TEKNOLOGI BASIS DATA

Praktikum MySQL pada CMD

Tugas Praktikum 4 Basis Data

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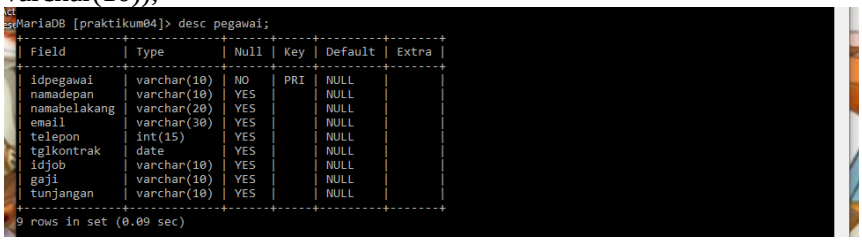
A. Membuat tabel

create table pegawai(idpegawai varchar(10), namadepan varchar(10), namabelakang varchar(20), email varchar(30), telepon int(15), tglkontrak date, idjob varchar(10), gaji vaechar(10), tunjangan varchar(10));



```
MariaDB [praktikum04]> desc pegawai;
+-------------+------------+------+-----+---------+-------+
| Field       | Type       | Null | Key | Default | Extra |
+-------------+------------+------+-----+---------+-------+
| idpegawai   | varchar(10) | NO   | PRI | NULL    |       |
| namadepan   | varchar(10) | YES  |     | NULL    |       |
| namabelakang | varchar(20) | YES |     | NULL    |       |
| email       | varchar(30) | YES  |     | NULL    |       |
| telepon     | int(15)    | YES  |     | NULL    |       |
| tglkontrak  | date       | YES  |     | NULL    |       |
| idjob       | varchar(10) | YES  |     | NULL    |       |
| gaji        | varchar(10) | YES  |     | NULL    |       |
| tunjangan   | varchar(10) | YES  |     | NULL    |       |
+-------------+------------+------+-----+---------+-------+
9 rows in set (0.09 sec)
```

B. Menginput data

Insert into pegawai

(id pegawai, namadepan, namabelakang, email, telepon, tglkontrak, idjob, gaji, tunjangan)

Values

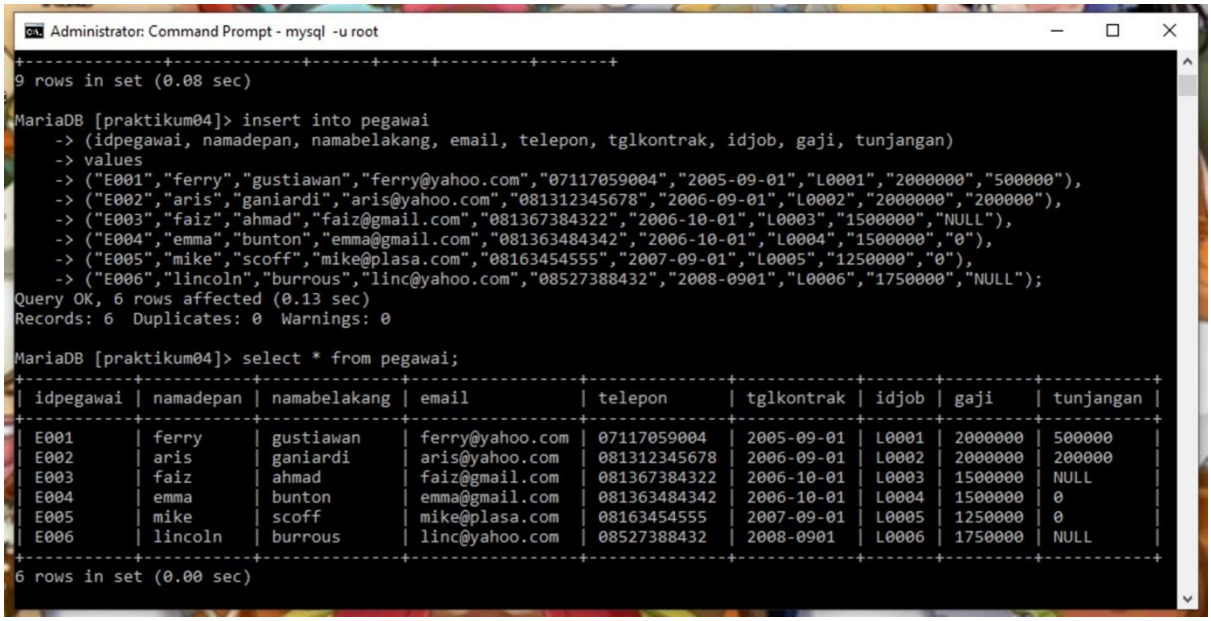
(“E001”,”ferry”,”gustiawan”,”ferry@yahoo.com”,”07117059004”,”2005-09-01”,”L0001”,”2000000”,”500000”),

