit interval de zile.

```
if OBJECT_ID('IntervalProgramari','P') is not null
drop procedure IntervalProgramari;
go
create procedure IntervalProgramari
    @inceput as datetime='19000101',
    @sfarsit as datetime = '99991231',
    @idProg as int,
    @numRows as int = 0 output
as
begin
    select idProgramare, DataVenire, DataIesire
    from Programari
    where @idProg=idProgramare and DataVenire>=@inceput and DataIesire<=@sfarsit;
    set @numRows=@@ROWCOUNT
    return;
end
```



```
declare @numRowsReturned as int;

exec IntervalProgramari
    @idProg='3',
    @inceput='2021-01-01',
    @sfarsit='2022-05-01',
    @numRows=@numRowsReturned output;
select @numRowsReturned as 'Nr de randuri
returnate'
```

Results			
Messages			
	idProgramare	DataVenire	DataIesire
1	3	2022-04-10	2022-04-20

Nr de randuri returnate	
1	1

121. Creati o procedura stocata care sa efectueze o reducere de x % pentru toate produsele din categoria y.

```
select * into Categoria2
from Categoria
select * from Categoria2
if OBJECT_ID('ReducerePret','P') is
not null
drop procedure ReducerePret
go
create procedure ReducerePret
    @procent float=0.3,
    @categorie nvarchar(32)='Vopsea',
    @rows int=0 output
as
begin
    update c
    set c.Pret=c.Pret-@procent*c.Pret
    from Categoria2 c
    inner join Categoria cat on c.idCategorie=cat.idCategorie
    where @categorie=cat.Tip
set @rows=@@ROWCOUNT;
end
```

```
exec ReducerePret
```

```
select * from Categoria2
where Categoria2.Tip='Vopsea'
```

Messages

Commands completed successfully.

Completion time: 2022-05-10T20:48:46.5457640+03:00

Results

	idCategorie	Tip	Pret	Cantitate
1	3	Vopsea	0.01	400

122. Creati o procedura stocata care sa afiseze toate campurile din tabela Angajati al caror nume incepe cu 'M' si au varsta peste 27 de ani.

```
if OBJECT_ID('VarstaAngajati','P') is not null
drop procedure VarstaAngajati
go
create procedure VarstaAngajati
as
select *
from Angajati
as Varsta
where Nume like 'M%' and
```

```
DATEDIFF(year,DataNastere,current_timestamp)>27
```

```
exec VarstaAngajati
```

Messages

Commands completed successfully.

Completion time: 2022-05-10T23:14:43.9682882+03:00

	idAngajat	idService	Nume	Prenume	Adresa	Oras	DataNastere	NrTelefon
1	8	1	Munteanu	Adrian	str. Carpati, nr. 897	Ploiesti	1985-02-28	0721929239
2	11	2	Munteanu	George	str. Zeicani, nr. 2	Predeal	1987-03-28	0789900988

123. Sa se creeze o procedura cu parametru care permite vizualizarea angajatilor cu functia de 'Manager' de la un anumit service prin transmiterea parametrului denumire oras service.

```
if OBJECT_ID('AngajatiManager','P') is not null
drop procedure AngajatiManager
go
create procedure AngajatiManager @service nvarchar(32)
as
select a.Nume+' '+a.Prenume as Angajati, f.Denumire as Functie
from Angajati a
inner join Service s on a.idService=s.idService
inner join FunctiiAngajati fa on fa.idAngajat=a.idAngajat
inner join Functii f on f.idFunctie=fa.idFunctie
where f.Denumire='manager' and s.Oras=@service
```

Messages

Commands completed successfully.

Completion time: 2022-05-10T23:21:32.5664845+03:00

```
exec AngajatiManager @service='Timisoara'
```

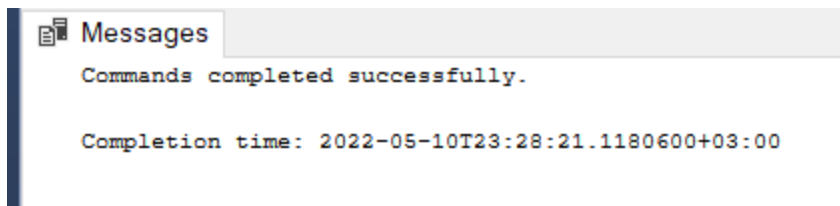
	Angajati	Functie
1	Dima Cosmin	Manager

124. Sa se creeze o procedura prin care se vor afisa toti angajatii care au acelasi salariu. Salariul va fi transmis ca parametru.

```
if OBJECT_ID('SalariuAng','P') is not null
drop procedure SalariuAng
go
create procedure SalariuAng @salariu decimal(18,2)
as
select a.Nume+' '+a.Prenume as Angajati, s.SalariuBrut
from Angajati a
inner join FunctiiAngajati fa on fa.idAngajat=a.idAngajat
inner join Salariu s on
s.idFunctieAngajat=fa.idFunctieAngajat
where s.SalariuBrut=@salariu
```

	Angajati	SalariuBrut
1	Badea Ion	2300.00

```
exec SalariuAng @salariu=2300
```

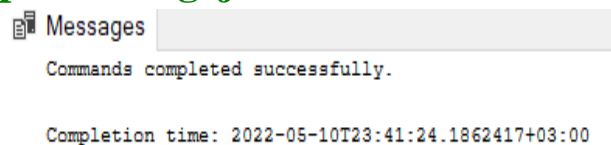


125. Sa se creeze o procedura care va permite vizualizarea varstei medii pentru un an trimis ca parametru pentru angajati.

```
if OBJECT_ID('MedieVarsta','P') is not null
drop procedure MedieVarsta
go
create procedure MedieVarsta @an int,@varstaMedie
int output
as
```

```
    select @varstaMedie=avg(datediff(year,DataNastere,current_timestamp))
    from Angajati
    where @an=year(DataNastere)
```

```
declare @varsta int
exec MedieVarsta @an=1996, @varstaMedie=@varsta output
select @varsta as [Varsta Medie]
```

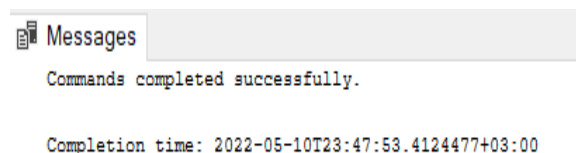


Results		Messages	
	Varsta Medie		
1	26		

126. Creati o procedura care sa afiseze toate piesele livrate de un furnizor trimis ca parametru.

```
if OBJECT_ID('FurnizorPiese','P') is not null
drop procedure FurnizorPiese
go
create procedure FurnizorPiese @furnizor nvarchar(32)
as
    select p.Denumire as Piese, f.Nume as Furnizor
    from Piese p
    inner join Furnizori f on
    f.idFurnizor=p.idFurnizor
    where @furnizor=f.Nume
```

```
exec FurnizorPiese @furnizor='Van Wezel'
```



Results		Messages	
	Piese	Furnizor	
1	Vopsea Neagra	Van Wezel	
2	Vopsea Alba	Van Wezel	
3	Vopsea Gri	Van Wezel	
4	Vopsea Rosie	Van Wezel	
5	Vopsea Albastra	Van Wezel	

127. Sa se afiseze nr. de inmatriculare al masinilor inregistrate intr-un service trimis ca parametru al procedurii, numele proprietarului, numele orasului service-ului in care se afla inregistrat si defectiunile vehiculului.

```
if OBJECT_ID('DetaliiReparatii','P') is not null
drop procedure DetaliiReparatii
go
create procedure DetaliiReparatii @service nvarchar(32)
as
    select p.Nume+' '+p.Prenume as Proprietar,ap.NrInmatriculare, s.Oras, r.Defectiune
    from Proprietar p
    inner join AutovehiculeProprietar ap on p.idProprietar=ap.idProprietar
    inner join Programari prog on prog.idProprietate=ap.idProprietate
    inner join Service s on s.idService=prog.idService
    inner join Reparatii r on r.idProgramare=prog.idProgramare
    where @service=s.Oras

exec DetaliiReparatii @service='Ploiesti'
```

Messages

Commands completed successfully.

Completion time: 2022-05-10T23:55:07.3660732+03:00

Results		Messages		
	Proprietar	NrInmatriculare	Oras	Defectiune
1	Barbu Georgiana	PX03BRB	Ploiesti	Schimb ulei
2	Barbu Georgiana	PX03BRB	Ploiesti	Schimb ulei
3	SOARE OCTAVIAN	PH18SUN	Ploiesti	Inlocuire baterie auto
4	Ilie Roxana	PH01RXV	Ploiesti	Schimbare filtre
5	Ilie Roxana	PH01RXV	Ploiesti	Schimbare filtre
6	Ilie Roxana	PH01RXV	Ploiesti	Schimbare filtre

128. Sa se creeze o procedura stocata care creste manopera cu x lei daca aceasta este mai mica decat y lei.

```
if OBJECT_ID('CrestereManopera','P') is not null
drop procedure CrestereManopera
go
create procedure CrestereManopera @x int,@y int
as
    update r
    set r.Manopera+=@x
    from Reparatii r
```

Messages

Commands completed successfully.

