

**LAPORAN**  
**UJIAN AKHIR SEMESTER**  
**BASIS DATA LANJUT C**  
**STRUCTURED QUERY LANGUAGE**  
**“SISTEM ALUR PENGGAJIAN KARYAWAN PERUSAHAAN”**



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**PROGRAM STUDI SAINS DATA**  
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**JAWA TIMUR**

**2023**

# **STRUCTURED QUERY LANGUAGE**

*(BASIS DATA LANJUT)*

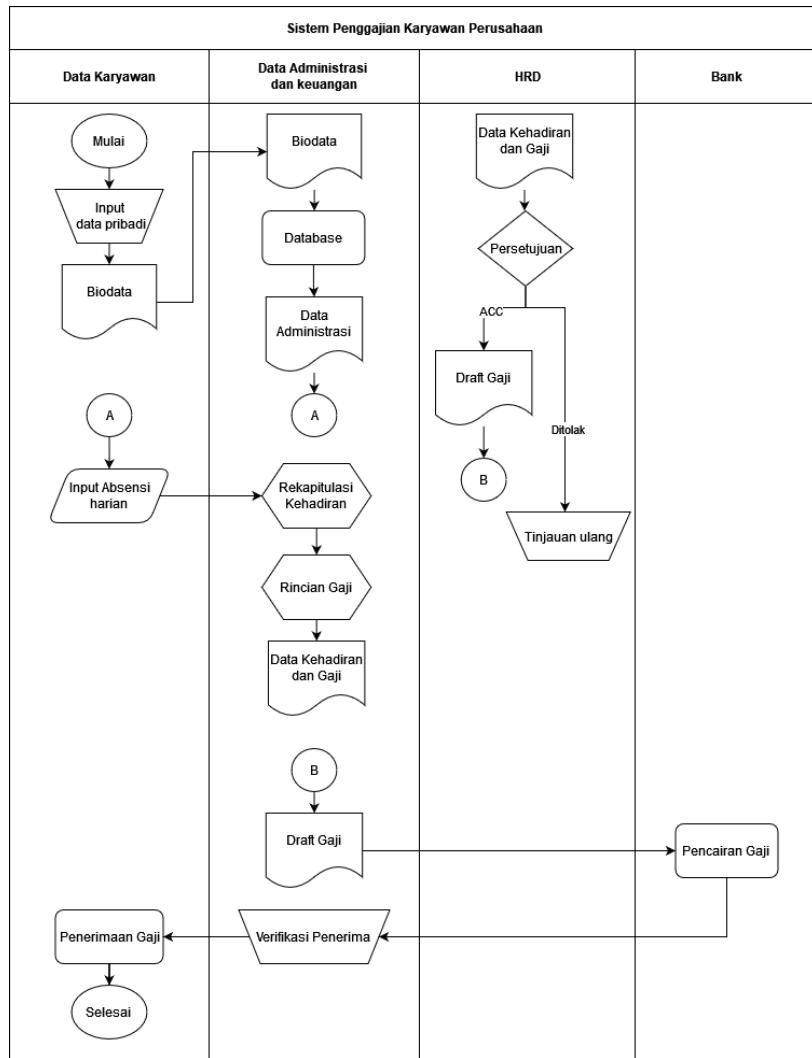
SQL (Structured Query Language) adalah bahasa pemrograman yang digunakan untuk berinteraksi dengan basis data. Ini memungkinkan kita untuk melakukan berbagai operasi terhadap data, seperti mengambil data, menambahkan data baru, memperbarui data yang sudah ada, atau menghapus data. SQL dirancang khusus untuk berinteraksi dengan sistem manajemen basis data (Database Management System atau DBMS), seperti MySQL, PostgreSQL, Microsoft SQL Server, Oracle, dan banyak lagi.

Dalam project ini, kami akan membuat sebuah rancangan basis data dengan studi kasus “Database Penggajian Karyawan Perusahaan” yang menggunakan salah satu pilihan perangkat DBMS yakni MySQL yang terdapat pada perangkat lunak XAMPP. Project ini akan memberikan gambaran mengenai sebuah sistem database yang digunakan dalam proses penggajian karyawan perusahaan.

