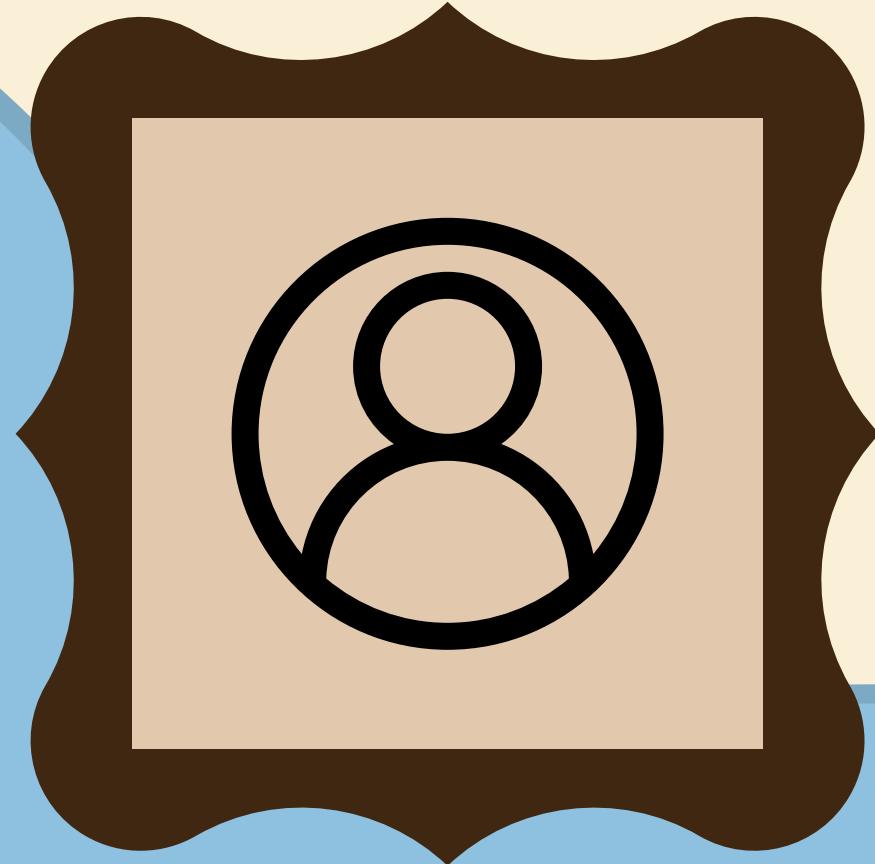


KELOMPOK LIMA



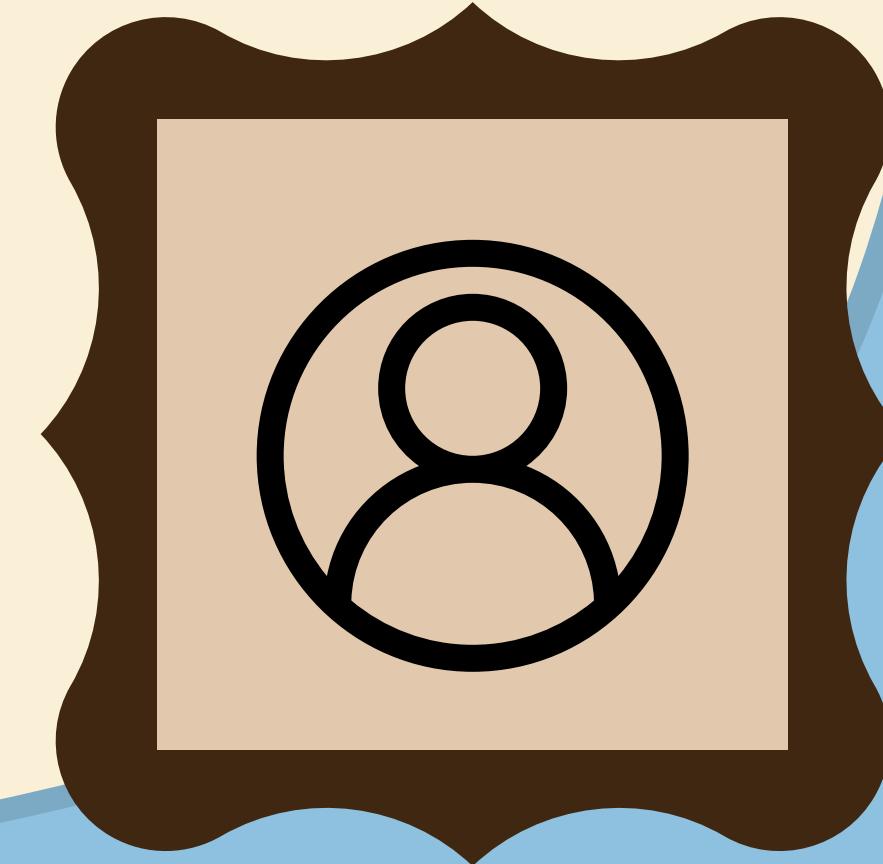
Our Team



**Adita Putri
Rahayu**



**Alvina Putri
Asharozak**



**Devi Aulia
Saputri**

PENGERTIAN

DML & DCL

Topic 1

DML adalah singkatan dari Data Manipulation Language, yaitu bagian dari bahasa SQL (Structured Query Language) yang digunakan untuk mengelola dan memanipulasi data dalam sebuah database.