Completion time: 2022-05-11T00:08:52.2586937+03:00

```

where r.Manopera<@y
exec CrestereManopera @x=10,@y=30

```

Messages

(5 rows affected)

Completion time: 2022-05-11T00:09:55.7619807+03:00

129. Creati o procedura stocata care afiseaza toti angajatii din orasul Bucuresti si al caror nr. de telefon se termina cu cifra 2.

```

if OBJECT_ID('AngajatiBucuresti','P') is not null
drop procedure AngajatiBucuresti
go
create procedure AngajatiBucuresti
as
    select a.Nume+' '+a.Prenume as
Angajati,a.Oras
    from Angajati a
    where a.Oras='Bucuresti' and a.NrTelefon like '%2'
exec AngajatiBucuresti

```

Messages

Commands completed successfully.

Completion time: 2022-05-11T00:16:18.2075239+03:00

Results		
	Angajati	Oras
1	Darie George	Bucuresti
2	Radu Codrut	Bucuresti

130. Creati o procedura stocata care sa afiseze angajatii nascuti in luna februarie, august, octombrie sau decembrie, ordonati crescator dupa anul nasterii.

```

if OBJECT_ID('LunaNastere','P') is not null
drop procedure LunaNastere
go
create procedure LunaNastere
as
    select *
    from Angajati a
    where DATEPART(m,a.DataNastere) IN
(2,8,10,12)
    order by DATEPART(year,a.DataNastere) asc
exec LunaNastere

```

Messages

Commands completed successfully.

Completion time: 2022-05-11T00:22:42.8194854+03:00

Results		Messages						
	idAngajat	idService	Nume	Prenume	Adresa	Oras	DataNastere	NrTelefon
1	3	1	Badic	Mihai	str. Plopeni, nr. 9	Paulesti	1974-02-15	0767676767
2	20	2	Timoftei	Radu	str. Bucurei, nr. 9	Brasov	1974-02-15	0723472476
3	30	3	Popovici	Andrei	str. Ciubarului, nr. 79	Balotesti	1974-02-15	0723572476
4	40	4	Popescu	Vlad	str. Paunului, nr. 739	Timisoara	1974-02-15	0763586476
5	35	4	David	Ionut	str. Raureni, nr. 85	Timisoara	1980-08-17	0789637153
6	25	3	David	Alexandru	str. Luica, nr. 8	Balotesti	1980-12-08	0789624153
7	28	3	Popescu	Cornel	str. Odei, nr. 1	Bucuresti	1981-02-02	0789187656
8	18	2	Ursachi	Robert	str. Mierei, nr. 12A	Busteni	1981-02-02	0789987656
9	38	4	Ionescu	Corneliu	str. Semanatorului,...	Timisoara	1981-02-22	078913256
10	37	4	Petre	Victoras	str. Radacinei, nr. 81	Timisoara	1983-12-30	0723315661
11	17	2	Voicu	Violeta	str. Garofitei, nr. 18	Brasov	1983-12-27	0723445665
12	27	3	Petrea	Victor	str. Scropoasa, nr. 8	Gherghita	1983-12-27	0723435665
13	8	1	Munte...	Adrian	str. Carpati, nr. 897	Ploiesti	1985-02-28	0721929239
14	44	5	Tudose	Mihai	str. Doina, nr. 18	Constanta	1987-12-23	0734343334
15	49	5	lordache	Dragos	str. Barnova, nr. 277	Constanta	1988-12-30	0756678388
16	12	2	Radu	Serghei	str. Prasilei, nr. 178	Brasov	1990-02-14	0756776589
17	16	2	Voncila	Ionel	str. Soarelui, nr. 456	Brasov	1996-12-13	0788888888
18	26	3	Miclaus	Marian	str. Zanoaga, nr. 46	Bucuresti	1996-12-13	0788778888
19	36	4	Miclaus	Marin	str. Docuri, nr. 63	Timisoara	1996-12-11	0788677833
20	33	4	Soare	Octavian	str. Morii, nr. 70	Timisoara	1997-08-05	0753599789
21	7	1	Enache	Sorin	str. Crisu Alb, nr. 2	Albesti-...	1998-02-17	0737834155
22	21	3	Dima	Stefan	str. Urziceni, nr. 18	Bragadiru	1998-02-17	0721314151

10. Rezolvarea cerintelor legate de TRANSACTIONS

131. Creati o tranzactie care presupune inserarea unui nou service si afisarea acestuia.

```

begin try
    begin tran
        insert into Service(idService,Adresa,NrTelefon,Oras,Program) values
            (7,'str. Castanelor, nr. 6','0745678788','Cluj-Napoca','Non-stop');
        select*
        from Service
    commit tran
end try
begin catch
    if ERROR_NUMBER()=2627 --eroare pt dubluri chei
    begin
        print 'Primary key violation';
    end
end catch

```



```

        end
    else if ERROR_NUMBER()=547 --eroare pt constrangere
        begin
            print 'Constraint violation';
        end
    else
        begin
            print 'Unhandled error';
        end
    end

if @@TRANCOUNT>0
    rollback tran;
end catch

```

	idService	Adresa	NrTelefon	Oras	Program
1	1	str. Bobilna, nr. 12	0712345678	Ploiesti	Non-stop
2	2	str. Sforii, nr. 10	0798765432	Brasov	Non-stop
3	3	str. Viilor, nr. 30	0722334455	Bucur...	Non-stop
4	4	str. Latina, nr.48	0799887766	Timis...	Non-stop
5	5	str. Constructoril...	0744567788	Const...	Non-stop
6	6	str. Gh. Doja, nr. ...	0789987667	Sibiu	Non-stop
7	7	str. Castanelor, ...	0745678788	Cluj...	Non-stop

132. Creati o tranzactie care presupune inserarea unei inregistrari in tabelul service pe care apoi o va elimina.

```

begin try
    begin tran
        insert into Service(idService,Adresa,NrTelefon,Oras,Program) values
            (8,'str. Castanelor, nr. 6','0745678788','Mures','Non-stop');

        select *
    end tran
end try

```

```

        from service

        delete from Service
        where idService=8

        select *
        from service

    commit tran
end try
begin catch

    if ERROR_NUMBER()=2627
        begin
            print 'Primary key violation';
        end
    else if ERROR_NUMBER()=547
        begin
            print 'Constraint
violation';
        end
    else
        begin
            print 'Unhandled error';
        end
    end

    if @@TRANCOUNT>0
        rollback tran;

end catch

```

Results		Messages			
	idService	Adresa	NrTelefon	Oras	Program
1	1	str. Bobilna, nr. 12	0712345678	Ploiesti	Non-stop
2	2	str. Sforii, nr. 10	0798765432	Brasov	Non-stop
3	3	str. Viilor, nr. 30	0722334455	Bucuresti	Non-stop
4	4	str. Latina, nr.48	0799887766	Timisoara	Non-stop
5	5	str. Constructorilor, nr. 3	0744567788	Constanta	Non-stop
6	6	str. Gh. Doja, nr. 189	0789987667	Sibiu	Non-stop
7	7	str. Castanelor, nr. 6	0745678788	Cluj-Na...	Non-stop
8	8	str. Castanelor, nr. 6	0745678788	Mures	Non-stop

	idService	Adresa	NrTelefon	Oras	Program
1	1	str. Bobilna, nr. 12	0712345678	Ploiesti	Non-stop
2	2	str. Sforii, nr. 10	0798765432	Brasov	Non-stop
3	3	str. Viilor, nr. 30	0722334455	Bucur...	Non-stop
4	4	str. Latina, nr.48	0799887766	Timis...	Non-stop
5	5	str. Constructoril...	0744567788	Const...	Non-stop
6	6	str. Gh. Doja, nr. ...	0789987667	Sibiu	Non-stop
7	7	str. Castanelor, ...	0745678788	Cluj-...	Non-stop

133. Creati o tranzactie care presupune inserarea unui noi autovehicul si modificarea culorii acestuia.

```

begin try
    begin tran
        insert into
Autovehicul(idAutovehicul,Categorie,Model,Culoare,Carburant,NrKm,PutereMotor,SerieSasiu)
VALUES
    (12,'Autoturism','Opel
Astra','Auriu','Motorina','180.000',100,'SKES111ER5CP00111')
        INSERT INTO
AutovehiculeProprietar(idProprietate,idProprietar,idAutovehicul,NrInmatriculare) VALUES
    (12,6,12,'CT13CSR')

        select *
        from Autovehicul

        select *
        from AutovehiculeProprietar

        update Autovehicul
        set Culoare='Gri'
        where idAutovehicul=12
    end tran
end try

```

```

commit
end try
begin catch

```

```

    if ERROR_NUMBER()=2627 --eroare pt dubluri chei
    begin
        print 'Primary key violation';
    end
    else if ERROR_NUMBER()=547 --eroare pt constrangere
    begin
        print 'Constraint violation';
    end
    else
    begin
        print 'Unhandled error';
    end
end

```

```

if @@TRANCOUNT>0
    rollback tran;

end catch

select *
from Autovehicul