(“E002”,”aris”,”ganiardi”,”aris@yahoo.com”,”081312345678”,”2006-09-01”,”L0002”,”2000000”,”200000”),

(“E003”,”faiz”,”ahmad”,”faiz@gmail.com”,”081367384322”,”2006-10-01”,”L0003”,”1500000”,”NULL”),

(‘E004”,”emma”,”bunton”,”emma@gmail.com”,”081363484342”,”2006-10-01”,”L0004”,”150000”,”NULL”),

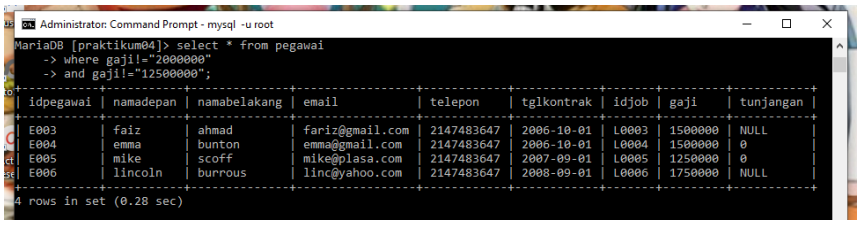
(“E005”,”mike”,”scoff”,mike@plasa.com,”



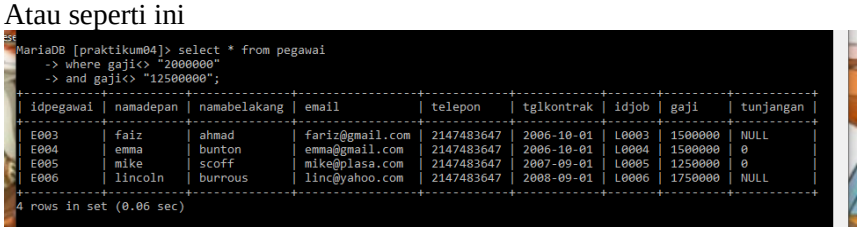
```
Administrator: Command Prompt - mysql -u root
+--------------+------------+------+-----+---------+-------+
9 rows in set (0.08 sec)

MariaDB [praktikum04]> insert into pegawai
    -> (idpegawai, namadepan, namabelakang, email, telepon, tglkontrak, idjob, gaji, tunjangan)
    -> values
    -> ("E001","ferry","gustiawan","ferry@yahoo.com","07117059004","2005-09-01","L0001","2000000","500000"),
    -> ("E002","aris","ganiardi","aris@yahoo.com","081312345678","2006-09-01","L0002","2000000","200000"),
    -> ("E003","faiz","ahmad","faiz@gmail.com","081367384322","2006-10-01","L0003","1500000","NULL"),
    -> ("E004","emma","bunton","emma@gmail.com","081363484342","2006-10-01","L0004","1500000","0"),
    -> ("E005","mike","scoff","mike@plasa.com","08163454555","2007-09-01","L0005","1250000","0"),
    -> ("E006","lincoln","burrous","linc@yahoo.com","08527388432","2008-0901","L0006","1750000","NULL");
Query OK, 6 rows affected (0.13 sec)
Records: 6  Duplicates: 0  Warnings: 0

MariaDB [praktikum04]> select * from pegawai;
+-----------+-----------+--------------+-----------------+-------------+------------+-------+---------+-----------+
| idpegawai | namadepan | namabelakang | email           | telepon     | tglkontrak | idjob | gaji    | tunjangan |
+-----------+-----------+--------------+-----------------+-------------+------------+-------+---------+-----------+
| E001      | ferry     | gustiawan    | ferry@yahoo.com | 07117059004 | 2005-09-01 | L0001 | 2000000 | 500000    |
| E002      | aris      | ganiardi     | aris@yahoo.com  | 081312345678 | 2006-09-01 | L0002 | 2000000 | 200000    |
| E003      | faiz      | ahmad        | faiz@gmail.com  | 081367384322 | 2006-10-01 | L0003 | 1500000 | NULL      |
| E004      | emma      | bunton       | emma@gmail.com  | 081363484342 | 2006-10-01 | L0004 | 1500000 | 0         |
| E005      | mike      | scoff        | mike@plasa.com  | 08163454555 | 2007-09-01 | L0005 | 1250000 | 0         |
| E006      | lincoln   | burrous      | linc@yahoo.com  | 08527388432 | 2008-0901  | L0006 | 1750000 | NULL      |
+-----------+-----------+--------------+-----------------+-------------+------------+-------+---------+-----------+
6 rows in set (0.00 sec)
```

