Create owner table with ownerID as primary key

```
mysql> CREATE TABLE owner (
    -> first_name varchar(255),
    -> last_name varchar(255),
    -> address varchar(255),
    -> ownerID int PRIMARY KEY AUTO_INCREMENT );'
```

Alter pet table to have petID and ownerID

```
mysql> ALTER TABLE pet ADD COLUMN ownerID INT;

mysql> ALTER TABLE pet ADD COLUMN petID INT PRIMARY KEY AUTO_INCREMENT;
```

Insert data to owner table

```
mysql> INSERT INTO owner VALUES ( 'Harold','Lloyd','Someaddress 1',NULL);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO owner VALUES ( 'Gwen','Stefani','Someaddress 2',NULL);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO owner VALUES ( 'Benny','Hill','Someaddress 3',NULL);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO owner VALUES ( 'Diane','Keaton','Someaddress 4',NULL);
Query OK, 1 row affected (0.00 sec)
```

Delete duplicate data from pet and add a constraint that forces ownerID to exist to insert it

```
mysql> ALTER TABLE pet DROP COLUMN owner;
Query OK, 0 rows affected (0.02 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> ALTER TABLE pet ADD CONSTRAINT FOREIGN KEY(ownerID) REFERENCES
    -> owner(ownerID)
    -> ;
Query OK, 8 rows affected (0.06 sec)
Records: 8  Duplicates: 0  Warnings: 0
```

Update pet table for them to have ownerID example

```
9 rows in set (0.00 sec)

mysql> UPDATE pet SET ownerID=3 WHERE name='Chirpy' OR name='Whistler';
Query OK, 2 rows affected (0.00 sec)
Rows matched: 2  Changed: 2  Warnings: 0

mysql> UPDATE pet SET ownerID=4 WHERE name='Slim';
Query OK, 2 rows affected (0.00 sec)
Rows matched: 2  Changed: 2  Warnings: 0
```

Now you can join tables using ownerID example

```
mysql> SELECT owner.first_name, pet.name FROM owner INNER JOIN pet ON owner.ownerID = pet.ownerID;
+------------+----------+
| first_name | name     |
+------------+----------+
| Harold     | Fluffy   |
| Harold     | Buffy    |
| Gwen       | Claws    |
| Gwen       | Chirpy   |
| Gwen       | Whistler |
| Benny      | Fang     |
| Benny      | Slim     |
| Diane      | Bowser   |
+------------+----------+
8 rows in set (0.00 sec)
```

Descriptions of both tables

```
mysql> DESC pet;
+---------+-------------+------+-----+---------+----------------+
| Field   | Type        | Null | Key | Default | Extra          |
+---------+-------------+------+-----+---------+----------------+
| name    | varchar(20) | YES  |     | NULL    |                |
| species | varchar(20) | YES  |     | NULL    |                |
| sex     | char(1)     | YES  |     | NULL    |                |
| birth   | date        | YES  |     | NULL    |                |
| death   | date        | YES  |     | NULL    |                |
| petID   | int         | NO   | PRI | NULL    | auto_increment |
| ownerID | int         | YES  | MUL | NULL    |                |
+---------+-------------+------+-----+---------+----------------+
7 rows in set (0.00 sec)

mysql> DESC owner;
+------------+--------------+------+-----+---------+----------------+
| Field      | Type         | Null | Key | Default | Extra          |
+------------+--------------+------+-----+---------+----------------+
| first_name | varchar(255) | YES  |     | NULL    |                |
| last_name  | varchar(255) | YES  |     | NULL    |                |
| address    | varchar(255) | YES  |     | NULL    |                |
| ownerID    | int          | NO   | PRI | NULL    | auto_increment |
+------------+--------------+------+-----+---------+----------------+
4 rows in set (0.00 sec)
```