

UPDATE & DELETE SQL

Update dan Delete pada SQL merupakan bagian dari DML (Data Manipulation Language). Update digunakan untuk update/edit data pada database sedangkan delete digunakan untuk menghapus data pada database.

A. UPDATE data (content):

Contoh: nama mata kuliah **automata** akan diubah menjadi mata kuliah **rekayasa perangkat lunak**.

```
mysql> select * from matakuliah;
+-----+-----+-----+
| kode_matkul | nama_matkul | sks |
+-----+-----+-----+
| 00C01      | KOMPUTER GRAFIK | 3 |
| 00F02      | BASIS DATA | 2 |
| 00H09      | AUTOMATA | 3 |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

→ Data awal

```
mysql> update matakuliah set nama_matkul='REKAYASA PERANGKAT LUNAK' where kode_matkul='00H09';
Query OK, 1 row affected, 1 warning (0.02 sec)
Rows matched: 1 Changed: 1 Warnings: 1
```

→ query update

```
mysql> select * from matakuliah;
+-----+-----+-----+
| kode_matkul | nama_matkul | sks |
+-----+-----+-----+
| 00C01      | KOMPUTER GRAFIK | 3 |
| 00F02      | BASIS DATA | 2 |
| 00H09      | REKAYASA PERANGKAT L | 3 |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

→ Data akhir

B. UPDATE tipe data :

Contoh: tipe data `sks` yaitu `int` akan diubah menjadi tipe data `char`.

```
mysql> desc matakuliah;
```

Field	Type	Null	Key	Default	Extra
kode_matkul	char(5)	NO	PRI	NULL	
nama_matkul	char(20)	YES		NULL	
sks	int(20)	YES		NULL	

3 rows in set (0.00 sec)

Tipe Data awal

```
mysql> alter table matakuliah modify sks char (8);
```

Query OK, 2 rows affected (0.01 sec)
Records: 2 Duplicates: 0 Warnings: 0

query update

```
mysql> desc matakuliah;
```

Field	Type	Null	Key	Default	Extra
kode_matkul	char(5)	NO	PRI	NULL	
nama_matkul	char(20)	YES		NULL	
sks	char(8)	YES		NULL	

3 rows in set (0.02 sec)

Tipe data akhir

C. UPDATE atribut (kolom tabel) :

Contoh: atribut `reguler` akan diubah menjadi atribut `sesi`.

```
mysql> desc jadwal;
```

Field	Type	Null	Key	Default	Extra
kode_jadwal	char(5)	NO	PRI	NULL	
kode_matkul	char(20)	YES		NULL	
tanggal	date	YES		NULL	
hari	char(7)	YES		NULL	
reguler	char(2)	YES		NULL	

5 rows in set (0.02 sec)

Atribut awal

```
mysql> alter table jadwal change reguler sesi char (5);
```

Query OK, 0 rows affected (0.02 sec)
Records: 0 Duplicates: 0 Warnings: 0

Query update

```
mysql> desc jadwal;
```

Field	Type	Null	Key	Default	Extra
kode_jadwal	char(5)	NO	PRI	NULL	
kode_matkul	char(20)	YES		NULL	
tanggal	date	YES		NULL	
hari	char(7)	YES		NULL	
sesi	char(5)	YES		NULL	

5 rows in set (0.01 sec)

Atribut akhir

D. UPDATE entitas (nama tabel) :

Contoh: entitas(nama tabel) **jadwal** akan diubah menjadi entitas **jadwal_kuliah**.

```
mysql> show tables;
+-----+
| Tables_in_kampus |
+-----+
| jadwal            |
| mahasiswa         |
| matakuliah        |
+-----+
3 rows in set (0.00 sec)
```

Entitas awal

```
mysql> alter table jadwal rename to jadwal_kuliah;
Query OK, 0 rows affected (0.00 sec)
```

Query update

```
mysql> show tables;
+-----+
| Tables_in_kampus |
+-----+
| jadwal_kuliah     |
| mahasiswa         |
| matakuliah        |
+-----+
3 rows in set (0.00 sec)
```

Entitas akhir

E. Delete Data (content) :

Contoh: Menghapus data nama matakuliah **BASIS DATA**

```
mysql> select * from matakuliah;
+-----+-----+-----+
| kode_matkul | nama_matkul | sks |
+-----+-----+-----+
| 00C01      | KOMPUTER GRAFIK | 3 |
| 00F02      | BASIS DATA | 2 |
| 00H09      | REKAYASA PERANGKAT L | 3 |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

Data yang akan dihapus

```
mysql> delete from matakuliah where kode_matkul='00F02';
Query OK, 1 row affected (0.00 sec)
```

Query delete

```
mysql> select * from matakuliah;
+-----+-----+-----+
| kode_matkul | nama_matkul | sks |
+-----+-----+-----+
| 00C01      | KOMPUTER GRAFIK | 3 |
| 00H09      | REKAYASA PERANGKAT L | 3 |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

F. Delete atribut (kolom tabel) :

Contoh: Menghapus atribut **no_tlp**

```
mysql> desc mahasiswa;
```

Field	Type	Null	Key	Default	Extra
NIM	char(12)	NO	PRI	NULL	
nama	char(20)	YES		NULL	
alamat	char(30)	YES		NULL	
no_tlp	char(12)	YES		NULL	

4 rows in set (0.00 sec)

Atribut yang akan dihapus

```
mysql> alter table mahasiswa drop column no_tlp;
```

Query OK, 2 rows affected (0.01 sec)
Records: 2 Duplicates: 0 Warnings: 0

query delete

```
mysql> desc mahasiswa;
```

Field	Type	Null	Key	Default	Extra
NIM	char(12)	NO	PRI	NULL	
nama	char(20)	YES		NULL	
alamat	char(30)	YES		NULL	

3 rows in set (0.00 sec)