Pengertian DML:

DML adalah kumpulan perintah SQL yang digunakan untuk menambah (insert), mengambil (select), mengubah (update), dan menghapus (delete) data yang tersimpan di dalam tabel database.

Topic 2

DCL adalah singkatan dari Data Control Language, yaitu bagian dari bahasa SQL yang digunakan untuk mengatur hak akses (privileges) dan kontrol keamanan terhadap data dalam database.

Pengertian DCL:

DCL adalah kumpulan perintah SQL yang digunakan untuk memberikan atau mencabut hak akses pengguna (user) terhadap objek-objek dalam database, seperti tabel, view, prosedur, dan lain-lain.

Perbedaan DML & DCL

Aspek DML (Data Manipulation Language) DCL (Data Control Language)

Fungsi utama

Mengelola dan memanipulasi data dalam tabel (isi data)

Mengatur hak akses dan kontrol keamanan data

Operasi yang dilakukan

INSERT, SELECT, UPDATE, DELETE

GRANT, REVOKE

Fokus

Bekerja langsung dengan data (menambah, menampilkan, mengubah, menghapus)

Memberikan atau mencabut hak akses pengguna terhadap data

Contoh

```
SELECT * FROM karyawan;
```

```
UPDATE karyawan SET gaji = 5000000 WHERE id = 3;
```

```
GRANT SELECT ON karyawan TO userA;
```

```
REVOKE UPDATE ON karyawan FROM userB;
```

Tujuan

Mengelola data operasional sehari-hari

Menjaga keamanan dan kontrol terhadap akses pengguna

FUNGSI DML & DCL

01

Fungsinya adalah untuk mengelola dan memanipulasi data dalam tabel database. DML digunakan saat kita ingin bekerja langsung dengan isi dari tabel (bukan strurnya)

02

Fungsinya adalah untuk mengatur hak akses dan izin pengguna terhadap database, biasanya terkait keamanan.

Contoh DML

01

```
INSERT INTO karyawan (id, nama, jabatan, gaji)
VALUES (1, 'Budi Santoso', 'Manajer', 8000000);
```

02

```
UPDATE karyawan
SET gaji = 85000
WHERE id = 1;
```

03

```
SELECT * FROM karyawan;
```

04

```
DELETE FROM karyawan
WHERE id = 1;
```

Contoh DCL

01

```
GRANT SELECT, INSERT ON karyawan TO user_pegawai;
```

02

```
REVOKE INSERT ON karyawan FROM user_pegawai;
```

Project

```
+-----+-----+-----+
5 rows in set (0.02 sec)

mysql> UPDATE siswa SET no_hp = +620123456789 WHERE nis = 1;
Query OK, 1 row affected (0.08 sec)
Rows matched: 1  Changed: 1  Warnings: 0
Shortcut
Shortcut

mysql> SELECT * FROM siswa;
+-----+-----+-----+-----+
| nis | nama_siswa | alamat      | no_hp      | jurusan_id |
+-----+-----+-----+-----+
| 1  | Hidayat    | Ngalian     | 620123456789 | 1          |
| 2  | Naha        | Beringin    | 85822222   | 2          |
| 3  | Jhon        | Taman lele | 8531122    | 3          |
| 4  | Firas       | Krapyak    | 85221345   | 4          |
| 5  | Rafasa      | Krapyak    | 87654778   | 5          |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> UPDATE siswa SET no_hp = +620000842116 WHERE nis = 2;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> SELECT * FROM siswa;
+-----+-----+-----+-----+
| nis | nama_siswa | alamat      | no_hp      | jurusan_id |
+-----+-----+-----+-----+
| 1  | Hidayat    | Ngalian     | 620123456789 | 1          |
| 2  | Naha        | Beringin    | 620000842116 | 2          |
| 3  | Jhon        | Taman lele | 8531122    | 3          |
| 4  | Firas       | Krapyak    | 85221345   | 4          |
| 5  | Rafasa      | Krapyak    | 87654778   | 5          |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