1. Tampilkan pegawai yang gajinya bukan 2000000 dan 1250000

```
Select * from pegawai
Where gaji !=”2000000”
And gaji !=”1250000”;
Atau
Select * from pegawai
Where gaji<>”2000000”
And gaji<>”1250000”;
```



Atau seperti ini

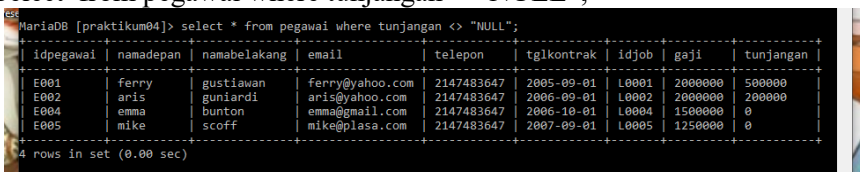


2. Tampilkan pegawai yang tunjangannya null

   Select * from pegawai where tunjangan=”NULL”;

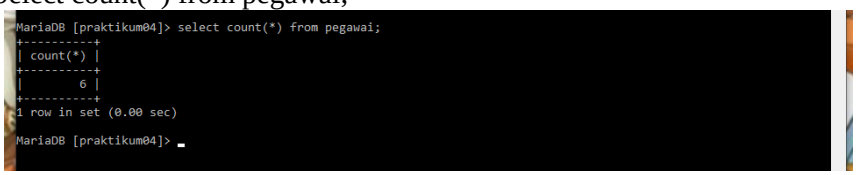
3. Tampilkan pegawai yang tunnjangannya tidak null

   Select*from pegawai where tunjangan<>”NULL”;



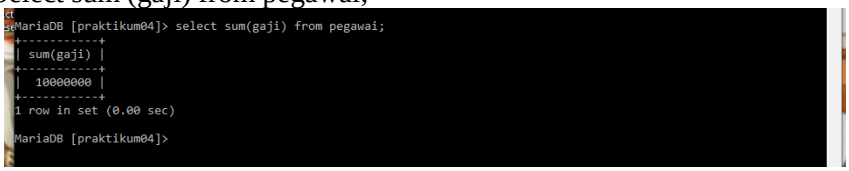
4. Tampilkan/hitung jumlah baris/record tabel pegawai

   Select count(*) from pegawai;



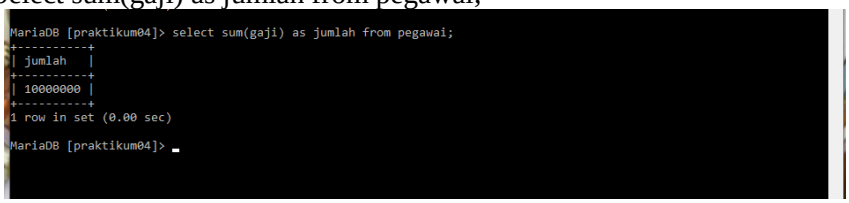
5. Tampilkan/hitung jumlah total gaji di tabel pegawai

   Select sum (gaji) from pegawai;



Atau bisa juga menggunakan

   Select sum(gaji) as jumlah from pegawai;



6. Tampilkan atau hitung rata – rata gaji

   Select avg (gaji) from pegawai;

```
MariaDB [praktikum04]> select avg (gaji) from pegawai;
+--------------------+
| avg (gaji)         |
+--------------------+
| 1666666.6666666667 |
+--------------------+
1 row in set (0.00 sec)

MariaDB [praktikum04]>
```