## **1. FLOWCHART**

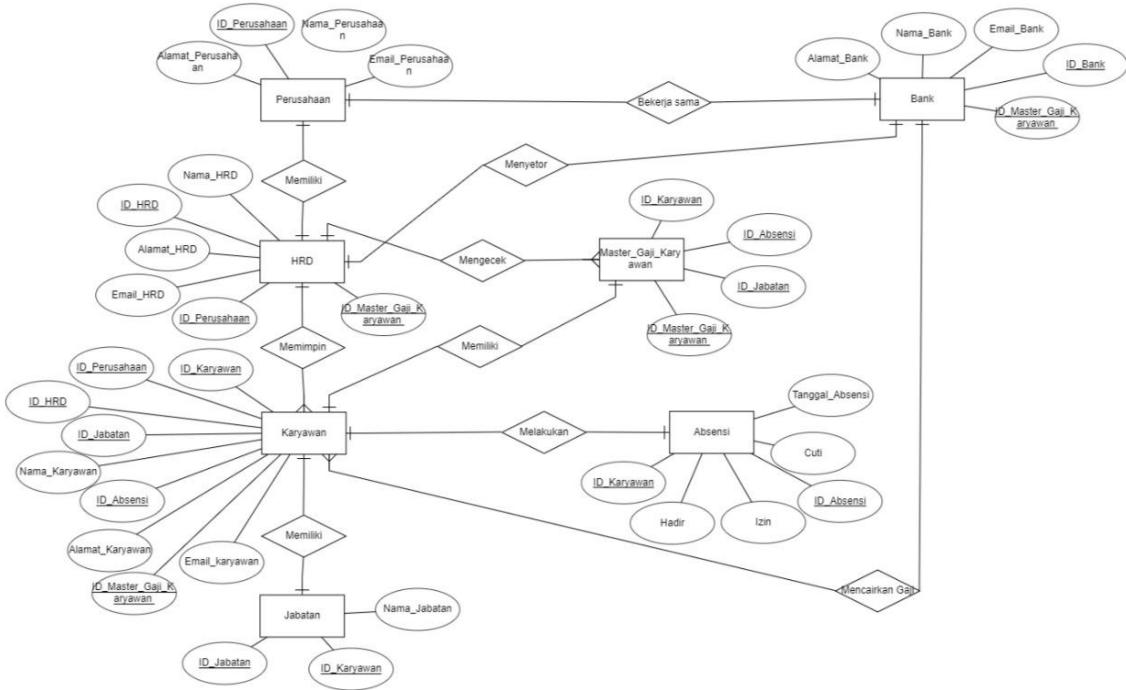
Cross-Functional Flowchart, juga dikenal sebagai swimlane diagram atau deployment flowchart, adalah jenis diagram alir yang digunakan untuk menggambarkan alur kerja proses bisnis melintasi berbagai fungsi atau departemen dalam suatu organisasi. Berikut merupakan suatu alur kerja proses yang telah kami buat yakni :

- Karyawan mengisikan data pribadi sebagai administrasi
- Data karyawan akan diolah oleh pihak administrator dengan berbagai rincian yakni data pribadi, jabatan hingga rekapitulasi absensi.
- Karyawan perusahaan melakukan absensi harian sebagai tanda rincian gaji bulanan
- Setiap akhir bulan, Pihak Administrasi membuat draft rincian gaji yang sudah disesuaikan dengan rekap absensi dan jabatan.
- Draft gaji akan diberikan kepada pimpinan perusahaan sebagai persetujuan, jika disetujui maka proses gaji akan dilanjutkan dan jika tidak maka akan ada tinjauan ulang oleh pihak administrasi
- Ketika draft disetujui, maka pihak keuangan akan berkoordinasi dengan pihak bank untuk mencairkan seluruh gaji yang dibutuhkan dan akan didistribusikan kepada seluruh karyawan.
- Semua proses transaksi gaji akan diatur dengan jelas oleh pihak administrasi dan sistem selesai.



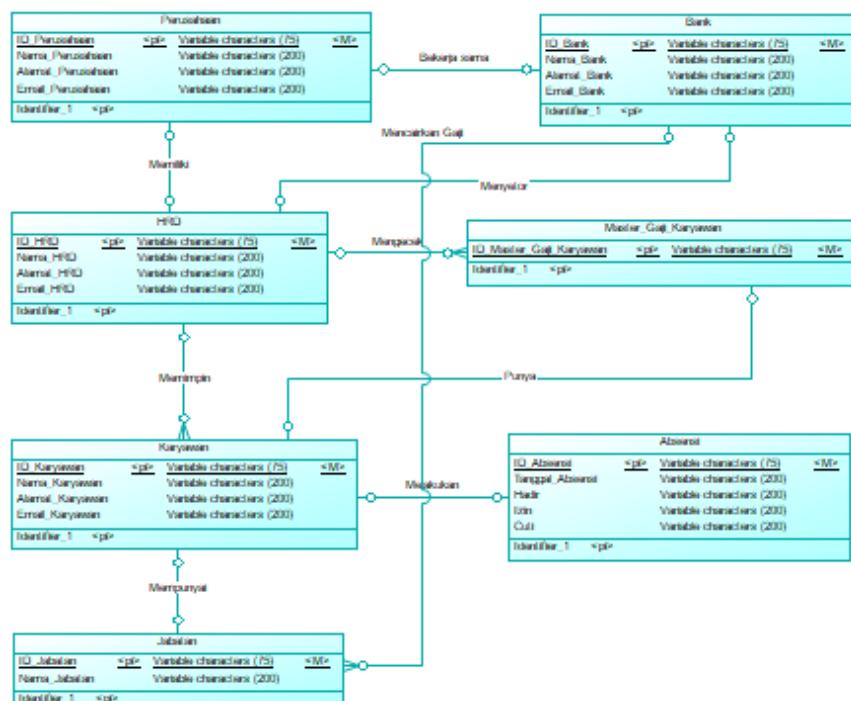
## 2. ENTITY RELATIONSHIP DIAGRAM (ERD)

