

**PRAKTIKUM BASIS DATA
BERSAMA DOSEN PRAKTISI**

“Latihan Soal DML”



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SOAL & JAWABAN

Pertama Buat Databasenya dahulu dengan nama pm_dml

The screenshot shows two instances of the phpMyAdmin interface running side-by-side. Both instances have the URL `localhost/phpmyadmin/index.php?route=/server/sql` and are connected to the MySQL server "127.0.0.1".

In the top instance, the SQL tab is active. A query is being run:

```
1 create DATABASE pm_dml;
```

In the bottom instance, the results of the query execution are displayed:

- A green success message: "MySQL memberikan hasil kosong (atau nol baris). (Pencarian dilakukan dalam 0,0030 detik.)"
- The executed query: "create DATABASE pm_dml;"
- An error message in a red box: "Error: #1046 No database selected"

Kemudian buat TABEL member

Buatlah Tabel member berikut :

```
create table member (
no int primary key auto_increment,
nama varchar(50) not null,
tgllhr date,
berat decimal(6,2),
status enum('A','T') default 'A'
);
```

The image shows two separate browser windows, both displaying the phpMyAdmin interface on a local host at port 127.0.0.1.

Top Window: This window is titled "MySQL Member Table Queries". It shows the SQL query for creating the "member" table:

```
CREATE TABLE member(
    no INT PRIMARY KEY AUTO_INCREMENT,
    nama VARCHAR(50) NOT NULL,
    tgllhr DATE,
    berat DECIMAL(6, 2),
    status ENUM('A', 'T') DEFAULT 'A'
);
```

Bottom Window: This window is also titled "MySQL Member Table Queries" and is specifically for the database "pm_dml". It shows the same SQL query and includes a message: "MySQL memberikan hasil kosong (atau nol baris). (Pencarian dilakukan dalam 0,0029 detik.)".

Both windows have standard browser toolbars and status bars indicating the date and time (e.g., 15/05/2023, 22:37).

The screenshot shows the 'Struktur' (Structure) tab for the 'member' table. The table structure is as follows:

#	Nama	Jenis	Penyortiran	Atribut	Tak Ternilai	Bawaan	Komentar	Ekstra	Tindakan
1	NO	int(11)			Tidak	Tidak ada		AUTO_INCREMENT	Ubah Hapus Lainnya
2	nama	varchar(50)	utf8mb4_general_ci		Tidak	Tidak ada			Ubah Hapus Lainnya
3	tglhr	date			Ya	NULL			Ubah Hapus Lainnya
4	berat	decimal(6,2)			Ya	NULL			Ubah Hapus Lainnya
5	STATUS	enum('A', 'T')	utf8mb4_general_ci		Ya	A			Ubah Hapus Lainnya

Below the table structure, there are buttons for 'Pilih Semua' (Select All), 'Dengan pilihan:' (With Selection), and various actions like 'Ubah' (Edit), 'Hapus' (Delete), 'Utama' (Primary), 'Unik' (Unique), 'Indeks' (Index), and 'Spasial' (Spatial). There are also buttons for 'Cetak' (Print), 'Usulkan struktur tabel' (Propose table structure), 'Lacak tabel' (Track table), 'Move columns' (Move columns), and 'Normalisasi' (Normalization).

1. Tambahkan data pada table member dengan isi berikut (null,'Februari','1990-10-12',60,'T'). Lalu tampilkan nilai id auto_increment terakhir.

Jawab :

The screenshot shows the 'SQL' tab with the following SQL query:

```

1 INSERT INTO member(nama, tglhr, berat,
2 STATUS
3 )
4 VALUES('Februari', '1990-10-12', 60, 'T');
5 SELECT
6     LAST_INSERT_ID() AS last_id;

```

Below the query, there are tabs for 'Konsol' (Console), 'Format', and 'Get auto-saved query'. The left sidebar shows the database structure with 'pm_dml' selected.

Screenshot of the phpMyAdmin interface showing the execution of an SQL query:

```
INSERT INTO member(nama, tglhr, berat, STATUS ) VALUES('Febru', '1990-10-12', 60, 'T');
```

The message indicates 1 row was inserted.

