Création d'une base de donnée

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Création de la base

CREATE DATABASE agence_immo CHARACTER SET 'utf8';
USE agence_immo;

Création des tables

```
mysql> SHOW TABLES;
+-------------------+
| Tables_in_agence_immo |
+-------------------+
| Commune           |
| Individu          |
| Location          |
| Logement          |
| Loyer             |
+-------------------+
5 rows in set (0.00 sec)
```

CREATE TABLE IF NOT EXISTS Commune (
nb_habitant INT,
distance_agence SMALLINT,
nom_commune VARCHAR(50) NOT NULL,
cp CHAR(5),
id_commune SMALLINT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY
KEY
)
ENGINE=InnoDB;

CREATE TABLE IF NOT EXISTS Loyer (
id_loyer SMALLINT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY,
type_Logement VARCHAR(3),
mt_loyer SMALLINT,
frais SMALLINT
)
ENGINE=InnoDB;

CREATE TABLE IF NOT EXISTS Individu (
id_individu SMALLINT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY,
nom VARCHAR(55) NOT NULL,
prenom VARCHAR(55) NOT NULL,
date_naissance DATE,
num_tel1 CHAR(10),
num_tel2 CHAR(10)
)
ENGINE=InnoDB;

CREATE TABLE IF NOT EXISTS Logement (
superficie SMALLINT,
adresse VARCHAR(255),
id_commune SMALLINT UNSIGNED NOT NULL,
id_loyer SMALLINT UNSIGNED NOT NULL,
id_logement SMALLINT UNSIGNED NOT NULL AUTO_INCREMENT
PRIMARY KEY,
CONSTRAINT fk_id_commune FOREIGN KEY (id_commune)
REFERENCES Commune(id_commune),
CONSTRAINT fk_id_loyer FOREIGN KEY (id_loyer) REFERENCES
Loyer(id_loyer)
)
ENGINE=InnoDB;

CREATE TABLE IF NOT EXISTS Location (
date_debut DATE,
date_fin DATE,
id_logement SMALLINT UNSIGNED NOT NULL,
id_individu SMALLINT UNSIGNED NOT NULL,
id_location SMALLINT UNSIGNED NOT NULL AUTO_INCREMENT
PRIMARY KEY,
CONSTRAINT fk_id_logement FOREIGN KEY (id_logement)
REFERENCES Logement(id_logement),
CONSTRAINT fk_id_individu FOREIGN KEY (id_individu)
REFERENCES Individu(id_individu)
)
ENGINE=InnoDB;

Insérer 5 tuples dans la table COMMUNE et afficher

INSERT INTO Commune (nb_habitant, distance_agence, nom_commune,cp)
VALUES
(10000, 10, 'ville1',59111),
(22222, 22, 'ville2',59222),
(333,333,'ville3',59003),
(4410222,124,'ville4',59444),
(55, 5, 'ville5', 59557);

```
mysql> SELECT * FROM Commune;
+------------+-----------------+-------------+-------+------------+
| nb_habitant | distance_agence | nom_commune | cp    | id_commune |
+------------+-----------------+-------------+-------+------------+
|      10000 |              10 | ville1      | 59111 |          1 |
|      22222 |              22 | ville2      | 59222 |          2 |
|        333 |             333 | ville3      | 59003 |          3 |
|    4410222 |             124 | ville4      | 59444 |          4 |
|         55 |               5 | ville5      | 59557 |          5 |
+------------+-----------------+-------------+-------+------------+
5 rows in set (0.00 sec)
```

UPDATE Commune SET nom_commune = 'new_town1' WHERE cp = 59111;

DELETE FROM Commune WHERE nb_habitant<100;

```
mysql> SELECT * FROM Commune;
+------------+-----------------+-------------+-------+------------+
| nb_habitant | distance_agence | nom_commune | cp    | id_commune |
+------------+-----------------+-------------+-------+------------+
|      10000 |              10 | new_town1   | 59111 |          1 |
|      22222 |              22 | ville2      | 59222 |          2 |
|        333 |             333 | ville3      | 59003 |          3 |
|    4410222 |             124 | ville4      | 59444 |          4 |
+------------+-----------------+-------------+-------+------------+
4 rows in set (0.00 sec)
```

Insérer 5 tuples dans la table LOYER et afficher

INSERT INTO Loyer (type_Logement, mt_loyer, frais) VALUES
('T1',250,50),
('T2',350,60),
('T3',455,65),
('T4',800,140),
('LOF',1200,200);

```
mysql> SELECT * FROM Loyer;
+----------+---------------+----------+-------+
| id_loyer | type_Logement | mt_loyer | frais |
+----------+---------------+----------+-------+
|        6 | T1            |      250 |    50 |
|        7 | T2            |      350 |    60 |
|        8 | T3            |      455 |    65 |
|        9 | T4            |      800 |   140 |
|       10 | LOF           |     1200 |   200 |
+----------+---------------+----------+-------+
5 rows in set (0.00 sec)
```

UPDATE Loyer SET type_Logement = 'T5' WHERE frais = 200;
DELETE FROM Loyer WHERE mt_loyer <=250;

```
mysql> SELECT * FROM Loyer;
+----------+---------------+----------+-------+
| id_loyer | type_Logement | mt_loyer | frais |
+----------+---------------+----------+-------+
|        7 | T2            |      350 |    60 |
|        8 | T3            |      455 |    65 |
|        9 | T4            |      800 |   140 |
|       10 | T5            |     1200 |   200 |
+----------+---------------+----------+-------+
4 rows in set (0.00 sec)
```