```

Results		Messages						
	idAutovehicul	Categorie	Model	Culoare	Carburant	NrKm	PutereMotor	SerieSasiu
1	1	Autoturism	Peugeot 508	Negru	Benzina	198.123	112	AB01CDE34F1234567
2	2	Autoturism	BMW Seria 3	Argintiu	Motorina	203.125	180	WCDYC7CF8DX201851
3	3	Autoturism	Audi A5	Maro	Motorina	245.560	195	WBAGG83461DN81194
4	4	Motocicleta	Honda VFR 800x	Alb	Motorina	150.255	102	JH2PC35051M200020
5	5	Autoturism	Volkswagen Passat CC	Maro	Benzina	199.000	170	1G1YY24UX5X7120EX
6	6	Autoturism	Skoda Octavia	Verde	Motorina	178.980	115	WAULC68E92A140677
7	7	Autoturism	Citroen C4	Rosu	Electric	150.000	120	1HGBH41JXMN109186
8	8	Autoturism	Audi Q7	Albastru	Motorina	50.000	286	LJCPCBLCX11000237
9	9	Autoturism	Mercedes GLC	Alb	Benzina	103.520	194	SGES000EX5CRC0199
10	10	Autoturism	Peugeot 308	Negru	Benzina	256.000	108	WF04XXGGB4YS85432
11	11	Autoturism	Dacia Logan	Negru	Motorina	190.520	100	SKES030ER5CPO0189
12	12	Autoturism	Opel Astra	Auriu	Motorina	180.000	100	SKES111ER5CPO0111

	idAutovehicul	Categorie	Model	Culoare	Carburant	NrKm	PutereMotor	SerieSasiu
1	1	Autoturism	Peugeot 508	Negru	Benzina	198.123	112	AB01CDE34F1234567
2	2	Autoturism	BMW Seria 3	Argintiu	Motorina	203.125	180	WCDYC7CF8DX201851
3	3	Autoturism	Audi A5	Maro	Motorina	245.560	195	WBAGG83461DN81194
4	4	Motocicleta	Honda VFR 800x	Alb	Motorina	150.255	102	JH2PC35051M200020
5	5	Autoturism	Volkswagen Passat CC	Maro	Benzina	199.000	170	1G1YY24UX5X7120EX
6	6	Autoturism	Skoda Octavia	Verde	Motorina	178.980	115	WAULC68E92A140677
7	7	Autoturism	Citroen C4	Rosu	Electric	150.000	120	1HGBH41JXMN109186
8	8	Autoturism	Audi Q7	Albastru	Motorina	50.000	286	LJCPCBLCX11000237
9	9	Autoturism	Mercedes GLC	Alb	Benzina	103.520	194	SGES000EX5CRC0199
10	10	Autoturism	Peugeot 308	Negru	Benzina	256.000	108	WF04XXGGB4YS85432
11	11	Autoturism	Dacia Logan	Negru	Motorina	190.520	100	SKES030ER5CPO0189
12	12	Autoturism	Opel Astra	Gri	Motorina	180.000	100	SKES111ER5CPO0111

134. Creati o tranzactie prin intermediul careia sa modificati pretul pieselor care depasesc 100 lei cu 10 lei. Pentru fiecare piesa afisati categoria si furnizorul acesteia.

```

begin try
    begin tran
        --inainte de modif
        select p.Denumire as Piesa, c.Tip
as Categorie, f.Nume as Furnizor, c.Pret
        from Categorie c
        inner join Piese p on
c.idCategorie=p.idCategorie
        inner join Furnizori f on
f.idFurnizor=p.idFurnizor

        update c
        set c.Pret+=10
        from Categorie c
        where c.Pret>100

        select p.Denumire as Piesa,
c.Tip as Categorie, f.Nume as
Furnizor, c.Pret
        from Categorie c
        inner join Piese p on
c.idCategorie=p.idCategorie
        inner join Furnizori f on
f.idFurnizor=p.idFurnizor
        commit tran
    end try
    begin catch

        if @@TRANCOUNT > 0
            rollback tran;
    end catch

```

	Piesa	Categorie	Furnizor	Pret
1	Ulei motor	Ulei	Total	60.00
2	Suruburi metrice	Suruburi	Ridex	5.00
3	Vopsea Neagra	Vopsea	Van W...	35.00
4	Vopsea Alba	Vopsea	Van W...	35.00
5	Vopsea Gri	Vopsea	Van W...	35.00
6	Vopsea Rosie	Vopsea	Van W...	35.00
7	Vopsea Albastra	Vopsea	Van W...	35.00
8	Radiator de rac...	Radiator	Ridex	100.00
9	Bujii	Bujii	Bosch	70.00
10	Antigel	Antigel	Mann ...	170.00
11	Parbriz	Parbriz	Stark	820.00
12	Geamuri laterale	Parbriz	Stark	820.00
13	Luneta	Parbriz	Stark	820.00
14	Acumulator auto	Baterii	Bosch	370.00
15	Becuri auto	Becuri	A.B.S.	10.00
16	Furtun	Furtun	Mann ...	45.00
17	Filtru polen	Filtre	Mann ...	100.00
18	Filtru aer	Filtre	Mann ...	100.00
19	Filtru ulei	Filtre	Mann ...	100.00
20	Filtru combustibil	Filtre	Mann ...	100.00

Results		Messages		
	Piesa	Categorie	Furnizor	Pret
1	Ulei motor	Ulei	Total	60.00
2	Suruburi ...	Suruburi	Ridex	5.00
3	Vopsea ...	Vopsea	Van W...	35.00
4	Vopsea ...	Vopsea	Van W...	35.00
5	Vopsea ...	Vopsea	Van W...	35.00
6	Vopsea ...	Vopsea	Van W...	35.00
7	Vopsea ...	Vopsea	Van W...	35.00
8	Radiator ...	Radiator	Ridex	100...
9	Bujii	Bujii	Bosch	70.00
10	Antigel	Antigel	Mann ...	160...
11	Parbriz	Parbriz	Stark	810...
12	Geamuri...	Parbriz	Stark	810...
13	Luneta	Parbriz	Stark	810...
14	Acumula...	Baterii	Bosch	360...
15	Becuri a...	Becuri	A.B.S.	10.00
16	Furtun	Furtun	Mann ...	45.00
17	Filtru pol...	Filtre	Mann ...	100...
18	Filtru aer	Filtre	Mann ...	100...
19	Filtru ulei	Filtre	Mann ...	100...
20	Filtru co...	Filtre	Mann ...	100...

(No column name)	
1	820.00

	Piesa	Categorie	Furnizor	Pret
1	Ulei motor	Ulei	Total	60.00
2	Suruburi metrice	Suruburi	Ridex	5.00
3	Vopsea Neagra	Vopsea	Van W...	35.00
4	Vopsea Alba	Vopsea	Van W...	35.00
5	Vopsea Gri	Vopsea	Van W...	35.00
6	Vopsea Rosie	Vopsea	Van W...	35.00
7	Vopsea Albastra	Vopsea	Van W...	35.00
8	Radiator de rac...	Radiator	Ridex	100.00
9	Bujii	Bujii	Bosch	70.00
10	Antigel	Antigel	Mann ...	170.00
11	Parbriz	Parbriz	Stark	820.00
12	Geamuri laterale	Parbriz	Stark	820.00

135. Sa se creeze o tranzactie care introduce o noua inregistrare in tabelul Furnizori, modifica tara ca fiind Franta si apoi sterge inregistrarea.

```
begin try
    begin tran

        INSERT INTO Furnizori(idFurnizor,Nume,Adresa,Oras,CodPostal,Tara,NrTelefon)
VALUES
    (9,'AXI','str. Principala, nr.
759A','Ploiesti','107160','Romania','0737834152')

        select *
        from Furnizori

        update f
        set f.Tara='Franta'
        from Furnizori f
        where idFurnizor=9

        select *
        from Furnizori

        delete from Furnizori
        where Tara='Franta'

        select *
        from Furnizori

    commit tran
end try
begin catch

    if ERROR_NUMBER()=2627 --eroare pt dubluri chei
    begin
        print 'Primary key violation';
    end
    else if ERROR_NUMBER()=547 --eroare pt constrangere
    begin
        print 'Constraint violation';
    end
    else
    begin
        print 'Unhandled error';
    end
end

if @@TRANCOUNT>0
    rollback tran;
```

end catch

Results Messages							
	idFurnizor	Nume	Adresa	Oras	CodPostal	Tara	NrTelefon
2	2	Bosch	49 Gilbert St.	Munchen	EC1 4SD	Romania	1715552222
3	3	A.B.S.	Josef-Orlopp-Strabe 55	Berlin	10365	Romania	0316302230
4	4	Ridex	92 Setsuko Chuo-ku	Osaka	545	Romania	064317877
5	5	Stark	Kaloadagatan 13	Göteborg	S-345 67	Romania	0319876543
6	6	Van Wezel	Tiergartenstraße 5	Berlin	10785	Romania	0109984510
7	7	Mann Filter	Sales Representative	Ravenna	48100	Romania	054460323
8	8	Ajax	50 Gilbert St.	Munchen	EC1 4SE	Romania	1715552992
9	9	AXI	str. Principala, nr. 759A	Ploiesti	107160	Romania	0737834152

	idFurnizor	Nume	Adresa	Oras	CodPostal	Tara	NrTelefon
2	2	Bosch	49 Gilbert St.	Munchen	EC1 4SD	Romania	1715552222
3	3	A.B.S.	Josef-Orlopp-Str...	Berlin	10365	Romania	0316302230
4	4	Ridex	92 Setsuko Chu...	Osaka	545	Romania	064317877
5	5	Stark	Kaloadagatan 13	Göteborg	S-345 67	Romania	0319876543
6	6	Van ...	Tiergartenstraße...	Berlin	10785	Romania	0109984510
7	7	Man...	Sales Represen...	Ravenna	48100	Romania	054460323
8	8	Ajax	50 Gilbert St.	Munchen	EC1 4SE	Romania	1715552992
9	9	AXI	str. Principala, n...	Ploiesti	107160	Franta	0737834152

	idFurnizor	Nume	Adresa	Oras	CodPostal	Tara	NrTelefon
1	1	Total	str. Stejarilor, nr. 2	Brasov	507055	Romania	0268401711
2	2	Bosch	49 Gilbert St.	Munchen	EC1 4SD	Romania	1715552222
3	3	A.B.S.	Josef-Orlopp-Str...	Berlin	10365	Romania	0316302230
4	4	Ridex	92 Setsuko Chu...	Osaka	545	Romania	064317877
5	5	Stark	Kaloadagatan 13	Göteborg	S-345 67	Romania	0319876543
6	6	Van ...	Tiergartenstraße...	Berlin	10785	Romania	0109984510
7	7	Man...	Sales Represen...	Ravenna	48100	Romania	054460323
8	8	Ajax	50 Gilbert St.	Munchen	EC1 4SE	Romania	1715552992

