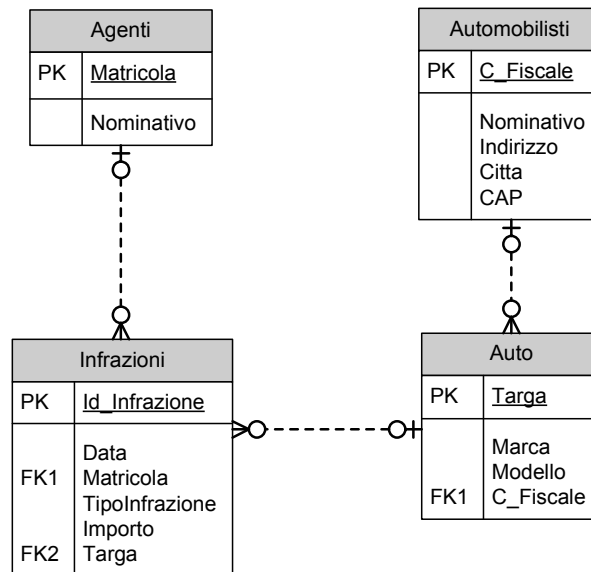


MULTE

Esercizio 2 capitolo A3



DBSCHEMA

```
CREATE TABLE Agenti(
    Matricola INTEGER,
    Nominativo VARCHAR(30),
    CONSTRAINT PrimaryKey PRIMARY KEY(Matricola)
);

CREATE TABLE Automobilisti(
    C_Fiscale VARCHAR(16),
    Nominativo VARCHAR(30),
    Indirizzo VARCHAR(25),
    Citta VARCHAR(20),
    CAP VARCHAR(5),
    CONSTRAINT PrimaryKey PRIMARY KEY(C_Fiscale)
);

CREATE TABLE Auto(
    Targa VARCHAR(10),
    Marca VARCHAR(15),
    Modello VARCHAR(15),
    C_Fiscale VARCHAR(16),
    CONSTRAINT PrimaryKey PRIMARY KEY(Targa)
    CONSTRAINT AutomobilistiAuto FOREIGN KEY(C_Fiscale)
        REFERENCES Automobilisti(C_Fiscale)
        ON DELETE CASCADE ON UPDATE CASCADE,
);

CREATE TABLE Infrazioni(
    Id_Infrazione VARCHAR(10),
    Data DATETIME,
    Matricola INTEGER,
    TipoInfrazione VARCHAR(25),
    Importo DOUBLE,
    Targa VARCHAR(10),
    CONSTRAINT PrimaryKey PRIMARY KEY(Id_Infrazione)
    CONSTRAINT AgentiInfrazioni FOREIGN KEY(Matricola)
```

```

REFERENCES Agenti(Matricola)
ON DELETE CASCADE ON UPDATE CASCADE,
CONSTRAINT AutoInfrazioni FOREIGN KEY(Targa)
REFERENCES Auto(Targa)
ON DELETE CASCADE ON UPDATE CASCADE,
);

```

QUERY SQL

a)

```

SELECT Data, Nominativo AS Agente, Auto.Targa, Modello, Marca
FROM Agenti, Infrazioni, Auto
WHERE Agenti.Matricola=Infrazioni.Matricola
      AND Infrazioni.Targa=Auto.Targa;

```

b)

```

SELECT Agenti.Matricola, Agenti.Nominativo, COUNT(*) AS N_Multe,
      SUM(Importo) AS Totale_importo
FROM Agenti, Infrazioni
WHERE Agenti.Matricola = Infrazioni.Matricola
GROUP BY Agenti.Matricola, Agenti.Nominativo;

```

c)

```

SELECT Automobilisti.C_Fiscale, Automobilisti.Nominativo, COUNT(*) AS N_Auto
FROM Automobilisti, Auto
WHERE Automobilisti.C_Fiscale = Auto.C_Fiscale
GROUP BY Automobilisti.C_Fiscale, Automobilisti.Nominativo;

```

d)

```

SELECT Infrazioni.TipoInfrazione AS Tipo_Infrazione, COUNT(*) AS Numero_multe
FROM Auto, Infrazioni
WHERE Auto.Targa = Infrazioni.Targa AND Auto.Marca= 'FIAT'
GROUP BY Infrazioni.TipoInfrazione, Auto.Marca;

```

e)

```

SELECT Automobilisti.Nominativo
FROM Automobilisti ,Auto ,Infrazioni
WHERE Auto.Targa = Infrazioni.Targa AND Automobilisti.C_Fiscale = Auto.C_Fiscale
AND Infrazioni.TipoInfrazione='Divieto di sosta'
GROUP BY Automobilisti.Nominativo
HAVING COUNT(*)>=3;

```

f)

Versione per Access

```

SELECT * INTO Velocita_Marzo
FROM Infrazioni
WHERE YEAR(Data)=2011 AND MONTH(Data)=3
AND Infrazioni.TipoInfrazione='Eccesso di velocità';

```

Versione per MySQL

```

CREATE TABLE Velocita_Marzo
SELECT *
FROM Infrazioni
WHERE YEAR(Data)=2011 AND MONTH(Data)=3
AND Infrazioni.TipoInfrazione='Eccesso di velocità';

```

