

Object-Oriented Programming with Java- MySQL

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Materi Diskusi

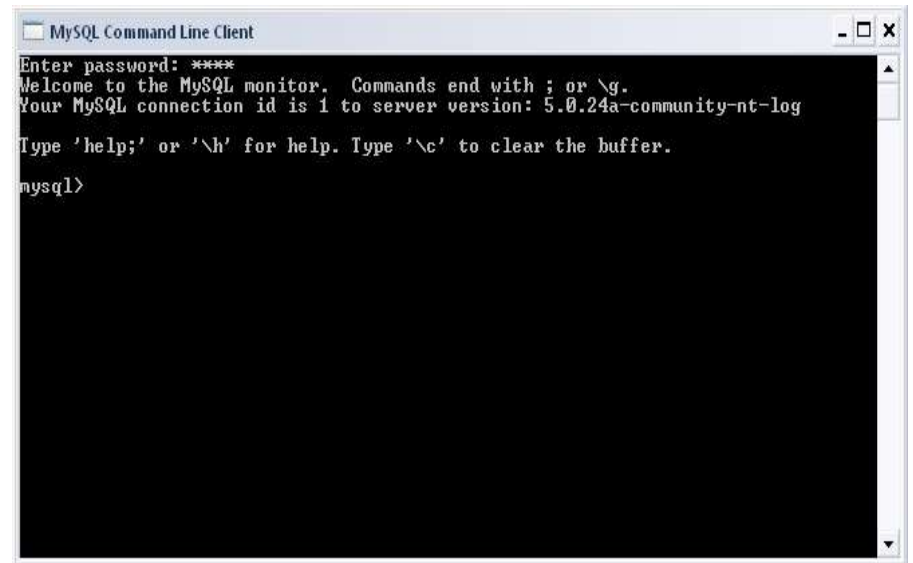
- Sekilas Mysql
Pengantar mysql, perintah dasar sql (create, insert, update, delete, select, alter)
- Koneksi Java dengan Mysql
Driver ODBC, koneksi ke databse Mysql, membuat class koneksi ke database
- Aplikasi Java-Mysql Sederhana (text mode)
Menambah data, koreksi, hapus dan menampilkan data
- Aplikasi Java-Mysql dengan GUI
Desain menu, desain form, desain report
- Aplikasi Java-Mysql Multi Table
Relasi antar tabel, desain form multi table, desain report multi table

Sekilas Mysql

- Download mysql di www.mysql.com
- Dapat juga menggunakan paket server + mysql seperti appwebserver, xampp, wamp, phptriad (contoh disini menggunakan appserver)
- Install paket appwebserver di pc
- Praktek di Lab sudah tersedia mysql di server lab

Memulai Mysql

- Buka mysql dari appserv → Mysql command line client, masukkan password, hasil terlihat seperti tampilan disamping
- Di Lab, jalankan putty dan isikan IP 192.168.10.250, masukkan user dan password, ketikkan mysql pada prompt, hasil kurang lebih sama seperti tampilan disamping



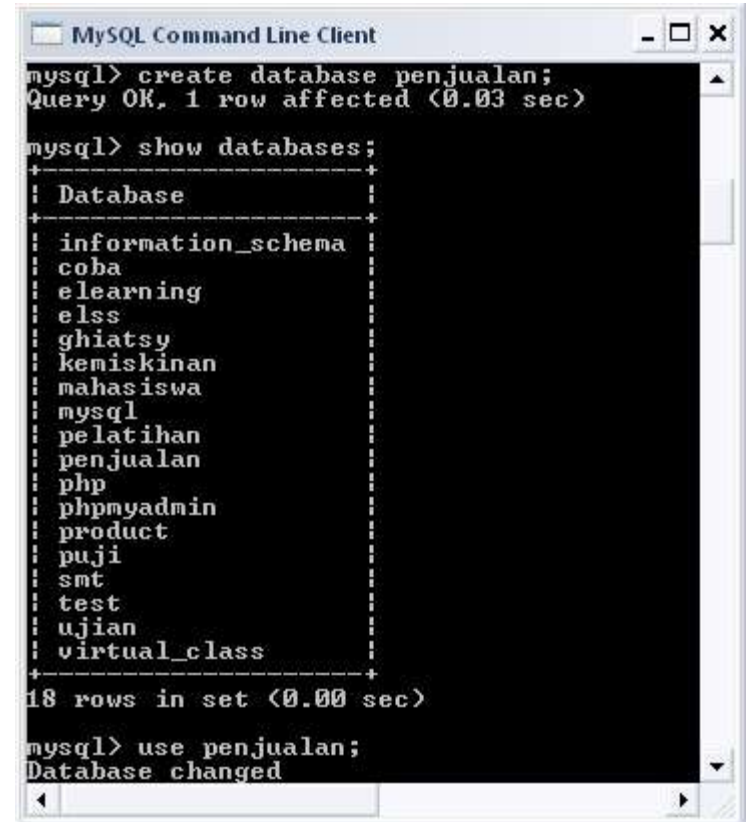
```
MySQL Command Line Client
Enter password: ****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 1 to server version: 5.0.24a-community-nt-log

Type 'help;' or '\h' for help. Type '\c' to clear the buffer.

mysql>
```