Entity Relationship Diagram (ERD) adalah jenis diagram yang digunakan dalam desain basis data untuk menggambarkan hubungan antara entitas (objek atau konsep) dalam suatu sistem. ERD membantu memodelkan struktur data dan hubungannya dengan cara yang intuitif, memberikan pandangan visual tentang bagaimana data terorganisir dan saling terkait. ERD umumnya digunakan selama fase perancangan basis data pada pengembangan sistem informasi.



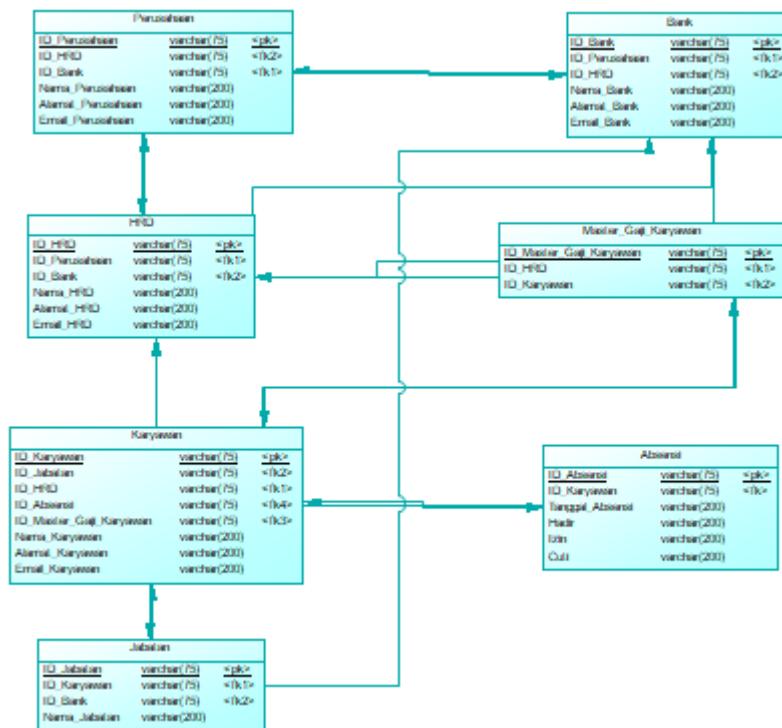
### 3. CONCEPTUAL DATA MODEL (CDM)

Conceptual Data Model (CDM) adalah tahap pertama dalam perancangan basis data yang lebih berfokus pada konsep dan pemahaman bisnis daripada implementasi teknis. CDM akan membangun gambaran konseptual tentang data yang akan disimpan dalam basis data. CDM membantu mengidentifikasi entitas kunci, atribut utama, dan hubungan antar entitas tanpa terlalu terikat pada aspek teknis.



#### 4. PHYSICAL DATA MODEL (PDM)

Physical Data Model (PDM) adalah merupakan tahap implementasi teknis dari desain database yang mengutamakan aspek teknis dan struktur penyimpanan data. Fokus utama PDM adalah merinci cara menyimpan dan mengelola data secara efisien dalam database atau sistem penyimpanan data yang sesuai. PDM membantu menghubungkan konsep bisnis yang didefinisikan dalam CDM dengan implementasi teknis yang dapat dijalankan dalam lingkungan teknologi tertentu.



#### 5. INTEGRASI STRUCTURED QUERY LANGUAGE (SQL)

Dalam tahap ini, kami akan mengintegrasikan konsep yang telah dibuat sebelumnya yakni PDM dengan SQL untuk diimplementasikan beberapa perintah SQL dan memasukkan data sample. Berikut merupakan praktek perintah SQL dalam rancangan sistem kami :

##### A. INSERT

Perintah SQL ini digunakan untuk melakukan entry atau penambahan suatu record pada table dalam basis data. Berikut ini merupakan aturan umum penulisan yang digunakan pada insert suatu table.