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Result of the SELECT query:

```
SELECT LAST_INSERT_ID() AS last_id;
```

Output: 1

Screenshot of the phpMyAdmin interface showing the structure of the 'member' table:

#	Nama	Jenis	Penyortiran	Atribut	Tak Ternilai	Bawaan	Komentar	Ekstra	Tindakan
1	NO	int(11)			Tidak	Tidak ada		AUTO_INCREMENT	Ubah Hapus Lainnya
2	nama	varchar(50)	utf8mb4_general_ci		Tidak	Tidak ada			Ubah Hapus Lainnya
3	tglihr	date			Ya	NULL			Ubah Hapus Lainnya
4	berat	decimal(6,2)			Ya	NULL			Ubah Hapus Lainnya
5	STATUS	enum('A', 'T')	utf8mb4_general_ci		Ya	A			Ubah Hapus Lainnya

Buttons at the bottom of the table structure screen:

- Pilih Semua
- Dengan pilihan: Jelajahi Ubah Hapus Utama Unik Indeks Spasial
- Teks penuh Add to central columns Remove from central columns
- Cetak Usulkan struktur tabel Lacak tabel Move columns Normalisasi
- Tambahkan kolom setelah STATUS Kirim

Server: 127.0.0.1 » Database: pm_dml » Tabel: member

NO	nama	tglhr	berat	STATUS
1	Februari	1990-10-12	60.00	T

Operasi hasil kueri

Cetak Salin ke clipboard Eksport Tampilkan bagan Buat tampilan

2. Tambahkan kolom yang hanya menambahkan nama dan tanggal lahir sesuai tanggal yang ada pada computer saat ini.

Jawab :

Jalankan perintah SQL pada basis data pm_dml:

```
1 ALTER TABLE
2     member ADD COLUMN waktu_input TIMESTAMP DEFAULT CURRENT_TIMESTAMP;
```

Konsol kan Format Get auto-saved query

Screenshot of the phpMyAdmin interface showing the SQL tab for the pm_dml database.

The sidebar shows databases: idcard, informatika, information_schema, konser, mahasiswauns, manajemen_pertanian, mysql, pendaftaran_konser, pendaftaran_konser, performance_schema, phpmyadmin, pm (selected), pm_ddl, pm_dml (selected), Baru, member, teknik_informatika.

The main area displays the following SQL query:

```
ALTER TABLE member ADD COLUMN waktu_input TIMESTAMP DEFAULT CURRENT_TIMESTAMP;
```

Buttons at the bottom: [Edit dikotak] [Ubah] [Buat kode PHP].

Screenshot of the phpMyAdmin interface showing the Tabel: member page for the pm_dml database.

The sidebar shows databases: uu, dbmahasiswa, ddl, form, formulir, idcard, informatika, information_schema, konser, mahasiswauns, manajemen_pertanian, mysql, pendaftaran_konser, pendaftaran_konser, performance_schema, phpmyadmin, pm (selected).

The main area displays the following SQL query:

```
SELECT * FROM `member`
```

Buttons at the top: Profil [Edit dikotak] [Ubah] [Jelaskan SQL] [Buat kode PHP] [Segarkan].

Table header: NO, nama, tglLhr, berat, STATUS, waktu_input.

Table data:

NO	nama	tglLhr	berat	STATUS	waktu_input
1	Febru	1990-10-12	60.00	T	2023-05-15 23:14:01

Action buttons: Pilih Semua, Dengan pilihan: Ubah, Salin, Hapus, Eksport.

Buttons at the bottom: [Tampilkan semua] [Jumlah baris: 25] [Saring baris: Cari di tabel ini].

3.

no	nama	tglhr	berat	status
1	ADI	1980-06-10	65.50	A
2	BUDI	1985-12-10	50.00	T
3	CATUR	NULL	NULL	A
4	ENI	NULL	NULL	A
5	FEBRI	1990-10-12	60.00	T
6	GUNGUN	2010-10-25	NULL	A
10	HENDRI	NULL	NULL	A
11	INA	NULL	NULL	A

a. Masukkan data diatas pada table member menggunakan query insert secara bersamaan

Jawab :

The screenshot shows the phpMyAdmin interface for the 'pm_dml' database. The left sidebar lists databases and tables, including 'pm' which contains 'pm_ddl', 'pm_dml', 'Baru', and 'member'. The main area has tabs for 'Struktur', 'SQL', 'Cari', 'Kueri', 'Ekspor', 'Impor', 'Operasi', 'Hak Akses', and 'Lainnya'. The 'SQL' tab is selected. The query editor contains the following SQL code:

```
1 INSERT INTO member(nama, tglhr, berat,
2 STATUS
3 )
4 VALUES('ADI', '1980-06-10', 65.50, 'A'), ('BUDI', '1985-12-10', 50.00, 'T'), ('CATUR', NULL, NULL, 'A'),
('ENI', NULL, NULL, 'A'), ('FEBRI', '1990-10-12', 60.00, 'T'), ('GUNGUN', '2010-10-25', NULL, 'A'),
('HENDRI', NULL, NULL, 'A'), ('INA', NULL, NULL, 'A');
```

The screenshot shows the phpMyAdmin interface again for the 'pm_dml' database. The 'Kueri' tab is selected. A green message box displays: '8 baris ditambahkan.' and 'Nomor baris baru: 9 (Pencarian dilakukan dalam 0,0006 detik.)'. Below the message, the same SQL insert query is shown in the query editor. At the bottom right of the editor, there are buttons for '[Edit dikotak]', '[Ubah]', and '[Buat kode PHP]'.

