

```
/*Q1*/
```

```
CREATE TABLE Fournisseur
  (NumFour number(2) CONSTRAINT PK_NumFour PRIMARY KEY,
   NomFour varchar2(30) CONSTRAINT C_NomFour NOT NULL);

CREATE TABLE Article
  (NumArt number(2) CONSTRAINT PK_NumArt PRIMARY KEY,
   Libelle varchar2(30),
   NumFour number(2),
   CONSTRAINT FK_NumFourArt FOREIGN KEY(NumFour) REFERENCES Fournisseur);

CREATE TABLE Client
  (NumClt number(2) CONSTRAINT PK_NumClt PRIMARY KEY,
   NomClt varchar2(30) CONSTRAINT C_NomClt NOT NULL,
   Adresse varchar2(100),
   NumTel varchar2(20));

CREATE TABLE Commande
  (NumArt number(2),
   CONSTRAINT FK_NumArt FOREIGN KEY(NumArt) REFERENCES Article,
   NumClt number(2),
   CONSTRAINT FK_NumClt FOREIGN KEY(NumClt) REFERENCES Client,
   Quantite number(3) CONSTRAINT C_Quantite CHECK (Quantite > 0) NOT NULL);
```

```
/*Q2*/
```

```
INSERT INTO Fournisseur VALUES (1, 'Magouille');
INSERT INTO Fournisseur VALUES (2, 'Rigolo');
INSERT INTO Fournisseur VALUES (3, 'Sympa');
INSERT INTO Fournisseur VALUES (4, 'Chouette');

INSERT INTO Article VALUES (1, 'Pomme', 3);
INSERT INTO Article VALUES (2, 'Poire', 3);
INSERT INTO Article VALUES (3, 'Fraise', 1);
INSERT INTO Article VALUES (4, 'Prune', 2);

INSERT INTO Client VALUES (10, 'Picsou', 'Nice', null);
INSERT INTO Client VALUES (40, 'Dingo', 'Clermont-Ferrand', '04-73-42-58-12');
INSERT INTO Client VALUES (15, 'Picsou', 'Nantes', '02-40-12-15-65');
INSERT INTO Client VALUES (55, 'Mickey', 'Brest', '02-51-24-52-87');

INSERT INTO Commande VALUES (1, 15, 10);
INSERT INTO Commande VALUES (3, 40, 35);
INSERT INTO Commande VALUES (2, 40, 42);
INSERT INTO Commande VALUES (3, 15, 12);
INSERT INTO Commande VALUES (2, 55, 80);
INSERT INTO Commande VALUES (1, 10, 60);
```

```
/*Q3*/
```

```
/*1)*/
```

```
INSERT INTO Article VALUES (1, 'Pomme', 5);
```

```
/*
```

```
INSERT INTO Article VALUES (1, 'Pomme', 5)
```

```
*
```

```
ERROR at line 1:
```

```
ORA-00001: unique constraint (LAURENTV.PK_NUMART) violated
```

```
Une clé primaire est unique !
```

```
/*
```

```
/*2)*/
INSERT INTO Commande VALUES (1,55,0);
/*
INSERT INTO Commande VALUES (1,55,0)
*
ERROR at line 1:
ORA-02290: check constraint (LAURENTV.C_QUANTITE) violated
On viole la contrainte Quantite > 0
*/

/*3)*/
INSERT INTO Commande VALUES (1,55,NULL);
/*
INSERT INTO Commande VALUES (1,55,NULL)
*
ERROR at line 1:
ORA-01400: cannot insert NULL into ("LAURENTV"."COMMANDE"."QUANTITE")
On viole la contrainte Quantite NOT NULL
*/

/*4)*/
DELETE FROM Client
WHERE NumClt=15;
/*
WHERE NumClt=15; 2
DELETE FROM Client
*
ERROR at line 1:
ORA-02292: integrity constraint (LAURENTV.FK_NUMCLT) violated - child record
found
La contrainte d'inclusion avec la table Commande a été outrepassée
*/

/*5)*/
ALTER TABLE Commande DROP CONSTRAINT FK_NumClt;
ALTER TABLE Commande ADD CONSTRAINT FK_NumClt FOREIGN KEY(NumClt) REFERENCES Client ON
DELETE CASCADE;

DELETE FROM Client
WHERE NumClt=15;
/*ça marche !*/

/*6)*/
ALTER TABLE Fournisseur ADD NumTel varchar2(20);
UPDATE Fournisseur SET NumTel='02-23-15-98-87' WHERE NumFour=3;
/*ça marche bien aussi !*/

/*7)*/
UPDATE Fournisseur SET NomFour=LPAD(NomFour,6);
ALTER TABLE Fournisseur MODIFY NomFour varchar2(6);

/*8)*/
CREATE VIEW Livraison AS
    SELECT NomClt, Libelle, Quantite
    FROM Client, Article, Commande;

SELECT * FROM Livraison;
/* Affichage :
```

NOMCLT	LIBELLE	QUANTITE
Picsou	Pomme	35
Picsou	Poire	35
Picsou	Fraise	35
Picsou	Prune	35
Dingo	Pomme	35
Dingo	Poire	35
Dingo	Fraise	35
Dingo	Prune	35
Mickey	Pomme	35
Mickey	Poire	35
Mickey	Fraise	35
Mickey	Prune	35
Picsou	Pomme	42
Picsou	Poire	42
Picsou	Fraise	42
Picsou	Prune	42
Dingo	Pomme	42
Dingo	Poire	42
Dingo	Fraise	42
Dingo	Prune	42
Mickey	Pomme	42
Mickey	Poire	42
Mickey	Fraise	42
Mickey	Prune	42
Picsou	Pomme	80
Picsou	Poire	80
Picsou	Fraise	80
Picsou	Prune	80
Dingo	Pomme	80
Dingo	Poire	80
Dingo	Fraise	80
Dingo	Prune	80
Mickey	Pomme	80
Mickey	Poire	80
Mickey	Fraise	80
Mickey	Prune	80

/\*

/\*Q4\*/

**DROP VIEW** Livraison;**DROP TABLE** Commande;**DROP TABLE** Article;**DROP TABLE** Client;**DROP TABLE** Fournisseur;

/\*THE END\*/