136. Creati o tranzactie care sa mareasca salariul patronului cu 1000 lei.

```
begin try
    begin tran

        select *
        from Salariu s
        inner join FunctiiAngajati fa on fa.idFunctieAngajat=s.idFunctieAngajat
        inner join Angajati a on a.idAngajat=fa.idAngajat
        inner join Functii f on fa.idFunctie=f.idFunctie
        where f.Denumire='Patron'

        update s
        set s.SalariuBrut+=1000
        from Salariu s
        inner join FunctiiAngajati fa on fa.idFunctieAngajat=s.idFunctieAngajat
```

```

inner join Angajati a on a.idAngajat=fa.idAngajat
inner join Functii f on fa.idFunctie=f.idFunctie
where f.Denumire='Patron'

select *
from Salariu s
inner join FunctiiAngajati fa on fa.idFunctieAngajat=s.idFunctieAngajat
inner join Angajati a on a.idAngajat=fa.idAngajat
inner join Functii f on fa.idFunctie=f.idFunctie
where f.Denumire='Patron'

commit tran
end try
begin catch

if @@TRANCOUNT>0
rollback tran;

end catch

```

Results Messages											
	idSalariu	idFunctieAngajat	SalariuBrut	DataIntrareVigoare	DataIesireVigoare	idFunctieAngajat	idAngajat	idFunctie	DataAngajare	DataPlecare	Sefi
1	1	1	2200.00	2020-02-23	NULL	1	1	10	2005-05-17	NULL	NULL
< >											
	idSalariu	idFunctieAngajat	SalariuBrut	DataIntrareVigoare	DataIesireVigoare	idFunctieAngajat	idAngajat	idFunctie	DataAngajare	DataPlecare	Sefi
1	1	1	3200.00	2020-02-23	NULL	1	1	10	2005-05-17	NULL	NULL

137. Scrieti o tranzactie care sa adauge un nou angajat in baza de date. Daca id-ul este deja existent, gestionati eroarea.

```

begin try
begin tran
INSERT INTO
Angajati(idAngajat,idService,Nume,Prenume,Adresa,Oras,DataNastere,NrTelefon) VALUES
(46,5,'Lascuzeanu','Daniel','str. Dunavat, nr. 66','Jupiter','1995-11-11','0735333344')
commit tran
end try
begin catch

```

```

if ERROR_NUMBER()=2627 --eroare pt
dubluri chei
begin
print 'Primary key violation';
end
else if ERROR_NUMBER()=547 --eroare pt
constrangere
begin
print 'Constraint
violation';
end

```

Messages

(0 rows affected)
Primary key violation

Completion time: 2022-05-11T11:31:54.2833012+03:00

```

        else
            begin
                print 'Unhandled error';
            end
        end

if @@TRANCOUNT>0
    rollback tran;
end catch

```

138. Scrieți o tranzacție în care să inserați două rânduri și să modificați alte trei rânduri la alegere în oricare din tabelele din baza de date Shop. Tratați cazurile de eroare.

```

begin try
    begin tran
        insert into
Autovehicul(idAutovehicul,Categorie,Model,Culoare,Carburant,NrKm,PutereMotor,SerieSasiu)
VALUES
        (13,'Autoturism','Skoda Octavia
II','Gri','Motorina','180.000',100,'SKEI111ER5CP03311'),
        (14,'Autoturism','BMW Seria
1','Auriu','Benzina','180.000',100,'SKES111ER5CP06969')

        select * from Autovehicul

        update a
        set a.NrKm='185.000'
        from Autovehicul a
        where a.NrKm='180.000'

        select * from Autovehicul

    commit tran
end try
begin catch
    if ERROR_NUMBER()=2627 --eroare pt dubluri chei
        begin
            print 'Primary key violation';
        end
    else if ERROR_NUMBER()=547 --eroare pt constrangere
        begin
            print 'Constraint violation';
        end
    else
        begin
            print 'Unhandled error';
        end
    end

if @@TRANCOUNT>0
    rollback tran;
end catch

```


Results		Messages						
7	7	Autoturism	Citroen C4	Rosu	Electric	150.000	120	1HGBH41JXMN109186
8	8	Autoturism	Audi Q7	Albastru	Motorina	50.000	286	LJPCBLCX11000237
9	9	Autoturism	Mercedes GLC	Alb	Benzina	103.520	194	SGES000EX5CRC0199
10	10	Autoturism	Peugeot 308	Negru	Benzina	256.000	108	WF04XXGBB4YS85432
11	11	Autoturism	Dacia Logan	Negru	Motorina	190.520	100	SKES030ER5CPO0189
12	12	Autoturism	Opel Astra	Gri	Motorina	180.000	100	SKES111ER5CPO0111
13	13	Autoturism	Skoda Octavia II	Gri	Motorina	180.000	100	SKEI111ER5CPO3311
14	14	Autoturism	BMW Seria 1	Auriu	Benzina	180.000	100	SKES111ER5CPO6969

	idAutovehicul	Categorie	Model	Culoare	Carburant	NrKm	PutereMotor	SerieSasiu
1	1	Autoturism	Peugeot 508	Negru	Benzina	198.123	112	AB01CDE34F1234567
2	2	Autoturism	BMW Seria 3	Argintiu	Motorina	203.125	180	WCDYC7CF8DX201851
3	3	Autoturism	Audi A5	Maro	Motorina	245.560	195	WBAGG83461DN81194
4	4	Motocicl...	Honda VFR...	Alb	Motorina	150.255	102	JH2PC35051M200020
5	5	Autoturism	Volkswage...	Maro	Benzina	199.000	170	1G1YY24UX5X7120EX
6	6	Autoturism	Skoda Octa...	Verde	Motorina	178.980	115	WAULC68E92A140677
7	7	Autoturism	Citroen C4	Rosu	Electric	150.000	120	1HGBH41JXMN109186
8	8	Autoturism	Audi Q7	Albastru	Motorina	50.000	286	LJPCBLCX11000237
9	9	Autoturism	Mercedes ...	Alb	Benzina	103.520	194	SGES000EX5CRC0199
10	10	Autoturism	Peugeot 308	Negru	Benzina	256.000	108	WF04XXGBB4YS85432
11	11	Autoturism	Dacia Logan	Negru	Motorina	190.520	100	SKES030ER5CPO0189
12	12	Autoturism	Opel Astra	Gri	Motorina	185.000	100	SKES111ER5CPO0111
13	13	Autoturism	Skoda Octa...	Gri	Motorina	185.000	100	SKEI111ER5CPO3311
14	14	Autoturism	BMW Seria 1	Auriu	Benzina	185.000	100	SKES111ER5CPO6969

139. Sciati o tranzactie care sa introduca o noua functie pentru angajati.

```
begin try
    begin tran
        INSERT INTO Functii(idFunctie,Denumire) VALUES (10,'Femeie serviciu')
    commit tran
end try
begin catch
```

```
    if ERROR_NUMBER()=2627 --eroare pt dubluri chei
        begin
            print 'Primary key violation';
        end
    else if ERROR_NUMBER()=547 --eroare pt
constrangere
```

```
        begin
            print 'Constraint
violation';
        end
    else
        begin
            print 'Unhandled error';
        end
end
```

```
if @@TRANCOUNT>0
```

Messages

(0 rows affected)
Primary key violation

Completion time: 2022-05-11T14:32:06.1216807+03:00

```
rollback tran;
end catch
```