Atau

Select avg (gaji) as rerata from pegawai;

```
MariaDB [praktikum04]> select avg (gaji) as rerata from pegawai;
+--------------------+
| rerata             |
+--------------------+
| 1666666.6666666667 |
+--------------------+
1 row in set (0.00 sec)

MariaDB [praktikum04]>
```

7. Tampilkan gaji terkecil

Select min(gaji) from pegawai;

```
MariaDB [praktikum04]> select min(gaji) from pegawai;
+-----------+
| min(gaji) |
+-----------+
| 1250000   |
+-----------+
1 row in set (0.00 sec)

MariaDB [praktikum04]>
```

Atau

Select min(gaji) as termurah from pegawai;

```
MariaDB [praktikum04]> select min(gaji) as termurah from pegawai;
+----------+
| termurah |
+----------+
| 1250000  |
+----------+
1 row in set (0.00 sec)

MariaDB [praktikum04]>
```

8. Tampilkan gaji terbesar

Select max(gaji) from pegawai;

```
MariaDB [praktikum04]> select max(gaji) from pegawai;
+-----------+
| max(gaji) |
+-----------+
| 2000000   |
+-----------+
1 row in set (0.00 sec)

MariaDB [praktikum04]>
```

Atau

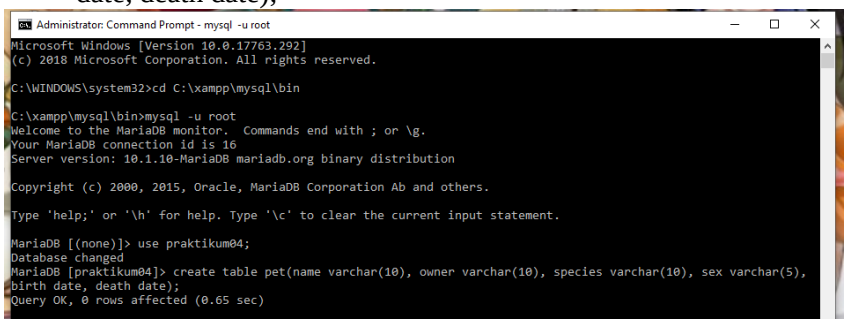
Select max(gaji) as termahal from pegawai;

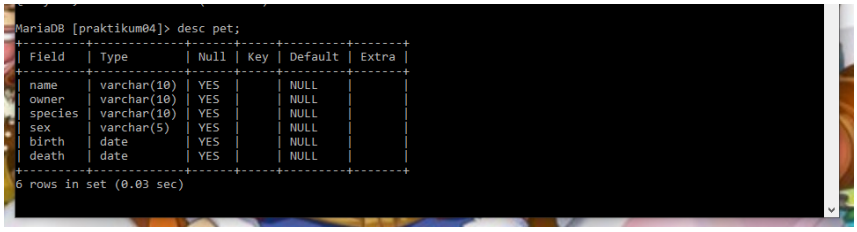
```
MariaDB [praktikum04]> select max(gaji) as termahal from pegawai;
+----------+
| termahal |
+----------+
| 2000000  |
+----------+
1 row in set (0.00 sec)

MariaDB [praktikum04]>
```

Tabel pet

A. Membuat tabel

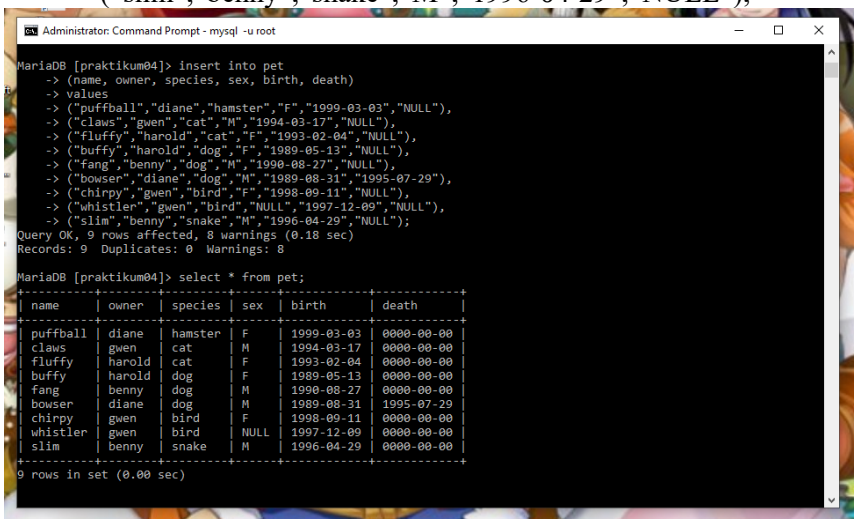
Create table pet(name varchar(10), owner varchar(10), species varchar(10), sex varchar(5), birth date, death date);