Database

- Membuat
`create database <nama database>;`
- Membuat database penjualan
`mysql> create database penjualan;`
- Perhatikan di Lab nama database yang diperbolehkan adalah sama dengan username masing-masing
- Melihat database
`mysql> show databases;`
- Membuka database
`use <nama database>`
`mysql> use penjualan;`



```
MySQL Command Line Client
mysql> create database penjualan;
Query OK, 1 row affected (0.03 sec)

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| coba        |
| elearning   |
| elss        |
| ghiatsy     |
| kemiskinan  |
| mahasiswa   |
| mysql       |
| pelatihan   |
| penjualan   |
| php         |
| phpmyadmin  |
| product     |
| puji        |
| smt         |
| test        |
| ujian       |
| virtual_class |
+-----+
18 rows in set (0.00 sec)

mysql> use penjualan;
Database changed
```

Table

- Membuat tabel

create table <nm tabel>(daftar field)

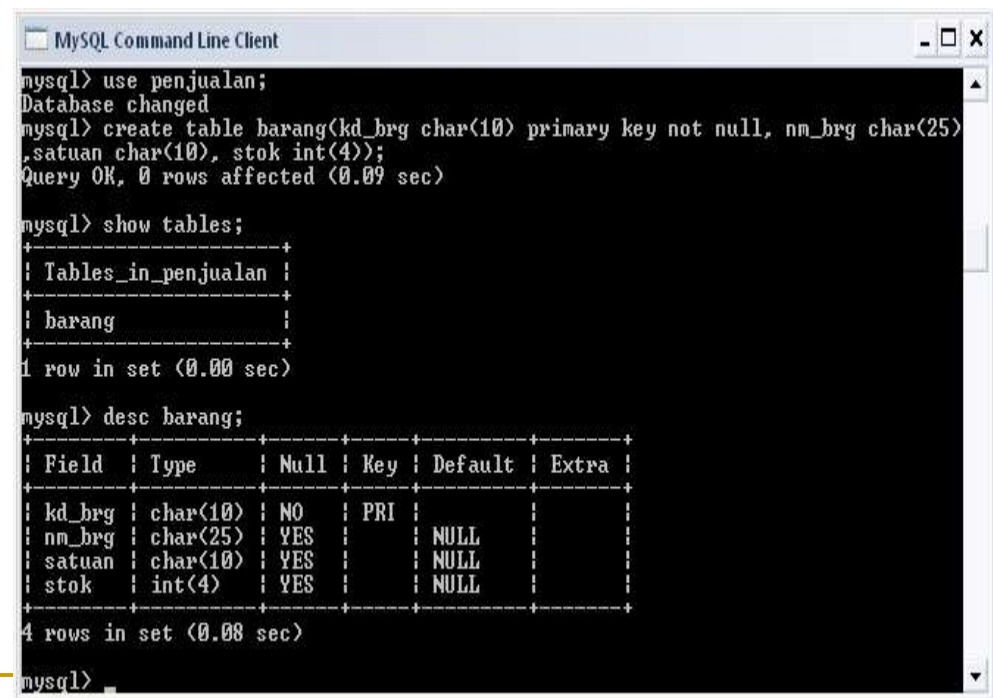
```
mysql>create table barang(kd_brg char(10) primary  
key not null,nm_brg char(25), satuan char(10), stok  
int(4));
```

- Melihat tabel
show tables;