140. Scrieti o tranzactie care sa scrie cu majuscule orasul tuturor angajatilor care apartin de service-ul din Bucuresti.

```
begin try
    begin tran
        --inainte de modif
        select *
        from Angajati a
        inner join Service s on s.idService=a.idService
        where a.idService=3

        update a
        set a.Oras=UPPER(a.Oras)
        from Angajati a
        inner join Service s on s.idService=a.idService
        where a.idService=3

        select *
        from Angajati a
        inner join Service s on s.idService=a.idService
        where a.idService=3

    commit tran
end try
begin catch

    if @@TRANCOUNT > 0
        rollback tran;
end catch
```

	idAngajat	idService	Nume	Prenume	Adresa	Oras	DataNastere	NrTelefon
1	21	3	Dima	Stefan	str. Urziceni, nr. 18	BRAGADIRU	1998-02-17	0721314151
2	22	3	Darie	George	str. Resita, nr. 8	BUCURESTI	1994-06-19	0742526272
3	23	3	Herdea	Adrian	str. Stelelor, nr. 780	PIPERA	1997-03-06	0753599787
4	24	3	Radu	Codrut	str. Principala, nr. 5	BUCURESTI	1992-01-05	0789858412
5	25	3	David	Alexandru	str. Luica, nr. 8	BALOTESTI	1980-12-08	0789624153
6	26	3	Miclaus	Marian	str. Zanoaga, nr. 46	BUCURESTI	1996-12-13	0788778888
7	27	3	Petrea	Victor	str. Scropoasa, nr. 8	GHERGHITA	1983-12-27	0723435665
8	28	3	Popescu	Cornel	str. Odei, nr. 1	BUCURESTI	1981-02-02	0789187656
9	29	3	Purcaru	Emil	str. Pogoanele, nr. 83	PIPERA	1996-04-21	0731122231
10	30	3	Popovici	Andrei	str. Ciubarului, nr. 79	BALOTESTI	1974-02-15	0723572476

11. Rezolvarea cerintelor legate de UPDATE

141. Sa se actualizeze programul de lucru al service-ului cu program 'Inchis' ca fiind 'Non-stop'.

```
select *
from Service s
where s.Program='Inchis'

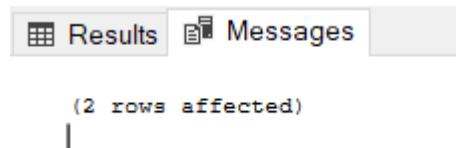
update Service
set Service.Program='Non-stop'
where Service.Program='Inchis'
```



142. Sa se mareasca toate salariilor angajatilor cu functia de 'Manager' cu 1000lei.

```
select s.SalariuBrut
from FunctiiAngajati fa
inner join Functii f on fa.idFunctie=f.idFunctie
inner join Salariu s on s.idFunctieAngajat=fa.idFunctieAngajat
where f.Denumire='Manager'

update s
set s.SalariuBrut+=1000
from FunctiiAngajati fa
inner join Functii f on fa.idFunctie=f.idFunctie
inner join Salariu s on s.idFunctieAngajat=fa.idFunctieAngajat
where f.Denumire='Manager'
```



143. Actualizati tabelul 'Proprietar' astfel incat celor care le-a fost reparata masina sa aiba numele scris cu majuscule.

```
select prop.Nume,prop.Prenume
from AutovehiculeProprietar as ap
inner join Programari p on ap.idProprietate=p.idProprietate
inner join Proprietar prop on ap.idProprietar=prop.idProprietar
where p.DataIesire is not null

update prop
set prop.Nume=UPPER(prop.Nume),prop.Prenume=UPPER(prop.Prenume)
from AutovehiculeProprietar as ap
inner join Programari p on ap.idProprietate=p.idProprietate
inner join Proprietar prop on ap.idProprietar=prop.idProprietar
```

```
where p.DataIesire is not null
```



144. Sa se actualizeze tabelul "Proprietar" astfel incat numarul de telefon al proprietarilor din orasul "Mamaia" sa fie un numar random hexazecimal de 8 bytes.

```
update Proprietar
set Proprietar.NrTelefon=CRYPT_GEN_RANDOM(8,0x25F18060EFD3A9B8)
from Proprietar
where Proprietar.Oras='Mamaia'
```

```
select * from Proprietar
where Oras='Mamaia'
```

Results		Messages					
	idProprietar	Nume	Prenume	Adresa	Oras	NrTelefon	Email
1	6	TOMA	CRISTINA	str. Principala, nr. 34A	Mamaia	7060606060606060	cristina.toma@mta.ro

145. Modificati pretul pieselor care depasesc 100 lei cu 10 lei. Pentru fiecare piesa afisati categoria si furnizorul acesteia.

```
select p.Denumire as Piesa, c.Tip as Categorie, f.Nume as Furnizor,c.Pret
from Categorie c
inner join Piese p on c.idCategorie=p.idCategorie
inner join Furnizori f on f.idFurnizor=p.idFurnizor
```

```
update c
set c.Pret+=10
from Categorie c
where c.Pret>100
```

```
select p.Denumire as Piesa, c.Tip as Categorie, f.Nume as Furnizor,c.Pret
from Categorie c
inner join Piese p on c.idCategorie=p.idCategorie
inner join Furnizori f on f.idFurnizor=p.idFurnizor
```

	Piesa	Categorie	Furnizor	Pret
7	Vopsea Albastra	Vopsea	Van Wezel	35.00
8	Radiator de racire a...	Radiator	Ridex	100.00
9	Bujii	Bujii	Bosch	70.00
10	Antigel	Antigel	Mann Fil...	170.00
11	Parbriz	Parbriz	Stark	820.00
12	Geamuri laterale	Parbriz	Stark	820.00
13	Luneta	Parbriz	Stark	820.00
14	Acumulator auto	Baterii	Bosch	370.00
15	Becuri auto	Becuri	A.B.S.	10.00
16	Furtun	Furtun	Mann Fil...	45.00
17	Filtru polen	Filtre	Mann Fil...	100.00
18	Filtru aer	Filtre	Mann Fil...	100.00
19	Filtru ulei	Filtre	Mann Fil...	100.00
20	Filtru combustibil	Filtre	Mann Fil...	100.00

	Piesa	Categorie	Furnizor	Pret
1	Ulei motor	Ulei	Total	60.00
2	Suruburi metrice	Suruburi	Ridex	5.00
3	Vopsea Neagra	Vopsea	Van Wezel	35.00
4	Vopsea Alba	Vopsea	Van Wezel	35.00
5	Vopsea Gri	Vopsea	Van Wezel	35.00
6	Vopsea Rosie	Vopsea	Van Wezel	35.00
7	Vopsea Albastra	Vopsea	Van Wezel	35.00
8	Radiator de rac...	Radiator	Ridex	100.00
9	Bujii	Bujii	Bosch	70.00
10	Antigel	Antigel	Mann Filter	180.00
11	Parbriz	Parbriz	Stark	830.00
12	Geamuri laterale	Parbriz	Stark	830.00
13	Luneta	Parbriz	Stark	830.00
14	Acumulator auto	Baterii	Bosch	380.00
15	Becuri auto	Becuri	A.B.S.	10.00
16	Furtun	Furtun	Mann Filter	45.00
17	Filtru polen	Filtre	Mann Filter	100.00
18	Filtru aer	Filtre	Mann Filter	100.00

146. Pentru anagajatul cu functia de patron, sa i se codifice ultimele 4 cifre din numar cu caracterul '*'.

```
select a.Nume,a.Prenume,a.NrTelefon
from Angajati a
inner join FunctiiAngajati fa on fa.idAngajat=a.idAngajat
inner join Functii f on f.idFunctie=fa.idAngajat
where f.Denumire='Patron'
```

```
update a
set
a.NrTelefon=concat(SUBSTRING(a.NrTelefon,1,6),'****')
from Angajati a
inner join FunctiiAngajati fa on
fa.idAngajat=a.idAngajat
inner join Functii f on f.idFunctie=fa.idAngajat
where f.Denumire='Patron'
```

```
select a.Nume,a.Prenume,a.NrTelefon
from Angajati a
inner join FunctiiAngajati fa on
fa.idAngajat=a.idAngajat
inner join Functii f on f.idFunctie=fa.idAngajat
```

	Nume	Prenume	NrTelefon
1	Neamtu	Liviu	0756544332

	Nume	Prenume	NrTelefon
1	Neamtu	Liviu	075654****

```
where f.Denumire='Patron'
```

147. Modificati tabela autovehicul astfel incat in fata acelora cu carburantul benzina sa apara caracterul '#'.

```
update a
set a.Carburant=concat('#',a.Carburant)
from Autovehicul a
where a.Carburant='Benzina'
```

```
select *
from Autovehicul a
where a.Carburant='Benzina'
```

	idAutovehicul	Categorie	Model	Culoare	Carburant	NrKm	PutereMotor	SerieSasiu
1	1	Autoturism	Peugeot 508	Negru	#Benzina	198.123	112	AB01CDE34F1234567
2	2	Autoturism	BMW Seria 3	Argintiu	Motorina	203.125	180	WCDYC7CF8DX201851
3	3	Autoturism	Audi A5	Maro	Motorina	245.560	195	WBAGG83461DN81194
4	4	Motocicleta	Honda VFR 800x	Alb	Motorina	150.255	102	JH2PC35051M200020
5	5	Autoturism	Volkswagen Passat CC	Maro	#Benzina	199.000	170	1G1YY24UX5X7120EX
6	6	Autoturism	Skoda Octavia	Verde	Motorina	178.980	115	WAULC68E92A140677
7	7	Autoturism	Citroen C4	Rosu	Electric	150.000	120	1HGBH41JXMN109186
8	8	Autoturism	Audi Q7	Albastru	Motorina	50.000	286	LJCPCBLCX11000237
9	9	Autoturism	Mercedes GLC	Alb	#Benzina	103.520	194	SGES000EX5CRC0199
10	10	Autoturism	Peugeot 308	Negru	#Benzina	256.000	108	WF04XXGBB4YS85432
11	11	Autoturism	Dacia Logan	Negru	Motorina	190.520	100	SKES030ER5CPO0189
12	12	Autoturism	Opel Astra	Gri	Motorina	185.000	100	SKES111ER5CPO0111
13	13	Autoturism	Skoda Octavia II	Gri	Motorina	185.000	100	SKEI111ER5CPO3311
14	14	Autoturism	BMW Seria 1	Auriu	#Benzina	185.000	100	SKES111ER5CPO6969

