

Viikko 3 teht 6. Pet ja Owner.

Luodaan owner taulu test_db databaseen.

```
mysql> create table owner (first_name varchar(255), last_name varchar(255), address varchar(255), ownerID int PRIMARY KEY AUTO_INCREMENT);
Query OK, 0 rows affected (0.02 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)
```

Muokataan pet taulua.

```
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 COLUMN petID int PRIMARY KEY AUTO_INCREMENT;
Query OK, 0 rows affected (0.06 sec)
Records: 0 Duplicates: 0 Warnings: 0

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

```
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)
```

Lisätään omistajien tiedot

```
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 (0.01 sec)

mysql> insert into owner values ('Diane','Keaton','Someaddress 4',NULL);
Query OK, 1 row affected (0.00 sec)
```

Yhdistettiin lemmikien tiedot omistajiin

```
mysql> update pet set ownerID=1 where name = 'Fluffy';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> update pet set ownerID=2 where name = 'Claws';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> update pet set ownerID=1 where name = 'Buffy';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> update pet set ownerID=4 where name = 'Fang';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> update pet set ownerID=3 where name = 'Bowser';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> update pet set ownerID=2 where name = 'Chirpy' or name='Whistler';
Query OK, 2 rows affected (0.01 sec)
Rows matched: 2  Changed: 2  Warnings: 0

mysql> update pet set ownerID=3 where name = 'Slim';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> select * from owner join pet on owner.ownerID = pet.ownerID;
```

first_name	last_name	address	ownerID	name	species	sex	birth	death	petID	ownerID
Harold	Lloyd	Someaddress 1	1	Fluffy	cat	f	1993-02-04	NULL	1	1
Harold	Lloyd	Someaddress 1	1	Buffy	dog	f	1989-05-13	NULL	3	1
Gwen	Stefani	Someaddress 2	2	Claws	cat	m	1994-03-17	NULL	2	2
Gwen	Stefani	Someaddress 2	2	Chirpy	bird	f	1998-09-11	2000-09-15	6	2
Gwen	Stefani	Someaddress 2	2	Whistler	bird	NULL	1997-12-09	NULL	7	2
Benny	Hill	Someaddress 3	3	Bowser	dog	m	1989-08-31	1995-07-29	5	3
Benny	Hill	Someaddress 3	3	Slim	snake	m	1996-04-29	NULL	8	3
Diane	Keaton	Someaddress 4	4	Fang	dog	m	1990-08-27	NULL	4	4

8 rows in set (0.00 sec)

```
mysql> SELECT first_name,name FROM pet JOIN owner on pet.ownerID = owner.ownerID;
```

first_name	name
Harold	Fluffy
Harold	Buffy
Gwen	Claws
Gwen	Chirpy
Gwen	Whistler
Benny	Bowser
Benny	Slim
Diane	Fang

8 rows in set (0.00 sec)