## ● Sintak pertama :

The screenshot shows the phpMyAdmin interface with the 'karyawan' table selected. The table has 10 rows of data. The columns are:

	id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan
1	3029-463d- 2db5e730a42fb	Raina Zulaka	Jalan Ciumbuleuit Batu, RI 85021	gadangpadmasari@example.net	76768d31-6bee- 42d2-9bd7- 12a5a14c8a91	01661c99- 42d2-9bd7- 12a5a14c8a91	32c41a31- 46fd-4aa4- 9a16-	7a67c1f5- 8147-4209- 9974-	14983cd-d b446b59a-c 1302e2ae1f
2	fde501db-fa51- cb35e879e0b6	Seadat Pudjastuti	Jalan Bangka Raya No. 40 Batu, KR 02383	kemal67@example.net	76768d31-6bee- 42d2-9bd7- 12a5a14c8a91	0558-42a6- 4506-7a44751	3c3b64048590	990127160951	
3	ff9ca058-eac- d36bc79e9b5	Ghalyati Prastut, M.M.	Gg. Pelajar Pejuang No. 25 Ambon, Kalimantan Barat ..	gamblangrahimah@example.org	76768d31-6bee- 42d2-9bd7- 12a5a14c8a91	016c4d11- 42d2-9bd7- 12a5a14c8a91	d154f7- 2623-4e41- b1f5-	48aa1e54- 0097-433d- 971c-	21fe7c0d-4; 679d3b246
4	ff7a128-ac70- 76c494b26205	Salsibila Sudati, S.I.Kom	Jalan Astana Anyar No. 23 Bandar Lampung, Kalimant	balamantiwasa@example.org	76768d31-6bee- 42d2-9bd7- 12a5a14c8a91	40773b16- 42d2-9bd7- 12a5a14c8a91	5b126c33- 9088-42b7- 91d7-	742e676f- 8b8dd-404a- a348699e1	
5	ffb6e5a9-9227- 4ac9-b6f- 4f9143ec3601	KH. Hardi Uwais, M.M.	Jalan Gedebage Selatan No. 937 Pekanbaru, Bengkulu..	jaswadimegarante@example.org	76768d31-6bee- 42d2-9bd7- 12a5a14c8a91	0160aa74- 42d2-9bd7- 12a5a14c8a91	01400032- b4b1-43e3- 8386-	2db404ad- 0618-450a- b142-	6791948b-9 c5500fe5db
6	ff5be41-88e- 511b771a29	Bella Putra, S.Kom	Gg. Kutai No. 2 Serong, KB 51294	bppermadi@example.org	76768d31-6bee- 42d2-9bd7- 12a5a14c8a91	3d14248b- 42d2-9bd7- 12a5a14c8a91	500af2a9- 8511-4299- 8f00-	30049e4- bd89-47dc- bbdb690f0	
7									
8									
9									
10									

The screenshot shows the phpMyAdmin interface with the SQL query editor open. The query is:

```
1 INSERT INTO karyawan
('id_karyawan', 'nama_karyawan', 'alamat_karyawan', 'email_karyawan', 'id_perusahaan', 'id_hrd', 'id_jabatan', 'id_absensi', 'id_master_gaji_karyawan') VALUES
('3211ty46f-195e-1084-a081-249e680e9445', 'Nashipp', 'Jl. Gunung Anyar Jaya III', 'nashipbelanegara@gmail.com', '76768d31-6bee-42d2-9bd7-12a5a14c8a91',
'7b90ec28-b90d-4b25-bd28-9addc7fe09a', '41077355-2f7e-406y-abc6-6ab3a35c241', 'dacd5e84-2f65-48f6-8fe1-90fp2q07t9b2', '720t072t-f53q-4ab7-902f-f73162f7e457')
```

The screenshot shows the phpMyAdmin interface for a database named 'sistem\_penggajian\_karyawan\_perusahaan'. The 'karyawan' table is selected. A SQL query has been run:

```
INSERT INTO karyawan ('id_karyawan', 'nama_karyawan', 'alamat_karyawan', 'email_karyawan', 'id_perusahaan', 'id_hrd', 'id_jabatan', 'id_absensi', 'id_master_gaji_karyawan') VALUES ('321ty46t-195e-1084-a081-249e689e9445', 'Nashipp', 'Jl. Gunung Aray Jaya III', 'nashipbelanegara@gmail.com', '76768d31-6bee-42d2-9bd7-12a5e14c8a91', '7b90ec28-b90d-4b25-bd28-9aaddc7fe09a', '418775b5-2fe7-406y-abc6-6ab3ba35c241', 'dacd5e84-2f85-48f6-8fe1-98fp2q07t9b2', '720t872t-f53q-4ab7-9d2f-f73162f7e457');
```

A message at the top indicates: "1 baris ditambahkan (Pencarian dilakukan dalam 0,0004 detik.)".