Insérer 5 tuples dans la table INDIVIDU et afficher

INSERT INTO Individu(nom, prenom, date_naissance, num_tel1, num_tel2) VALUES
('dujardin', 'franck', 19580706,'0614251859',null),
('durand', 'jean', 19550602,'0614747578','0321458595'),
('dupont', 'jules',null ,'0606060606',null),
('henry', 'jeanette', 19600607,'0707070707','0320030203'),
('delattre', 'huguette', 19451102,null,null);

```
mysql> SELECT * FROM Individu;
+------------+----------+----------+----------------+------------+------------+
| id_individu | nom      | prenom   | date_naissance | num_tel1   | num_tel2   |
+------------+----------+----------+----------------+------------+------------+
|          1 | dujardin | franck   | 1958-07-06     | 0614251859 | NULL       |
|          2 | durand   | jean     | 1955-06-02     | 0614747578 | 0321458595 |
|          3 | dupont   | jules    | NULL           | 0606060606 | NULL       |
|          4 | henry    | jeanette | 1960-06-07     | 0707070707 | 0320030203 |
|          5 | delattre | huguette | 1945-11-02     | NULL       | NULL       |
+------------+----------+----------+----------------+------------+------------+
5 rows in set (0.00 sec)
```

UPDATE Individu SET num_tel2 = '0320506041' WHERE nom = 'delattre';
DELETE FROM Individu WHERE prenom='jean';

```
mysql> SELECT * FROM Individu;
+------------+----------+----------+----------------+------------+------------+
| id_individu | nom      | prenom   | date_naissance | num_tel1   | num_tel2   |
+------------+----------+----------+----------------+------------+------------+
|          1 | dujardin | franck   | 1958-07-06     | 0614251859 | NULL       |
|          3 | dupont   | jules    | NULL           | 0606060606 | NULL       |
|          4 | henry    | jeanette | 1960-06-07     | 0707070707 | 0320030203 |
|          5 | delattre | huguette | 1945-11-02     | NULL       | 0320506041 |
+------------+----------+----------+----------------+------------+------------+
4 rows in set (0.00 sec)
```

Insérer 5 tuples dans la table LOGEMENT et afficher

INSERT INTO Logement (superficie, adresse, id_commune, id_loyer) VALUES
(25, '1rue premiere',1,7),
(45, '2rue premiere',1,8),
(50, null,3,9),
(75, '4rue premiere',3,9),
(150, '5rue premiere',4,10);

```
mysql> SELECT * FROM Logement;
+------------+----------------+------------+----------+-------------+
| superficie | adresse        | id_commune | id_loyer | id_logement |
+------------+----------------+------------+----------+-------------+
|         25 | 1rue premiere  |          1 |        7 |          11 |
|         45 | 2rue premiere  |          1 |        8 |          12 |
|         50 | NULL           |          3 |        9 |          13 |
|         75 | 4rue premiere  |          3 |        9 |          14 |
|        150 | 5rue premiere  |          4 |       10 |          15 |
+------------+----------------+------------+----------+-------------+
5 rows in set (0.00 sec)
```

UPDATE Logement SET adresse = '30 rue solferino' WHERE adresse IS NULL;

DELETE FROM Logement WHERE id_commune=4;

```
mysql> SELECT * FROM Logement;
+------------+------------------+------------+----------+-------------+
| superficie | adresse          | id_commune | id_loyer | id_logement |
+------------+------------------+------------+----------+-------------+
|         25 | 1rue premiere    |          1 |        7 |          11 |
|         45 | 2rue premiere    |          1 |        8 |          12 |
|         50 | 30 rue solferino |          3 |        9 |          13 |
|         75 | 4rue premiere    |          3 |        9 |          14 |
+------------+------------------+------------+----------+-------------+
4 rows in set (0.00 sec)
```

Insérer 5 tuples dans la table LOCATION et afficher

INSERT INTO Location (date_debut, date_fin, id_logement, id_individu) VALUES
(20200101,20220101,11,1),
(20200222,20230101,12,3),
(20200219,20220101,13,4),
(20190101,20201001,14,4),
(20190101,20221207,14,4);

```
mysql> SELECT * FROM Location;
+------------+------------+-------------+-------------+-------------+
| date_debut | date_fin   | id_logement | id_individu | id_location |
+------------+------------+-------------+-------------+-------------+
| 2020-01-01 | 2022-01-01 |          11 |           1 |           1 |
| 2020-02-22 | 2023-01-01 |          12 |           3 |           2 |
| 2020-02-19 | 2022-01-01 |          13 |           4 |           3 |
| 2019-01-01 | 2020-10-01 |          14 |           4 |           4 |
| 2019-01-01 | 2022-12-07 |          14 |           4 |           5 |
+------------+------------+-------------+-------------+-------------+
5 rows in set (0.00 sec)
```

UPDATE Location SET id_logement = 13 WHERE id_individu = 3;
DELETE FROM Location WHERE id_logement=11;

```
mysql> SELECT * FROM Location;
+------------+------------+-------------+-------------+-------------+
| date_debut | date_fin   | id_logement | id_individu | id_location |
+------------+------------+-------------+-------------+-------------+
| 2020-02-22 | 2023-01-01 |          13 |           3 |           2 |
| 2020-02-19 | 2022-01-01 |          13 |           4 |           3 |
| 2019-01-01 | 2020-10-01 |          14 |           4 |           4 |
| 2019-01-01 | 2022-12-07 |          14 |           4 |           5 |
+------------+------------+-------------+-------------+-------------+
4 rows in set (0.00 sec)
```