```
5 rows in set (0.00 sec)

mysql> UPDATE siswa SET no_hp = +62888867881 WHERE nis = 3;
Query OK, 1 row affected (0.02 sec)
Rows matched: 1  Changed: 1  Warnings: 0
This PC - PowerPoint Videos
Shortcut

mysql> SELECT * FROM siswa;
+-----+-----+-----+-----+
| nis | nama_siswa | alamat      | no_hp      | jurusan_id |
+-----+-----+-----+-----+
| 1  | Hidayat    | Ngalian     | 620123456789 | 1          |
| 2  | Naha        | Beringin    | 620000842116 | 2          |
| 3  | Jhon        | Taman lele | 62888867881  | 3          |
| 4  | Firas       | Krapyak    | 85221345   | 4          |
| 5  | Rafasa      | Krapyak    | 87654778   | 5          |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> UPDATE siswa SET no_hp = +628888678811 WHERE nis = 3;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> SELECT * FROM siswa;
+-----+-----+-----+-----+
| nis | nama_siswa | alamat      | no_hp      | jurusan_id |
+-----+-----+-----+-----+
| 1  | Hidayat    | Ngalian     | 620123456789 | 1          |
| 2  | Naha        | Beringin    | 620000842116 | 2          |
| 3  | Jhon        | Taman lele | 628888678811 | 3          |
| 4  | Firas       | Krapyak    | 85221345   | 4          |
| 5  | Rafasa      | Krapyak    | 87654778   | 5          |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

Project

```
+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> UPDATE siswa SET no_hp = +62888867881 WHERE nis = 4;
Query OK, 1 row affected (0.12 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> SELECT * FROM siswa;
+-----+-----+-----+-----+
| nis | nama_siswa | alamat      | no_hp          | jurusan_id |
+-----+-----+-----+-----+
| 1   | Hidayat     | Ngalian     | 620123456789 | 1           |
| 2   | Naha         | Beringin    | 620000842116 | 2           |
| 3   | Jhon         | Taman lele | 628888678811 | 3           |
| 4   | Firas        | Krupyak    | 62888867881   | 4           |
| 5   | Rafasa       | Krupyak    | 87654778      | 5           |
+-----+-----+-----+-----+
5 rows in set (0.01 sec)

mysql> UPDATE siswa SET no_hp = +628888678811 WHERE nis = 4;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> SELECT * FROM siswa;
+-----+-----+-----+-----+
| nis | nama_siswa | alamat      | no_hp          | jurusan_id |
+-----+-----+-----+-----+
| 1   | Hidayat     | Ngalian     | 620123456789 | 1           |
| 2   | Naha         | Beringin    | 620000842116 | 2           |
| 3   | Jhon         | Taman lele | 628888678811 | 3           |
| 4   | Firas        | Krupyak    | 628888678811 | 4           |
| 5   | Rafasa       | Krupyak    | 87654778      | 5           |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

```
mysql> UPDATE siswa SET jurusan_id = 3 WHERE nis = 5;
Query OK, 1 row affected (0.02 sec)
Rows matched: 1    Changed: 1    Warnings: 0

mysql> SELECT * FROM siswa;
+-----+-----+-----+-----+-----+
| nis | nama_siswa | alamat | no_hp | jurusan_id |
+-----+-----+-----+-----+
| 1   | Hidayat    | Ngalian | 620123456789 | 1      |
| 2   | Naha        | Beringin | 620000842116 | 1      |
| 3   | Jhon        | Taman lele | 628888678811 | 1      |
| 4   | Firas       | Krapyak   | 628888678811 | 2      |
| 5   | Rafasa      | Krapyak   | 620000842116 | 3      |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> DELETE crom siswa WHERE nama_siswa = "Jhon";
ERROR 1064 (42000): You have an error in your SQL syntax; check the
syntax near 'siswa WHERE nama_siswa = "Jhon"' at line 1
mysql>
mysql> DELETE FROM siswa WHERE nama_siswa = "Jhon";
```

Project

```
mysql> UPDATE siswa SET jurusan_id = 3 WHERE nis = 5;
Query OK, 1 row affected (0.02 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> SELECT * FROM siswa;
+----+-----+-----+-----+
| nis | nama_siswa | alamat | no_hp | jurusan_id |
+----+-----+-----+-----+
| 1 | Hidayat | Ngalian | 620123456789 | 1 |
| 2 | Naha | Beringin | 620000842116 | 1 |
| 3 | Jhon | Taman lele | 628888678811 | 1 |
| 4 | Firas | Krapyak | 628888678811 | 2 |
| 5 | Rafasa | Krapyak | 620000842116 | 3 |
+----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> DELETE crom siswa WHERE nama_siswa = "Jhon";
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'siswa WHERE nama_siswa = "Jhon"' at line 1
mysql>
mysql> DELETE FROM siswa WHERE nama_siswa ="Jhon";
Query OK, 1 row affected (0.03 sec)
```

```
Query OK, 0 rows affected (0.03 sec)

mysql> GRANT ALL PRIVILEGES ON *.* TO 'rpl'@'localhost' IDENTIFIED BY 'rpl2ok';
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'IDENTIFIED BY 'rpl2ok'' at line 1
mysql> GRANT ALL PRIVILEGES ON *.* TO 'rpl'@'localhost' WITH GRANT OPTION;
Query OK, 0 rows affected (0.03 sec)

mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.02 sec)

mysql>
```

Activate Windows
Go to Settings to activate Windows.



THANK
YOU