Hasil :

The screenshot shows the 'karyawan' table in phpMyAdmin. It contains two rows of data:

	id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan
1	321ty46t-195e-1084-a081-249e689e9445	Nashipp	Jl. Gunung Aray Jaya III	nashipbelanegara@gmail.com	76768d31-6bee-42d2-9bd7-12a5e14c8a91	7b90ec28-b90d-4b25-bd28-9aaddc7fe09a	418775b5-2fe7-406y-abc6-6ab3ba35c241	dacd5e84-2f85-48f6-8fe1-98fp2q07t9b2	720t872t-f53q-4ab7-9d2f-f73162f7e457
2	904bfac5-0fc0-45ee-a086-6e5ccb442715	Ellis Dabukke	Gg. Cikapayang No. 4 Probolinggo	anggebayanashiruddin@example.com	76768d31-6bee-42d2-9bd7-12a5a14c8a91	368b7b0d-2484-4cb2-b5bc-4401-51e57bb5244a	3794416a-bba4c428-9384-43d3-83796cbf85e	12a5a14c8a91	12a5a14c8a91

## ● Sintak kedua :

The screenshot shows the phpMyAdmin interface with the following details:

- Database:** sistem penggajian karyawan perusahaan
- Table:** karyawan
- SQL Query:**

```
1 INSERT INTO karyawan VALUES ('8314542425-0h32-4500-b9j3-9c5dc472f918', 'alfaro', 'jl. sememi indah','alfarotampang@gmail.com','76768d31-6bee-42d2-9bd7-12a5a14c8a91','522ee8d9-c921-4ffa-95af-f0429fce3bac','19adbd4-3f4f-44c0-95e8-73c69883b491','k021jn42-fcc6-4c00-8852-1e60c697be95','2j42a120F-2344-4717-bdff-6ba7776b9f79');
```
- Result Preview:** Shows the structure of the 'karyawan' table with columns: id\_karyawan, nama\_karyawan, alamat\_karyawan, email\_karyawan, id\_perusahaan, id\_hrd, id\_jabatan, id\_absensi, id\_master\_gaji\_karyawan.
- Buttons:** SELECT\*, SELECT, INSERT, UPDATE, DELETE, Bersihkan, Format, Get auto-saved query, Bind parameters, Markah kueri SQL ini: [text input], Pembatas, Tampilkan ulang perintah SQL, Menahan kotak kueri, Rollback when finished, Perbolehkan cek forign key, Kirim.

The screenshot shows the phpMyAdmin interface after the query has been executed:

- Message:** 1 baris ditambahkan (Pencarian dilakukan dalam 0,0004 detik.)
- Query Result:**

```
INSERT INTO karyawan VALUES ('8314542425-0h32-4500-b9j3-9c5dc472f918', 'alfaro', 'jl. sememi indah','alfarotampang@gmail.com','76768d31-6bee-42d2-9bd7-12a5a14c8a91','522ee8d9-c921-4ffa-95af-f0429fce3bac','19adbd4-3f4f-44c0-95e8-73c69883b491','k021jn42-fcc6-4c00-8852-1e60c697be95','2j42a120F-2344-4717-bdff-6ba7776b9f79');
```
- Buttons:** Edit dikotak, Ubah, Buat kode PHP.

Hasil :

The screenshot shows the phpMyAdmin interface with the database 'sistem penggajian karyawan perusahaan' selected. A query is running in the SQL tab:

```
Menampilkan baris 0 - 499 (total 502, Pencarian dilakukan dalam 0.0021 detik.) [id_karyawan 00E073BA-97C5-4BEC-91DF-3B6EFAE33736... - FFA7D128-AC70-46C5-ACBB-76C484B26205..]
SELECT * FROM `karyawan` ORDER BY `id_karyawan` ASC
```

The results table shows two rows of data:

id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan
8314542425-0h32-4500-b5d3-9c5dc4721918	alfaro	jl. sememi indah	alfarotampang@gmail.com	42d2-9bd7-12a5a14c8a01	522ee8d9-c921-4ff8-95ef-10429fce3bac	19adbd4-314f-44c0-95e8-73c69883b491	k021jn42-fcc6-4c00-8852-1e60c697b8e5	zj42a120-2344-4717-bdff-6ba7776b9f79

## B. SELECT

Perintah SQL ini digunakan untuk memilih record yang akan ditampilkan berdasarkan data pada table dalam basis data. Berikut ini merupakan aturan umum dan variasi penulisan yang digunakan pada select.

- Sintaks pertama :

The screenshot shows the phpMyAdmin interface with the database 'sistem penggajian karyawan perusahaan' selected. A SQL query is being run in the SQL tab:

```
Run SQL query/queries on table sistem penggajian karyawan perusahaan.karyawan:
```

```
1 SELECT `nama_karyawan`, `email_karyawan` FROM karyawan
```

The results pane on the right shows the structure of the 'karyawan' table:

id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan
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## Hasil :

The screenshot shows the phpMyAdmin interface for the 'sistem penggajian karyawan perusahaan' database. The left sidebar lists databases and tables, including 'Baru', 'information\_schema', 'mysql', 'performance\_schema', 'phpmyadmin', 'sistem penggajian karyawan perusahaan' (selected), 'Baru', 'absensi', 'bank', 'hrd', 'jabatan', 'karyawan' (selected), 'master\_gaji\_karyawan', and 'perusahaan'. The main panel displays the 'karyawan' table with 502 rows. A green message at the top says 'Menampilkan baris 0 - 24 (total 502, Pencarian dilakukan dalam 0.0004 detik)'. Below it is a SQL query: 'SELECT `nama\_karyawan`, `email\_karyawan` FROM karyawan;'. The results table shows columns 'nama\_karyawan' and 'email\_karyawan' with 24 rows of data.