- Melihat struktur tabel

desc <nama tabel>

```
mysql>desc barang;
```



```
MySQL Command Line Client
mysql> use penjualan;
Database changed
mysql> create table barang(kd_brg char(10) primary key not null, nm_brg char(25),
satuan char(10), stok int(4));
Query OK, 0 rows affected (0.09 sec)

mysql> show tables;
+-----+
| Tables_in_penjualan |
+-----+
| barang               |
+-----+
1 row in set (0.00 sec)

mysql> desc barang;
+-----+-----+-----+-----+-----+-----+
| Field | Type  | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| kd_brg | char(10) | NO   | PRI |          |       |
| nm_brg | char(25) | YES  |     | NULL    |       |
| satuan | char(10) | YES  |     | NULL    |       |
| stok  | int(4)  | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.08 sec)

mysql>
```

Modifikasi Tabel

- Menambah Field

`alter table barang add
stok_min int(4) after stok;`

- Merubah nama field

`mysql> alter table barang
modify stok int(5);`

- Merubah nama field dan
type data

`mysql> alter table barang
change stok stok_brg
int(5);`

```
mysql> desc barang;
+-----+-----+-----+-----+-----+-----+
| Field | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| kd_brg | char(10) | NO   | PRI |          |       |
| nm_brg | char(25) | YES  |     | NULL    |       |
| satuan | char(10) | YES  |     | NULL    |       |
| stok   | int(4)  | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.08 sec)

mysql>
```



```
MySQL Command Line Client
mysql> alter table barang change stok stok_brg int(5);
Query OK, 0 rows affected (0.39 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc barang;
+-----+-----+-----+-----+-----+-----+
| Field   | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| kd_brg  | char(10) | NO   | PRI |          |       |
| nm_brg  | char(25) | YES  |     | NULL    |       |
| satuan  | char(10) | YES  |     | NULL    |       |
| stok_brg | int(5)  | YES  |     | NULL    |       |
| stok_min | int(4)  | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql>
```

4 Perintah utama SQL

- Insert (menambah data)

insert into <nm tbl> values <daftar nilai>

mysql> insert into barang values('1111111111','Pensil','Buah',20,10);

mysql> insert into barang(kd_brg,nm_brg) values('222222222','Buku');

- Select (menampilkan data)

select <*>|dft field> from <nm tabel> where <kondisi>

mysql>select * from barang;

- Update (mengubah data)

update <nm tabel> set <field>=<value>,<field>=<value>,...Where <kondisi>

mysql>update barang set satuan='Buah',stok_brg=10,stok_min=5 where kd_brg='222222222';

- Delete (menghapus data)

delete from <nm tabel> where <kondisi>

mysql>delete from barang where kd_brg='111111111';

Perhatikan bedanya!!!

```
MySQL Command Line Client
mysql> insert into barang values('1111111111','Pensil','Buah',20,10);
Query OK, 1 row affected, 1 warning (0.00 sec)

mysql> insert into barang(kd_brg,nm_brg) values('2222222222','Buku');
Query OK, 1 row affected (0.00 sec)

mysql> update barang set satuan='Buah',stok_brg=10,stok_min=5 where kd_brg='2222
22222';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from barang;
```

kd_brg	nm_brg	satuan	stok_brg	stok_min
1111111111	Pensil	Buah	20	10
2222222222	Buku	Buah	10	5

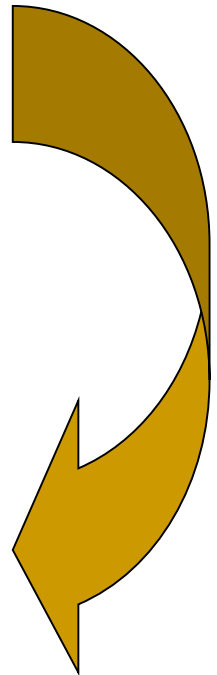
```
MySQL Command Line Client
mysql> delete from barang where kd_brg='1111111111';
Query OK, 1 row affected (0.00 sec)

mysql> select * from barang;
```

kd_brg	nm_brg	satuan	stok_brg	stok_min
2222222222	Buku	Buah	10	5

1 row in set (0.00 sec)

```
mysql>
```



Ada Pertanyaan

?

Latihan 1

- Buat tabel konsumen dengan struktur tabel sebagai berikut :

Field	Type	Width	Key
Kd_kons	Char	10	Pri
Nm_kons	Char	30	
alm_kons	Char	50	
Kota	Char	15	
Phone	Char	15	
Email	Char	30	

- Isikan 5 data teman anda
- Tampilkan yang kotanya Semarang
- Rubah kota konsumen selain semarang menjadi 'luar kota'
- Tampilkan seluruh data
- Hapus data yang kotanya 'luar kota'
- Tampilkan data dan amati perubahannya

