Nama   : Hasim Budi Jatmiko

Kelas   : TI 17 D2

NIM   : 311710448

PRAKTIKUM 4

- Buat sebuah tabel pet dan isi datanya seperti berikut:

Name	Owner	Species	Sex	Birth	Death
Puffball	Diane	Hamster	F	1999-03-03	Null
Claws	Gwen	Cat	M	1994-03-17	Null
Fluffy	Harold	Cat	F	1993-02-04	Null
Buffy	Harold	Dog	F	1989-05-13	Null
Fang	Benny	Dog	M	1990-08-27	Null
Bowser	Diane	Dog	M	1989-08-31	1995-07-29
Chirpy	Gwen	Bird	F	1998-09-11	Null
Whistler	Gwen	Bird	Null	1997-12-09	Null
Slim	Benny	Snake	M	1996-04-29	Null

Langkah – langkah

1. Buat tabel seperti diatas
   a. Setelah login ke mysql dan menggunakan database yang telah dibuat
   b. Buat tabel baru dengan nama pet menggunakan perintah **create table pet (name varchar(10), owner varchar(10), species varchar(10), sex char(1), birth date, death date);**

```
MariaDB [latihan01]> create table pet (
    -> name varchar(10),
    -> owner varchar(10),
    -> species varchar(10),
    -> sex char(1),
    -> birth date,
    -> death date);
Query OK, 0 rows affected (0.66 sec)
```

2. Setelah itu masukkan data kedalam tabel

```
MariaDB [latihan01]> insert into pet values
    -> ("Puffball", "Diane", "Hamster", "f", "1999-03-03", null),
    -> ("Claws", "Gwen", "Cat", "m", "1994-03-17", null),
    -> ("Fluffy", "Harold", "Cat", "f", "1993-02-04", null),
    -> ("Buffy", "Harold", "Dog", "f", "1989-05-13", null),
    -> ("Fang", "Benny", "Dog", "m", "1990-08-27", null),
    -> ("Bowser", "Diane", "Dog", "m", "1989-08-31", "1995-07-29"),
    -> ("Chirpy", "Gwen", "Bird", "f", "1998-09-11", null),
    -> ("Whistler", "Gwen", "Bird", null, "1997-12-09", null),
    -> ("Slim", "Benny", "Snake", "m", "1996-04-29", null);
Query OK, 9 rows affected (4.97 sec)
Records: 9  Duplicates: 0  Warnings: 0
```

3. Tampilkan jumlah hewan yang dimiliki setiap owner menggunakan perintah **select owner, count(name) as jumlah_hewan_peliharaan from pet group by owner;**

```
MariaDB [latihan01]> select owner, count(name) as jumlah_hewan_peliharaan from pet group by owner;
+--------+-------------------------+
| owner  | jumlah_hewan_peliharaan |
+--------+-------------------------+
| Benny  |                       2 |
| Diane  |                       2 |
| Gwen   |                       3 |
| Harold |                       2 |
+--------+-------------------------+
4 rows in set (0.55 sec)
```

4. Tampilkan jumlah hewan berdasarkan spesies menggunakan perintah **select species, count(species) as jumlah from pet group by species;**

```
MariaDB [latihan01]> select species, count(species) as jumlah from pet group by species;
+---------+--------+
| species | jumlah |
+---------+--------+
| Bird    |      2 |
| Cat     |      2 |
| Dog     |      3 |
| Hamster |      1 |
| Snake   |      1 |
+---------+--------+
5 rows in set (0.00 sec)
```

5. Tampilkan jumlah hewan berdasarkan jenis kelamin menggunakan perintah **select sex, count(sex) as jumlah from pet group by sex;**

```
MariaDB [latihan01]> select sex, count(sex) as jumlah from pet group by sex;
+------+--------+
| sex  | jumlah |
+------+--------+
| NULL |      0 |
| f    |      4 |
| m    |      4 |
+------+--------+
3 rows in set (0.00 sec)
```

6. Tampilkan jumlah hewan berdasarkan spesies dan jenis kelamin menggunakan perintah **select species, sex, count(sex) as jumlah from pet group by species, sex;**

```
MariaDB [latihan01]> select species, sex, count(sex) as jumlah from pet group by species, sex;
+---------+------+--------+
| species | sex  | jumlah |
+---------+------+--------+
| Bird    | NULL |      0 |
| Bird    | f    |      1 |
| Cat     | f    |      1 |
| Cat     | m    |      1 |
| Dog     | f    |      1 |
| Dog     | m    |      2 |
| Hamster | f    |      1 |
| Snake   | m    |      1 |
+---------+------+--------+
8 rows in set (0.00 sec)
```

```
MariaDB [latihan01]> select species, sex, count(sex) as jumlah from pet group by species, sex having pet.species = "Cat" or pet.species = "Dog";
+---------+-----+--------+
| species | sex | jumlah |
+---------+-----+--------+
| Cat     | f   |      1 |
| Cat     | m   |      1 |
| Dog     | f   |      1 |
| Dog     | m   |      2 |
+---------+-----+--------+
4 rows in set (1.02 sec)
```

7. Tampilkan jumlah hewan berdasarkan spesies (cat dan dog saja) dan jenis kelamin menggunakan perintah **select species, sex, count(sex) as jumlah from pet group by species, sex having pet.species = "Cat" or pet.species = "Dog";**

8. Tampilkan jumlah hewan berdasarkan jenis kelamin yang diketahui saja **select species, count(sex) as jumlah from pet group by species;**

```
MariaDB [latihan01]> select species, count(sex) as jumlah from pet group by species;
+---------+--------+
| species | jumlah |
+---------+--------+
| Bird    |      1 |
| Cat     |      2 |
| Dog     |      3 |
| Hamster |      1 |
| Snake   |      1 |
+---------+--------+
5 rows in set (0.00 sec)
```

KESIMPULAN

MySQL menyediakan beberapa fungsi untuk pengelompokan data, dan pengecekan data seperti :

- GROUP BY   : Untuk mengelompokkan data berdasarkan field
- HAVING   : Untuk mengecek data apakah memiliki nilai tertentu