### ● Sintaks kedua:

The screenshot shows the phpMyAdmin interface for the 'sistem penggajian karyawan perusahaan' database. The left sidebar lists databases and tables, including 'Baru', 'information\_schema', 'mysql', 'performance\_schema', 'phpmyadmin', 'sistem penggajian karyawan perusahaan' (selected), 'Baru', 'absensi', 'bank', 'hrd', 'jabatan', 'karyawan' (selected), 'master\_gaji\_karyawan', and 'perusahaan'. The main panel has a 'Run SQL query/queries on table sistem penggajian karyawan perusahaan.karyawan:' input field containing '1 SELECT \* FROM `karyawan`;'. To the right, a results grid shows the same 24 rows of employee data as the previous screenshot. Below the input field are buttons for 'SELECT\*', 'SELECT', 'INSERT', 'UPDATE', 'DELETE', 'Bersihkan', 'Format', 'Get auto-saved query', and 'Bind parameters'. At the bottom are checkboxes for 'Pembatas', 'Tampilkan ulang perintah SQL', 'Menahan kotak kueri', 'Rollback when finished', and 'Perbolehkan cek foreign key', followed by a 'Kirim' button.

## Hasil :

The screenshot shows the phpMyAdmin interface with the following details:

- Left sidebar:** Shows the database structure with tables: Baru, information\_schema, mysql, performance\_schema, phpmyadmin, sistem penggajian karyawan perusahaan, and test.
- Current Database:** sistem penggajian karyawan perusahaan
- Table:** karyawan
- Query Results:** A green message indicates "Menampilkan baris 0 - 24 (total 502, Pencarian dilakukan dalam 0,0003 detik)". The query used is "SELECT \* FROM `karyawan`;".
- Table Headers:** id\_karyawan, nama\_karyawan, alamat\_karyawan, email\_karyawan, id\_perusahaan, id\_hrd, id\_jabatan, id\_absensi, id\_master\_gaji.
- Data Preview:** The table displays 24 rows of employee data, including columns like ID, Name, Address, Email, Company ID, HR ID, Job ID, Absence ID, and Master Salary ID.

## C. UPDATE

Perintah SQL ini untuk mengubah data dalam suatu table pada field tertentu dengan record baru berdasarkan suatu field sebagai kriteria pengubahan record-nya.

The screenshot shows the phpMyAdmin interface with the following details:

- Left sidebar:** Shows the database structure with tables: Baru, information\_schema, mysql, performance\_schema, phpmyadmin, sistem penggajian karyawan perusahaan, and test.
- Current Database:** sistem penggajian karyawan perusahaan
- Table:** karyawan
- SQL Tab:** Contains the following UPDATE query:

```
1 UPDATE karyawan SET `nama_karyawan` = 'ramadhan', `alamat_karyawan` = 'jl. wiyung kramat' WHERE `id_karyawan` = '00e073ba-97c5-4bec-91df-3b6efae33736'
```
- Result Preview:** On the right, a preview of the table structure is shown with columns: id\_karyawan, nama\_karyawan, alamat\_karyawan, email\_karyawan, id\_perusahaan, id\_hrd, id\_jabatan, id\_absensi, and id\_master\_gaji\_karyawan.
- Bottom Buttons:** Includes buttons for SELECT, INSERT, UPDATE, DELETE, Bersihkan, Format, Get auto-saved query, Bind parameters, Simulasikan query, and Kirim.

The screenshot shows the phpMyAdmin interface with the following details:

- Database:** sistem\_penggajian\_karyawan\_perusahaan
- Table:** karyawan
- Query Result:** 1 baris terpengaruh (Pencarian dilakukan dalam 0,0003 detik)
- SQL Query:** UPDATE karyawan SET `nama\_karyawan` = 'ramadhan' , `alamat\_karyawan` = 'jl. wiung kramat' WHERE `id\_karyawan` = '00e073ba-97c5-4bec-91df-3b6efae33736';
- Buttons:** Edit dikotak, Ubah, Buat kode PHP

Hasil :

