CREATE DATABASE TP4\_GestionEmploye

USE TP4\_GestionEmploye

CREATE TABLE DEPT

(

DNO INT PRIMARY KEY,

DNOM VARCHAR(30),

DIR INT,

VILLE VARCHAR(30)

)

CREATE TABLE EMP

(

ENO INT PRIMARY KEY,

ENOM VARCHAR(30),

PROF VARCHAR(30),

DATEEMB SMALLDATETIME,

SAL REAL,

COMM REAL,

DNO INT FOREIGN KEY REFERENCES DEPT (DNO)

)

-- Remplissage de DEPT

INSERT INTO DEPT VALUES (1, 'Commercial', 30, 'New York')

INSERT INTO DEPT VALUES (2, 'Production', 20, 'Houston')

INSERT INTO DEPT VALUES (3, 'Développement', 40, 'Boston')

-- DELETED

INSERT INTO DEPT VALUES (4, 'Chawarma', 50, 'Maarif')

DELETE FROM DEPT

WHERE DNO = 4

--

-- Remplissage d'EMP

INSERT INTO EMP VALUES (10, 'Joe', 'Ingénieur', '1/10/93', 4000, 3000, 3)

INSERT INTO EMP VALUES (20, 'Jack', 'Technicien', '1/5/88', 3000, 2000, 2)

INSERT INTO EMP VALUES (30, 'Jim', 'Vendeur', '1/3/80', 5000, 5000, 1)

INSERT INTO EMP VALUES (40, 'Lucy', 'Ingénieur', '1/3/80', 5000, 5000, 3)

-- DELETED

INSERT INTO EMP VALUES (50, 'JACKMA', 'Technicien', '10/11/88', 3000, 2000, 2)

DELETE FROM EMP

WHERE ENO = 50

--

-- a. Interrogation d'une seule relation:

-- 1.

SELECT \* FROM DEPT

-- 2.

SELECT \* FROM EMP

-- 3.

SELECT ENOM, SAL FROM EMP

-- 4.

SELECT DISTINCT PROF FROM EMP

-- 5.

SELECT DATEEMB FROM EMP

WHERE PROF = 'Technicien'

-- b. Jointures

-- 1.

SELECT \* FROM EMP, DEPT WHERE EMP.DNO = DEPT.DNO

-- or

SELECT \* FROM EMP JOIN DEPT ON EMP.DNO = DEPT.DNO

-- 2.

SELECT ENOM, DNOM FROM EMP, DEPT WHERE EMP.DNO = DEPT.DNO

-- or

SELECT ENOM, DNOM FROM EMP JOIN DEPT ON EMP.DNO = DEPT.DNO

-- 3.

SELECT ENO FROM EMP JOIN DEPT ON EMP.DNO = DEPT.DNO

WHERE VILLE = 'Boston'

-- 4.

SELECT ENOM FROM EMP JOIN DEPT ON EMP.ENO = DEPT.DIR

WHERE DNO = 1 OR DNO = 3

-- or

SELECT ENOM FROM EMP JOIN DEPT ON EMP.ENO = DEPT.DIR

WHERE DNO IN (1, 3)

-- 5. (requête imbriquée)

SELECT ENOM FROM EMP WHERE DNO IN (SELECT DNO FROM EMP WHERE PROF = 'Ingénieur')

-- 6.

SELECT ENOM, SAL FROM EMP WHERE SAL > (SELECT MIN (SAL) FROM EMP WHERE PROF = 'Ingénieur')

-- 7.

SELECT ENOM, SAL FROM EMP WHERE SAL > (SELECT MAX (SAL) FROM EMP WHERE PROF = 'Ingénieur')

-- 8.

SELECT ENOM FROM EMP JOIN DEPT ON EMP.ENO = DEPT.DIR

-- or (using requête imbriqué)

SELECT ENOM FROM EMP WHERE ENO IN (SELECT DIR FROM DEPT)

-- 9.

SELECT E.ENOM AS 'Nom Employe', E.DATEEMB, D.ENOM AS 'Nom Directeur', D.DATEEMB FROM EMP E, EMP D WHERE E.DATEEMB <= D.DATEEMB AND E.DNO = D.DNO

AND D.ENO IN (SELECT DIR FROM DEPT)

-- 10.

SELECT DNO FROM DEPT WHERE DNO NOT IN (SELECT DNO FROM EMP)

-- 11.

SELECT E1.ENOM FROM EMP E1, EMP E2 WHERE E1.DNO = (SELECT DNO FROM DEPT WHERE DNOM = 'Commercial')

AND E2.DNO = (SELECT DNO FROM DEPT WHERE DNOM = 'Production') AND E1.DATEEMB = E2.DATEEMB

-- 12.

SELECT ENOM, DATEEMB FROM EMP WHERE DATEEMB < (SELECT MIN (DATEEMB) FROM EMP WHERE DNO = 1)

-- 13.

SELECT ENOM FROM EMP WHERE PROF = (SELECT PROF FROM EMP WHERE ENOM = 'Joe')

AND DNO = (SELECT DNO FROM EMP WHERE ENOM = 'Joe')