148. Sa se modifice toate autovehiculele care au culoarea rosu in culoarea mov.

```
select *
from Autovehicul
where Culoare='Rosu'
```

```
update a
set a.Culoare='Mov'
from Autovehicul a
where a.Culoare='Rosu'
```

```
select *
from Autovehicul
where Culoare='Mov'
```

	idAutovehicul	Categorie	Model	Culoare	Carburant	NrKm	PutereMotor	SerieSasiu
1	7	Autoturism	Citroen C4	Rosu				1HGBH41JXMN109186

	idAutovehicul	Categorie	Model	Culoare	Carburant	NrKm	PutereMotor	SerieSasiu
1	7	Autoturism	Citroen C4	Mov	Electric	150.000	120	1HGBH41JXMN109186

149. A fost introdusa o noua politica a lantului de service-uri astfel incat manopera reparatiilor ce foloseste piese din categoria Filtre va creste cu 10 lei. Faceti actualizarile necesare.

```
select c.Tip,c.Pret
from Piese p
inner join Categorie c on c.idCategorie=p.idPiesa
inner join Reparatii r on r.idPiesa=p.idPiesa
where c.Tip='Filtre'
```

```
update r
set r.Manopera+=10
from Reparatii r
inner join Piese p on r.idPiesa=p.idPiesa
inner join Categorie c on c.idCategorie=p.idPiesa
where c.Tip='Filtre'
```

Messages

(1 row affected)

Completion time: 2022-05-11T18:46:53.4846334+03:00

Messages

(1 row affected)

Completion time: 2022-05-11T19:08:54.5719491+03:00

150. Sa se modifice numele proprietarului: sa fie scris cu majuscule si judetul nr de inmatriculare sa inceapa cu PH pentru cele reparate in service-ul din Ploiesti.

```
select a.Model,p.Nume+' '+p.Prenume
from Proprietar p
inner join AutovehiculeProprietar ap on ap.idProprietar=p.idProprietar
inner join Autovehicul a on a.idAutovehicul=ap.idAutovehicul
inner join programari prog on prog.idProprietate=ap.idProprietate
inner join Service s on s.idService=prog.idService
where s.Oras='Ploiesti' and substring(ap.NrInmatriculare,1,2)='PH'
```

```
update p
set p.Nume=upper(p.Nume)
from Proprietar p
inner join AutovehiculeProprietar ap on ap.idProprietar=p.idProprietar
inner join Autovehicul a on a.idAutovehicul=ap.idAutovehicul
inner join programari prog on prog.idProprietate=ap.idProprietate
inner join Service s on s.idService=prog.idService
where s.Oras='Ploiesti' and substring(ap.NrInmatriculare,1,2)='PH'
```

Results	Messages
<pre> (2 rows affected) Modificarile au fost efectuate cu succes! (1 row affected) (10 rows affected) (2 rows affected) Completion time: 2022-05-12T22:53:46.8915674+03:00 </pre>	

151. Se doreste micsorarea salariului patronului cu 10%. Realizati modificarile asupra tabelui Salariu.

```

declare @procent real;
set @procent=0.1;

update s
set s.SalariuBrut-=@procent*s.SalariuBrut
from Salariu s
inner join FunctiiAngajati fa on
fa.idFunctieAngajat=s.idFunctieAngajat
inner join Functii f on fa.idFunctie=f.idFunctie
where f.Denumire='Patron'

select *
from Salariu
where Salariu.idFunctieAngajat=10

```

Messages
<pre> (1 row affected) Completion time: 2022-05-11T22:50:46.1385349+03:00 </pre>

152. Din motive pandemice, ora de inchidere a service-ului din Bucuresti va fi 8:00-22:00. Actualizati tabelul.

```

update s
set s.Program='08:00-22:00'
from Service s
where s.Oras='Bucuresti'

select *
from Service
where Oras='Bucuresti'


```

Messages
<pre> (1 row affected) Completion time: 2022-05-11T22:54:55.3925724+03:00 </pre>

Results		Messages			
	idService	Adresa	NrTelefon	Oras	Program
1	3	str. Viilor, nr. 30	0722334455	Bucuresti	08:00-22:00

153. Sa se modifice toate prenumele 'George' in 'Andrei' din tabelul Angajati.

```
update a
set a.Prenume='Andrei'
from Angajati a
where a.Prenume='George'
```


 Messages

(3 rows affected)

Completion time: 2022-05-11T22:59:34.1122754+03:00

154. Sa se modifice tara ca fiind Germania pentru furnizorii cu sediul in orasul Munchen.

```
update f
set f.Tara='Germania'
from Furnizori f
where f.Oras='Munchen'
```


 Messages

(2 rows affected)

Completion time: 2022-05-11T23:44:59.0228162+03:00

155. Sa se scrie cu litere mici numele proprietarilor care au avut masina intr-un service.

```
update p
set p.Nume=lower(p.Nume),p.Prenume=lower(p.Prenume)
from Proprietar p
inner join AutovehiculeProprietar ap on
ap.idProprietar=p.idProprietar
inner join Programari prog on
prog.idProprietate=ap.idProprietate
where prog.idProprietate=ap.idProprietate
```

 Messages

(10 rows affected)

Completion time: 2022-05-11T23:51:14.0777908+03:00

```
select *
from Proprietar p
inner join AutovehiculeProprietar ap on ap.idProprietar=p.idProprietar
inner join Programari prog on prog.idProprietate=ap.idProprietate
where prog.idProprietate=ap.idProprietate
```

Results		Messages					
	idProprietar	Nume	Prenume	Adresa	Oras	NrTelefon	Email
1	1	barbu	georgiana	str. Mihai Viteazu, nr. 3	Paulesti	0737658967	madalina.barbu@mta.ro
2	2	craciun	cristian	str. Patriei, nr. 10	Navodari	0788456723	cristian.craciun@mta.ro
3	4	ionita	daniel	str. Merilor, nr. 19	Craiova	0733355578	daniel.ionita@mta.ro
4	3	soare	octavian	str. Fagului, nr.2	Brazii de Jos	0723325665	soare.octavina@mta.ro
5	8	petrea	tudor	str. Muresului, nr. 7A	Iasi	0799999988	tudor.petrea@mta.ro
6	9	ilie	roxana	str. Fericirii, nr. 759	Ciorani	0766655534	roxana.ilie@mta.ro
7	7	chiva	elena	str. Primaverii, nr. 90-91	Galati	0712332145	elena.chiva@mta.ro
8	10	onea	george	str. Democratiei, nr. 11	Sighisoara	0777777788	george.onea@mta.ro
9	5	moise	sarah	str. Fat-Frumos, nr. 12-13	Alba-Iulia	0766688899	sarah.moise@mta.ro
10	6	toma	cristina	str. Principala, nr. 34A	Mamaia	0722335566	cristina.toma@mta.ro
11	6	toma	cristina	str. Principala, nr. 34A	Mamaia	0722335566	cristina.toma@mta.ro

12. Rezolvarea cerintelor legate de DELETE

156. Stergeti toti angajatii care sunt angajati la service-ul din Timisoara.

```
alter table FunctiiAngajati
drop constraint FK_FunctiiAn__idAng__2B3F6F97
alter table FunctiiAngajati
add constraint FK_FctAng
foreign key (idAngajat) references Angajati(idAngajat) on delete cascade;
```

```
alter table ReparatiiAutovehicule
drop constraint FK_Reparatii__idAng__71D1E811
alter table ReparatiiAutovehicule
add constraint FK_RepAng
foreign key (idAngajat) references Angajati(idAngajat) on delete cascade;
```

```
delete a
from Angajati a
inner join Service s on s.idService=a.idService
where s.Oras='Timisoara'

select * from Angajati
```

Results	Messages
(10 rows affected)	
(40 rows affected)	
Completion time: 2022-05-12T11:38:03.2650284+03:00	