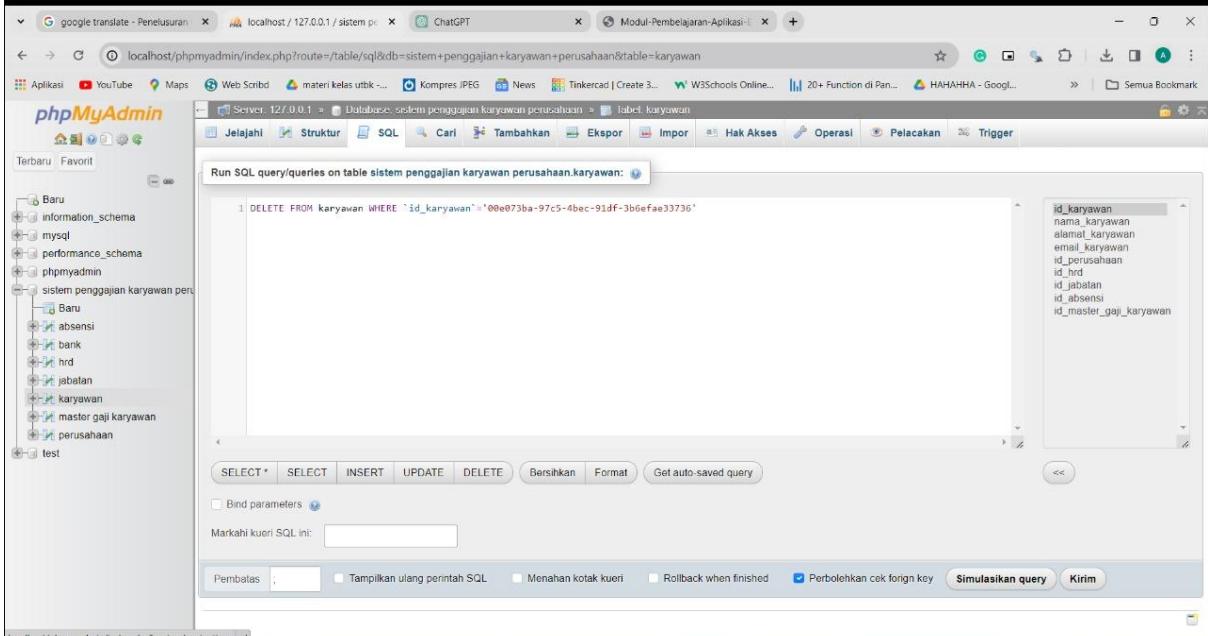
The screenshot shows the phpMyAdmin interface with the following details:

- Database:** sistem\_penggajian\_karyawan\_perusahaan
- Table:** karyawan
- Result Message:** Menampilkan baris 0 - 24 (total 502, Pencarian dilakukan dalam 0.0003 detik)
- SQL Query:** SELECT \* FROM `karyawan`
- Table Headers:** id\_karyawan, nama\_karyawan, alamat\_karyawan, email\_karyawan, id\_perusahaan, id\_hrd, id\_jabatan, id\_absensi, id\_master\_gaji\_karyawan
- Table Data:** (A single row is shown)

00e073ba-97c5-4bec-91df-3b6efae33736	ramadhan	jl. wiung kramat	balamantri63@example.org	42d2-9bd7-8832-12a5a14c8a91	76708d31-6bee-3633-4966-a784-356965629405	91bc5ac3-3633-4966-7bf4-44ec-de53-4ef6-a490	435ddb1c-3633-4966-8832-a784-1ac21949-75ac-48fc-8e-bebdfe095392	617a70db-3633-4966-8832-a784-1ac21949-75ac-48fc-8e-bebdfe095392
--------------------------------------	----------	------------------	--------------------------	-----------------------------	---	---	---	---
- Buttons:** Profil, Edit dikotak, Ubah, Jelaskan SQL, Buat kode PHP, Segarkan
- Operasi hasil kuery:** Cetak, Salin ke clipboard, Eksport, Tampilkan bagian, Buat tampilan
- Markah kuery SQL ini:**
- Checkboxes:** Izinkan semua pengguna untuk mengakses markah ini

