

TEKNOLOGI BASIS DATA PRATIUM MYSQL PADA CMD

Database Menggunakan Mysql Membuat data Jumlah hewan

DI Ajukan untuk memenuhi salah satu tugas Pratikum mata Kuliah Basis Data
Disusun Oleh :



Nama : R Iwan Darmawan
Nim : 311720879
Kelas : TI.17.D2

Program Studi Teknik Informatika
Sekolah Tinggi Teknik
Pelita Bangsa
2019

TUGAS LANJUTAN PRATIUM 4

- Buat sebuah tabel pet dan isi datanya seperti berikut:

Name	Owner	Species	Sex	Birth	Date
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	nul	1997-09-12	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

SHOW DATABASES;

```
MariaDB [(none)]> show databases;
+-----+
| Database |
+-----+
| information_schema |
| latihan01          |
| latihan04          |
| latihan3           |
| latihan4           |
| mysql             |
| performance_schema |
| phpmyadmin        |
| test              |
+-----+
9 rows in set (0.04 sec)
```

CREATE DATABASES;

```
MariaDB [(none)]> create database latihan4;
Query OK, 1 row affected (0.00 sec)
```

USE latihan4;

```
MariaDB [(none)]> use latihan4;
Database changed
```

2. 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 [latihan4]> create table pet (  
  -> Name varchar(15),  
  -> Owner varchar(10),  
  -> Species varchar(10),  
  -> Sex char(2),  
  -> Birth date,  
  -> Death date);  
Query OK, 0 rows affected (0.28 sec)
```

3. Setelah itu cek desc pet

```
MariaDB [latihan4]> desc pet;  
+-----+-----+-----+-----+-----+-----+  
| Field | Type      | Null | Key | Default | Extra |  
+-----+-----+-----+-----+-----+-----+  
| Name  | varchar(15) | YES  |     | NULL    |       |  
| Owner | varchar(10) | YES  |     | NULL    |       |  
| Species | varchar(10) | YES  |     | NULL    |       |  
| Sex   | char(2)    | YES  |     | NULL    |       |  
| Birth | date       | YES  |     | NULL    |       |  
| Death | date       | YES  |     | NULL    |       |  
+-----+-----+-----+-----+-----+-----+  
6 rows in set (0.04 sec)
```

4. Setelah itu masukkan data kedalam tabel

```
MariaDB [latihan4]> insert into pet values  
  -> ("puffball", "diane", "hamster", "f", "1999-03-03", null),  
  -> ("claws", "gwen", "cat", "m", "1994-03-27", null),  
  -> ("buffy", "harold", "dog", "f", "1989-05-13", null),  
  -> ("fang", "benny", "dog", "m", "1990-05-27", 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, 8 rows affected (0.18 sec)  
Records: 8 Duplicates: 0 Warnings: 0
```

5. Setelah itu kita lihat data didalam table, caranya select *from pet;

```
MariaDB [latihan4]> select *from pet;  
+-----+-----+-----+-----+-----+-----+  
| Name    | Owner  | Species | Sex  | Birth      | Death      |  
+-----+-----+-----+-----+-----+-----+  
| puffball | diane  | hamster | f    | 1999-03-03 | NULL       |  
| claws    | gwen   | cat     | m    | 1994-03-27 | NULL       |  
| buffy    | harold | dog     | f    | 1989-05-13 | NULL       |  
| fang     | benny  | dog     | m    | 1990-05-27 | 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       |  
+-----+-----+-----+-----+-----+-----+  
8 rows in set (0.00 sec)
```

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

```
MariaDB [latihan04]> select Owner,count(Name)as jumlah_hewan_peliharaan from pet group by Owner;
+-----+-----+
| Owner | jumlah_hewan_peliharaan |
+-----+-----+
| benny | 2 |
| daine | 1 |
| diane | 1 |
| gwen  | 3 |
| harold | 2 |
+-----+-----+
5 rows in set (0.00 sec)
```

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

```
MariaDB [latihan04]> 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)
```

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

```
MariaDB [latihan04]> 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)
```

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

```
MariaDB [latihan04]> 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 |
+-----+-----+-----+
```

10. 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";`

```
MariaDB [latihan04]> 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 (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