The screenshot shows the phpMyAdmin interface for the 'pm_dml' database. The 'member' table is selected. The columns are labeled: NO, nama, tglLhr, berat, STATUS, and waktu_input. The data rows are:

NO	nama	tglLhr	berat	STATUS	waktu_input
1	Febri	1990-10-12	60.00	T	2023-05-15 23:14:01
2	ADI	1980-06-10	65.50	A	2023-05-15 23:14:56
3	BUDI	1985-12-10	50.00	T	2023-05-15 23:14:56
4	CATUR	NULL	NULL	A	2023-05-15 23:14:56
5	ENI	NULL	NULL	A	2023-05-15 23:14:56
6	FEBRI	1990-10-12	60.00	T	2023-05-15 23:14:56
7	GUNGUN	2010-10-25	NULL	A	2023-05-15 23:14:56
8	HENDRI	NULL	NULL	A	2023-05-15 23:14:56
9	INA	NULL	NULL	A	2023-05-15 23:14:56

b. Lakukan update baris yang tanggal lahirnya null dengan mengisi kolom tglLhr dengan tanggal 1-Januari-1990.

Jawab :

The screenshot shows the phpMyAdmin interface with the SQL tab selected. A query is being run against the 'pm_dml' database:

```

1 UPDATE
2   member
3 SET
4   tglLhr = '1990-01-01'
5 WHERE
6   tglLhr IS NULL;
    
```

localhost/phpmyadmin/index.php?route=/database/sql&db=pm_dml

phpMyAdmin

Struktur SQL Cari Kueri Eksport Impor Operasi Hak Akses Lainnya

Tampilkan kotak kueri

✓ 4 baris terpengaruh. (Pencarian dilakukan dalam 0,0007 detik.)

UPDATE member SET tglhr = '1990-01-01' WHERE tglhr IS NULL;

[Edit dikotak] [Ubah] [Buat kode PHP]

Terbaru Favorit

- idcard
- informatika
- information_schema
- konser
- mahasiswauns
- manajemen_pertanian
- mysql
- pendaftaran_konser
- pendaftaran_konser
- performance_schema
- phpmyadmin
- pm
 - pm_ddl
 - pm_dml
 - Baru
 - member
- teknik_informatika

Konsol

Search

localhost/phpmyadmin/index.php?route=/sql&db=pm_dml&table=member&pos=0

phpMyAdmin

Jelajahi Struktur SQL Cari Tambahkan Eksport Impor Hak Akses

Tabel: member

NO	nama	tgllhr	berat	STATUS	waktu_input
1	Febri	1990-10-12	60.00	T	2023-05-15 23:14:01
2	ADI	1980-06-10	65.50	A	2023-05-15 23:14:56
3	BUDI	1985-12-10	50.00	T	2023-05-15 23:14:56
4	CATUR	1990-01-01	NULL	A	2023-05-15 23:14:56
5	ENI	1990-01-01	NULL	A	2023-05-15 23:14:56
6	FEBRI	1990-10-12	60.00	T	2023-05-15 23:14:56
7	GUNGUN	2010-10-25	NULL	A	2023-05-15 23:14:56
8	HENDRI	1990-01-01	NULL	A	2023-05-15 23:14:56
9	INA	1990-01-01	NULL	A	2023-05-15 23:14:56

Pilih Semua Dengan pilihan: Ubah Salin Hapus Eksport

localhost/phpmyadmin/index.php?route=/sql&db=pm_dml&table=member&pos=0

4. Lakukan update 2 baris pertama yang mempunyai berat paling besar dengan menambahkan 1 pada kolom berat.

Jawab :

The screenshot shows two instances of the phpMyAdmin interface. Both instances have the URL `localhost/phpmyadmin/index.php?route=/database/sql&db=pm_dml` and the database selected is `pm_dml`.