B. Menginput datanya

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”),



1. Tampilkan jumlah hewan yang dimiliki setiap owner

   Select owner, count(name) as total from pet group by owner;

```
MariaDB [praktikum04]> select owner, count(name) as total from pet group by owner;
+--------+-------+
| owner  | total |
+--------+-------+
| benny  |     2 |
| diane  |     2 |
| gwen   |     3 |
| harold |     2 |
+--------+-------+
4 rows in set (0.00 sec)
```

2. Tampilkan jumlah hewan berdasarkan spesies
   Select species, count(name) as total from pet group by species;

```
MariaDB [praktikum04]> select species, count(name) as total from pet group by species;
+---------+-------+
| species | total |
+---------+-------+
| bird    |     2 |
| cat     |     2 |
| dog     |     3 |
| hamster |     1 |
| snake   |     1 |
+---------+-------+
5 rows in set (0.00 sec)

MariaDB [praktikum04]>
```

3. Tampilkan jumlah hewan berdasarkan jenis kelamin
   Select sex, count(name) as total from pet group by sex;

```
MariaDB [praktikum04]> select sex, count(name) as total from pet group by sex;
+------+-------+
| sex  | total |
+------+-------+
| F    |     4 |
| M    |     4 |
| NULL |     1 |
+------+-------+
3 rows in set (0.00 sec)

MariaDB [praktikum04]>
```

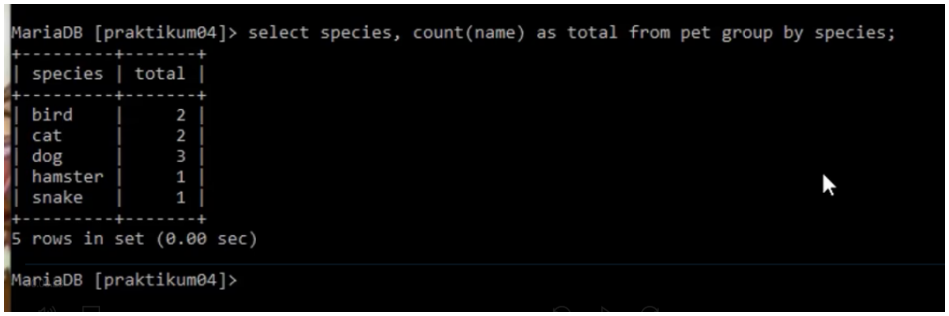
4. Tampilkan jumlah hewan berdasarkan spesies dan jenis kelamin
   Select species, sex, count(name) as total from pet group by species, sex;

```
MariaDB [praktikum04]> select species, sex, count(name) as total from pet group by species, sex;
+---------+------+-------+
| species | sex  | total |
+---------+------+-------+
| bird    | F    |     1 |
| bird    | NULL |     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)
```

5. Tampilkan jumlah hewan berdasarkan spesies (cat dan dog saja) dan jenis kelamin
   Select species, sex, count(name) as total from pet group by species, sex having pet.species=”cat” or pet.species=”dog”;

```
MariaDB [praktikum04]> select species, sex, count(name) as total from pet group by species, sex having pet.species=
"cat" or pet.species="dog";
+---------+------+-------+
| species | sex  | total |
+---------+------+-------+
| cat     | F    |     1 |
| cat     | M    |     1 |
| dog     | F    |     1 |
| dog     | M    |     2 |
+---------+------+-------+
4 rows in set (0.00 sec)
```

6. Tampilkan jumlah hewan berdasarkan jenis kelamin yang diketahui saja
   Select species, count(name) as total from pet group by species;


MariaDB [praktikum04]> select species, count(name) as total from pet group by species;
species	total
bird	2
cat	2
dog	3
hamster	1
snake	1
5 rows in set (0.00 sec)
MariaDB [praktikum04]>