Results		Messages								
	idAngajat	idService	Nume	Prenume	Adresa	Oras	DataNastere	NrTelefon		
11	11	2	Munte...	Andrei	str. Zeicani, nr. 2	Predeal	1987-03-28	0789900988		
12	12	2	Radu	Serghei	str. Prasilei, nr. 178	Brasov	1990-02-14	0756776589		
13	13	2	Samoi...	Gheorg...	str. Amara, nr. 9	Sinaia	1984-11-26	0767676769		
14	14	2	Stoian	Dan	str. Panselilor, nr. ...	Azuga	1991-09-25	0756678790		
15	15	2	Topa	Vasile	str. Zambilelor, nr. 2	Brasov	1982-01-09	0734433443		
16	16	2	Voncila	Ionel	str. Soarelui, nr. 456	Brasov	1996-12-13	0788888888		
17	17	2	Voicu	Violeta	str. Garofitei, nr. 18	Brasov	1983-12-27	0723445665		
18	18	2	Ursachi	Robert	str. Mierei, nr. 12A	Busteni	1981-02-02	0789987656		
19	19	2	Teodor	Emanuel	str. Nicoarei, nr. 89	Brasov	1996-04-21	0711122231		
20	20	2	Timoftei	Radu	str. Bucurei, nr. 9	Brasov	1974-02-15	0723472476		
21	21	3	Dima	Stefan	str. Urziceni, nr. 18	BRAGA...	1998-02-17	0721314151		
22	22	3	Darie	Andrei	str. Resita, nr. 8	BUCUR...	1994-06-19	0742526272		
23	23	3	Herdea	Adrian	str. Stelelor, nr. 780	PIPERA	1997-03-06	0753599787		
24	24	3	Radu	Codrut	str. Principala, nr. 5	BUCUR...	1992-01-05	0789858412		
25	25	3	David	Alexan...	str. Luica, nr. 8	BALOTE...	1980-12-08	0789624153		
26	26	3	Miclaus	Marian	str. Zanoaga, nr. 46	BUCUR...	1996-12-13	0788778888		
27	27	3	Petrea	Victor	str. Scropoasa, nr. 8	GHERG...	1983-12-27	0723435665		
28	28	3	Popes...	Cornel	str. Odei, nr. 1	BUCUR...	1981-02-02	0789187656		
29	29	3	Purcaru	Emil	str. Pogoanele, nr. ...	PIPERA	1996-04-21	0731122231		
30	30	3	Popov...	Andrei	str. Ciubarului, nr. ...	BALOTE...	1974-02-15	0723572476		
31	41	5	Dumit...	Vasile	str. Veseliei, nr. 32	Constanta	1978-01-28	0789898999		
32	42	5	Achim	Liliana	str. Stanescu, nr. 30	Navodari	1977-01-05	0790909091		
33	43	5	Badea	Tudor	str. Stana de Vale, ...	Mamaia	1974-03-15	0767676777		
34	44	5	Tudose	Mihai	str. Doina, nr. 18	Constanta	1987-12-23	0734343334		
35	45	5	Raicu	Andrei	str. Telita, nr. 99	Mamaia	1997-11-20	0723342387		
36	46	5	Lascu...	Daniel	str. Dunavat, nr. 66	Jupiter	1995-11-11	0735333344		
37	47	5	Avram	Sorinel	str. Ferentari, nr. 22	Constanta	1998-07-18	0738934155		
38	48	5	Aldea	Adrian	str. Rahovei, nr. 877	Mamaia	1985-04-28	0721929240		
39	49	5	Iordac...	Dragos	str. Barnova, nr. 277	Constanta	1988-12-30	0756678388		
40	50	5	Rusu	Liviu	str. Iancu Jianu, nr. ...	Constanta	1986-07-18	0756544212		

Query executed successfully. | DESKTOP-QBHMD5L (15.0 RTM) | DESKTOP-QBHMD5L\Deea (56) | TomService | 00:00:00 | 40 rows

157. Sa se stearga service-ul cu localizarea in Oradea.

```
delete from Service
where Oras='Oradea'
```

```
select * from Service
```

Results		Messages				
	idService	Adresa	NrTelefon	Oras	Program	
1	1	str. Bobilna, nr. 12	0712345678	Ploiesti	Non-stop	
2	2	str. Sforii, nr. 10	0798765432	Brasov	Non-stop	
3	3	str. Viilor, nr. 30	0722334455	Bucuresti	08:00-22:00	
4	4	str. Latina, nr.48	0799887766	Timisoara	Non-stop	
5	5	str. Constructorilor, nr. 3	0744567788	Constanta	Non-stop	
6	6	str. Gh. Doja, nr. 189	0789987667	Sibiu	Non-stop	
7	7	str. Castanelor, nr. 6	0745678788	Cluj-Na...	Non-stop	

158. Sa se stearga autovehiculul de top motocicleta care este de model 'Harley Davidson'.

```
delete from Autovehicul
where Model='Harley Davidson' and Categorie='Motocicleta'
```

	idAutovehicul	Categorie	Model	Culoare	Carburant	NrKm	PutereMotor	SerieSasiu
1	1	Autoturism	Peugeot 508	Negru	#Benzina	198.123	112	AB01CDE34F1234567
2	2	Autoturism	BMW Seria 3	Argintiu	Motorina	203.125	180	WCDYC7CF8DX201851
3	3	Autoturism	Audi A5	Maro	Motorina	245.560	195	WBAGG83461DN81194
4	4	Motocicleta	Honda VFR 800x	Alb	Motorina	150.255	102	JH2PC35051M200020
5	5	Autoturism	Volkswagen Passat CC	Maro	#Benzina	199.000	170	1G1YY24UX5X7120EX
6	6	Autoturism	Skoda Octavia	Verde	Motorina	178.980	115	WAULC68E92A140677
7	7	Autoturism	Citroen C4	Mov	Electric	150.000	120	1HGBH41JXMN109186
8	8	Autoturism	Audi Q7	Albastru	Motorina	50.000	286	LJCPCBLCX11000237
9	9	Autoturism	Mercedes GLC	Alb	#Benzina	103.520	194	SGES000EX5CRC0199
10	10	Autoturism	Peugeot 308	Negru	#Benzina	256.000	108	WF04XXGGB4YS85432
11	11	Autoturism	Dacia Logan	Negru	Motorina	190.520	100	SKES030ER5CPO0189
12	12	Autoturism	Opel Astra	Gri	Motorina	185.000	100	SKES111ER5CPO0111
13	13	Autoturism	Skoda Octavia II	Gri	Motorina	185.000	100	SKEI111ER5CPO3311
14	14	Autoturism	BMW Seria 1	Auriu	#Benzina	185.000	100	SKES111ER5CPO6969

159. Sa se stearga impozitul 'Impozit pe Venit'.

```

alter table ImpoziteSalariu
drop constraint FK__ImpoziteS__idImp__4F7CD00D
alter table ImpoziteSalariu
add constraint FK_ImpSal
foreign key (idImpozit) references Impozite(idImpozit) on delete cascade;

delete from Impozite
where Nume='Impozit pe Venit'

select * from Impozite

```

Results		Messages	
	idImpozit	Nume	Procent
1	1	Asigurare Sanatate	25.00
2	2	Asigurare Sociala	10.00
3	4	CAM	2.25

160. Stergeti furnizorul 'Ajax'.

```

delete from Furnizori
where Nume='Ajax'

select * from Furnizori

```

Results		Messages					
	idFurnizor	Nume	Adresa	Oras	CodPostal	Tara	NrTelefon
1	1	Total	str. Stejarilor, nr. 2	Brasov	507055	Romania	0268401711
2	2	Bosch	49 Gilbert St.	Munchen	EC1 4SD	Germania	1715552222
3	3	A.B.S.	Josef-Orlopp-Strabe 55	Berlin	10365	Romania	0316302230
4	4	Ridex	92 Setsuko Chuo-ku	Osaka	545	Romania	064317877
5	5	Stark	Kaloadagatan 13	Göteborg	S-345 67	Romania	0319876543
6	6	Van Wezel	Tiergartenstraße 5	Berlin	10785	Romania	0109984510
7	7	Mann Filter	Sales Representative	Ravenna	48100	Romania	054460323

161. Stergeti toti angajatii care sunt angajati la service-ul din Bucuresti care au peste 30 de ani.

```
alter table FunctiiAngajati
drop constraint FK__FunctiiAn__idAng__2B3F6F97
alter table FunctiiAngajati
add constraint FK_FctAng
foreign key (idAngajat) references Angajati(idAngajat) on delete cascade;
```

```
alter table ReparatiiAutovehicule
drop constraint FK__Reparatii__idAng__71D1E811
alter table ReparatiiAutovehicule
add constraint FK_RepAng
foreign key (idAngajat) references Angajati(idAngajat) on delete cascade;
```

```
delete a
from Angajati a
inner join Service s on s.idService=a.idService
where s.Oras='Bucuresti' and datediff(year,a.DataNastere,current_timestamp)>30

select * from Angajati
```

Results	Messages
(4 rows affected)	
(46 rows affected)	
Completion time: 2022-05-12T15:18:04.8931560+03:00	

162. Sa se stearga categoria anvelope.

```
delete from Categorie
where Categorie.Tip='Anvelope'

select * from Categorie
```

Results	Messages
(1 row affected)	
(11 rows affected)	
Completion time: 2022-05-12T15:21:05.7628422+03:00	

163. Stergeti toti angajatii cu prenumele de 'Andrei' din service-ul din Ploiesti.

```
alter table FunctiiAngajati
drop constraint FK__FunctiiAn__idAng__2B3F6F97
alter table FunctiiAngajati
add constraint FK_FctAng
foreign key (idAngajat) references
Angajati(idAngajat) on delete cascade;
```

Results	Messages
(0 rows affected)	
(50 rows affected)	
Completion time: 2022-05-12T15:30:31.6966341+03:00	

```
alter table ReparatiiAutovehicule
drop constraint FK__Reparatii__idAng__71D1E811
alter table ReparatiiAutovehicule
add constraint FK_RepAng
foreign key (idAngajat) references Angajati(idAngajat) on delete cascade;
```

```
delete a
from Angajati a
inner join Service s on s.idService=a.idService
where a.Prenume='Andrei' and s.Oras='Ploiesti'

select * from Angajati
```