Top Window (Left):

- SQL tab is active.
- Query text:

```
1 UPDATE
2     member
3 SET
4     berat = berat + 1
5 ORDER BY
6     berat
7 DESC
8 LIMIT 2;
```

Bottom Window (Right):

- SQL tab is active.
- Query text:

```
UPDATE member SET berat = berat + 1 ORDER BY berat DESC LIMIT 2;
```
- Feedback message: **✓ 2 baris terpengaruh. (Pencarian dilakukan dalam 0,0007 detik.)**
- Buttons at the bottom right: [Edit dikolak] [Ubah] [Buat kode PHP]

	Ubah	Salin	Hapus	NO	nama	tglLhr	berat	STATUS	waktu_input
<input type="checkbox"/>	Ubah	Salin	Hapus	1	Febru	1990-10-12	61.00	T	2023-05-15 23:14:01
<input type="checkbox"/>	Ubah	Salin	Hapus	2	ADI	1980-06-10	66.50	A	2023-05-15 23:14:56
<input type="checkbox"/>	Ubah	Salin	Hapus	3	BUDI	1985-12-10	50.00	T	2023-05-15 23:14:56
<input type="checkbox"/>	Ubah	Salin	Hapus	4	CATUR	1990-01-01	NULL	A	2023-05-15 23:14:56
<input type="checkbox"/>	Ubah	Salin	Hapus	5	ENI	1990-01-01	NULL	A	2023-05-15 23:14:56
<input type="checkbox"/>	Ubah	Salin	Hapus	6	FEBRI	1990-10-12	60.00	T	2023-05-15 23:14:56
<input type="checkbox"/>	Ubah	Salin	Hapus	7	GUNGUN	2010-10-25	NULL	A	2023-05-15 23:14:56
<input type="checkbox"/>	Ubah	Salin	Hapus	8	HENDRI	1990-01-01	NULL	A	2023-05-15 23:14:56
<input type="checkbox"/>	Ubah	Salin	Hapus	9	INA	1990-01-01	NULL	A	2023-05-15 23:14:56

5. Lakukan penghapusan 2 baris pada data yang memiliki tanggal lahir paling tua.

Jawab :

```

1 DELETE
2   member
3 FROM
4   member
5 INNER JOIN(
6   SELECT tgllhr
7   FROM
8     member
9   ORDER BY
10    tgllhr ASC
11   LIMIT 2
12 ) AS subquery
13 ON
14   member.tgllhr = subquery.tgllhr;

```

localhost/phpmyadmin/index.php?route=/table/sql&db=pm_dml&table=member

Tampilan kotak kueri

✓ 2 baris terpengaruh. (Pencarian dilakukan dalam 0,0028 detik.)

```
DELETE member FROM member INNER JOIN( SELECT tglhr FROM member ORDER BY tglhr ASC LIMIT 2 ) AS subquery ON member.tglhr = subquery.tglhr;
```

[Edit dikotak] [Ubah] [Buat kode PHP]

Konsol

localhost/phpmyadmin/index.php?route=/sql&db=pm_dml&table=member&pos=0

Extra options

NO	nama	tglhr	berat	STATUS	waktu_input
1	Febru	1990-10-12	61.00	T	2023-05-15 23:14:01
4	CATUR	1990-01-01	NULL	A	2023-05-15 23:14:56
5	ENI	1990-01-01	NULL	A	2023-05-15 23:14:56
6	FEBRI	1990-10-12	60.00	T	2023-05-15 23:14:56
7	GUNGUN	2010-10-25	NULL	A	2023-05-15 23:14:56
8	HENDRI	1990-01-01	NULL	A	2023-05-15 23:14:56
9	INA	1990-01-01	NULL	A	2023-05-15 23:14:56

Pilih Semua Dengan pilihan: Ubah Salin Hapus Eksport

Tampilkan semua | Jumlah baris: 25 | Saring baris: Cari di tabel ini | Sort by key: Tidak ada

Konsol

Screenshot of the phpMyAdmin interface showing the structure of the 'member' table in the 'pm_dml' database.

The left sidebar shows the database structure:

- form
- formulir
- idcard
- informatika
- information_schema
- konser
- mahasiswauns
- manajemen_pertanian
- mysql
- pendaftaran_konser
- pendaftaran_konser
- performance_schema
- phpmyadmin
- pm
- pm_ddl
- pm_dml

The main panel displays the 'Struktur tabel' (Table Structure) for the 'member' table:

#	Nama	Jenis	Penyortiran	Atribut	Tak Ternilai	Bawaan	Komentar	Ekstra
1	NO	int(11)			Tidak	Tidak ada		AUTO_INCREMENT
2	nama	varchar(50)	utf8mb4_general_ci		Tidak	Tidak ada		
3	tglhr	date			Ya	NULL		
4	berat	decimal(6,2)			Ya	NULL		
5	STATUS	enum('A', 'T')	utf8mb4_general_ci		Ya	A		
6	waktu_input	timestamp			Tidak	current_timestamp()		

Below the table structure, there are buttons for Konsol, Pilih Semua, Dengan pilihan:, Jelajahi, Ubah, Hapus, Utama, and Unik.