164. Sa se stearga toti angajatii cu functia de 'Manager' din Ploiesti.

```
delete a
from Angajati a
inner join Service s on s.idService=a.idService
inner join FunctiiAngajati fa on fa.idAngajat=a.idAngajat
inner join Functii f on f.idFunctie=fa.idFunctie
inner join FunctiiAngajati fa1 on fa1.Sefi=fa1.Sefi
where f.Denumire='Manager' and s.Oras='Ploiesti'
```

Messages
(5 rows affected)

165. Sa se stearga categoriile de produse care au pretul mai mare de 100 lei.

```
alter table Piese
drop constraint FK__Piese__idCategor__3E52440B
alter table Piese
add constraint FK_Categ
foreign key (idCategorie) references Categoriae(idCategorie) on delete cascade;

alter table Reparatii
drop constraint FK__Reparatii__idPie__440B1D61
alter table Reparatii
add constraint FK_RepPie
foreign key (idPiesa) references Piese(idPiesa) on delete cascade;

alter table ReparatiiAutovehicule
drop constraint FK__Reparatii__idRep__70DDC3D8
alter table ReparatiiAutovehicule
add constraint FK_Reparatie
foreign key (idReparatie) references Reparatii(idReparatie) on delete cascade;

delete c
from Categoriae c
where c.Pret >100
```

Messages

(4 rows affected)

Results Messages

	idCategorie	Tip	Pret	Cantitate
1	1	Ulei	60.00	100
2	2	Suruburi	5.00	350
3	3	Vopsea	35.00	400
4	4	Radiator	100.00	200
5	5	Bujii	70.00	800
6	9	Becuri	10.00	985
7	10	Furtun	45.00	800
8	11	Filtre	100.00	652

166. Sa se stearga proprietarii ce detin autovehicule din categoria motocicleta.

```
delete p
```

(1 row affected)

```

from Proprietar p
inner join AutovehiculeProprietar as ap on ap.idProprietar=p.idProprietar
inner join Autovehicul a on ap.idAutovehicul=a.idAutovehicul
where a.Categorie='Motocicleta'

```

167. Sa se stearga categoriile de produse de tipul 'Vopsea'.

```

alter table Piese
drop constraint FK__Piese__idCategor__3E52440B
alter table Piese
add constraint FK_Categ
foreign key (idCategorie) references
Categorie(idCategorie) on delete cascade;

alter table Reparatii
drop constraint FK__Reparatii__idPie__440B1D61
alter table Reparatii
add constraint FK_ReparPie
foreign key (idPiesa) references Piese(idPiesa) on
delete cascade;

alter table ReparatiiAutovehicule
drop constraint FK__Reparatii__idRep__70DDC3D8
alter table ReparatiiAutovehicule
add constraint FK_Reparatie
foreign key (idReparatie) references
Reparatii(idReparatie) on delete cascade;

```

Results		Messages		
	idCategorie	Tip	Pret	Cantitate
1	1	Ulei	60.00	100
2	2	Suruburi	5.00	350
3	4	Radiator	100.00	200
4	5	Bujii	70.00	800
5	6	Antigel	180.00	417
6	7	Parbriz	830.00	500
7	8	Baterii	380.00	80
8	9	Becuri	10.00	985
9	10	Furtun	45.00	800
10	11	Filtre	100.00	652
11	12	Anvelope	290.00	100

```

delete c
from Categorie c
where c.Tip = 'Vopsea'

```

```
select * from Categorie
```

168. Stergeti toate masinile inregistrate in service-ul cu id=1.

```

delete ap
from AutovehiculeProprietar ap
inner join Programari p on ap.idProprietate=p.idProprietate
inner join Proprietar prop on ap.idProprietar=prop.idProprietar
inner join Autovehicul auto on ap.idAutovehicul=auto.idAutovehicul
where p.idService=1

```

(3 rows affected)

169. Sa se stearga service-urile ce contin in numarul de telefon '56' si orasul in care se afla.

```
delete from s
from Service s
where s.NrTelefon like '%56%'
```

(3 rows affected)

13. Centralizarea

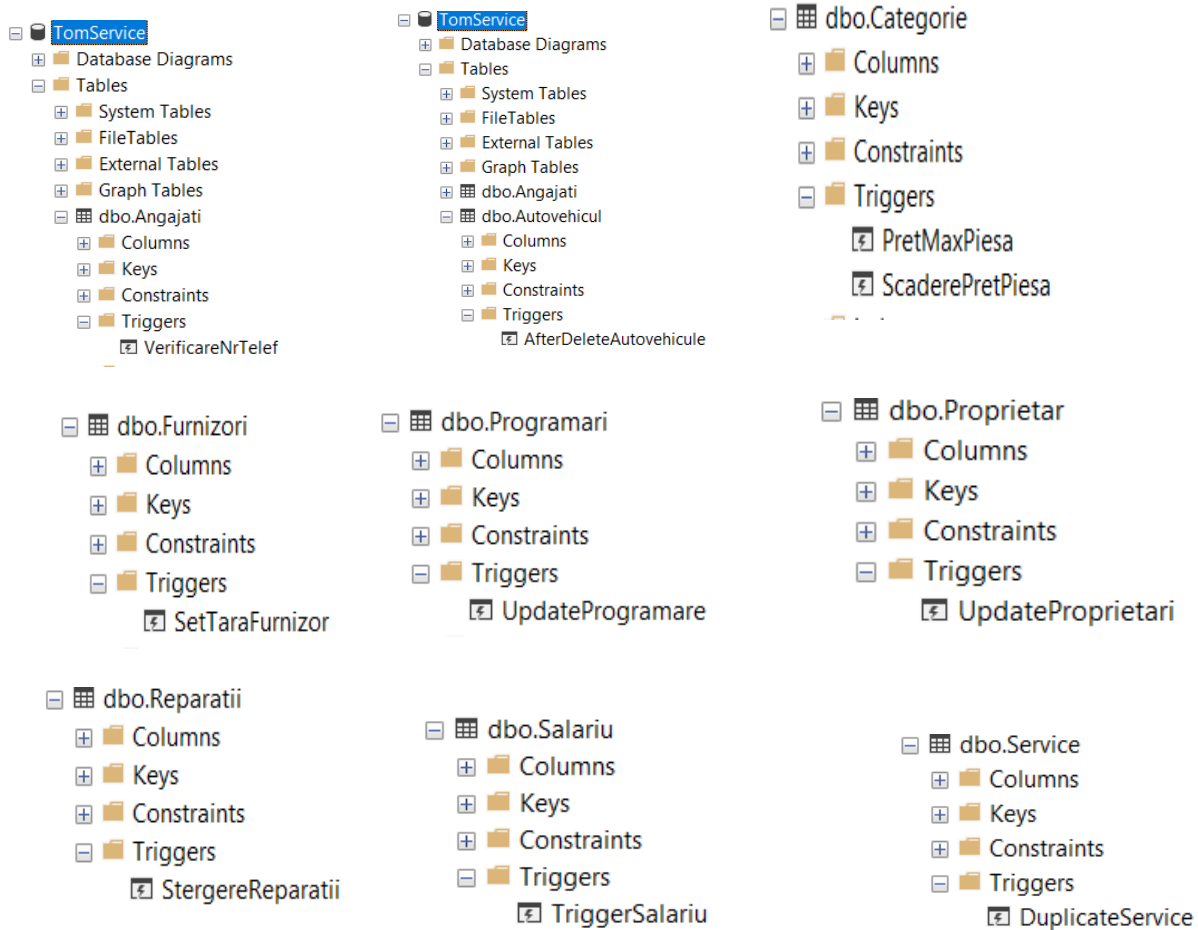
VIEWS:

- TomService
 - Database Diagrams
 - Tables
 - Views
 - System Views
 - dbo.CosturiReparatii
 - dbo.DetaliiAngajati
 - dbo.DetaliiPiese
 - dbo.MasiniBenzina
 - dbo.MasiniReparate

STORED PROCEDURES:

- TomService
 - Database Diagrams
 - Tables
 - Views
 - External Resources
 - Synonyms
 - Programmability
 - Stored Procedures
 - System Stored Procedures
 - dbo.AngajatiBucuresti
 - dbo.AngajatiManager
 - dbo.CrestereManopera
 - dbo.DetaliiReparatii
 - dbo.FurnizorPiese
 - dbo.IntervalProgramari
 - dbo.LunaNastere
 - dbo.MedieVarsta
 - dbo.ReducerePret
 - dbo.SalariuAng
 - dbo.VarstaAngajati

TRIGGERS:



Centralizarea cerintelor:

- CREARE BAZA DE DATE + TABELE: 17
- INSERT: 48
- SELECT: 30 + 10 SUBINTEROGARI SELECT
- VIEWs sau VEDERI: 5
- CTEs sau EXPRESII DE TABEL COMUNE: 7
- TRIGGERS sau DECLANSATORI: 10
- STORED PROCEDURES sau PROCEDURI STOCATE: 11
- TRANSACTIONS sau TRANZACTII: 10
- UPDATE: 15
- DELETE: 15

TOTAL: 178