## D. DELETE

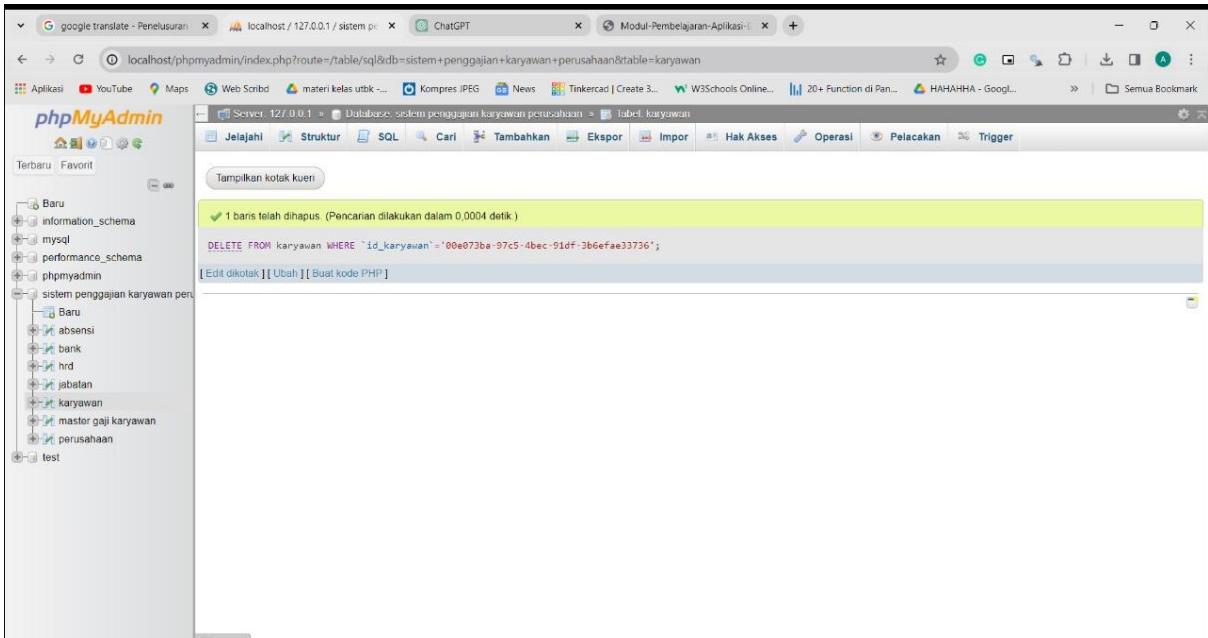
Perintah SQL ini digunakan untuk menghapus data dalam suatu table, berdasarkan suatu field sebagai kriteria penghapusan record-nya



The screenshot shows the phpMyAdmin interface for a database named 'sistem penggajian karyawan perusahaan'. The left sidebar lists tables: Baru, information\_schema, mysql, performance\_schema, phpmyadmin, sistem penggajian karyawan perusahaan, and test. The 'karyawan' table is selected in the main area. A SQL query window contains the command:

```
1 DELETE FROM karyawan WHERE `id_karyawan`='00e073ba-97c5-4bec-91df-3b6efae33736'
```

To the right of the query window is a table structure for 'karyawan' with columns: id\_karyawan, nama\_karyawan, alamat\_karyawan, email\_karyawan, id\_perusahaan, id\_hrd, id\_jabatan, id\_absensi, and id\_master\_gaji\_karyawan. Below the query window are buttons for SELECT\*, SELECT, INSERT, UPDATE, DELETE, Bersihkan, Format, Get auto-saved query, Bind parameters, Markahi kueri SQL ini, and checkboxes for Tampilkan ulang perintah SQL, Menahan kotak kueri, Rollback when finished, Perbolehkan cek foreign key, Simulasikan query, and Kirim.



The screenshot shows the same phpMyAdmin interface after the query has been executed. The message 'Tampilkan kotak kueri' is visible. The main area displays the result of the delete operation:

```
✓ 1 baris telah dihapus. (Pencarian dilakukan dalam 0,0004 detik)
```

```
DELETE FROM karyawan WHERE `id_karyawan`='00e073ba-97c5-4bec-91df-3b6efae33736';
```

Below the message are buttons for Edit dikotak, Ubah, and Buat kode PHP. The bottom of the screen shows a 'Konsol' tab.

## Hasil :

The screenshot shows the phpMyAdmin interface for a MySQL database named 'sistem\_penggajian\_karyawan\_perusahaan'. The current table is 'karyawan'. The results of a SELECT query are displayed, showing 501 rows. The columns listed are id\_karyawan, nama\_karyawan, alamat\_karyawan, email\_karyawan, id\_perusahaan, id\_hrd, id\_jabatan, id\_absensi, and id\_master\_gaji\_karyawan. The interface includes various navigation and management tools typical of a database administration tool.

## EKSPLORASI PERINTAH SQL

### A. WHERE DENGAN SELECT

Where ini digunakan untuk melakukan seleksi pada record, yang sesuai dengan syarat suatu kriteria pada suatu kondisi perintah SQL. Pada table 6.1 disajikan operator matematika yang digunakan oleh klausa where.

The screenshot shows the phpMyAdmin interface. In the left sidebar, the database 'sistem penggajian karyawan perusahaan' is selected. The main area contains a SQL query editor with the following code:

```
1 SELECT * FROM karyawan WHERE `nama_karyawan`='Puti Victoria Rajasa';
```

On the right, a results grid displays the following data:

	id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan
1	99f06535-4dd7-4712-83d3-47926da0c66a	Puti Victoria Rajasa	Gg. Moch. Taha No. 190 Batu, Kalimantan Barat 4641...	agnesmarbun@example.net	76768d31-6bee-4d34-4a2b-12a5a14c8a01	6a3ff104-06a1cf9f-d434-4a2b-7253-4623-b200-aa86-74ab6cb1c9b	c1f1ad0b-06a1cf9f-b0db-4a71-bbe0-c6d8ba260b23	92614ac6-12cb-4479-bt29aea519f1e7d	9c632b3f7bb8

Hasil :

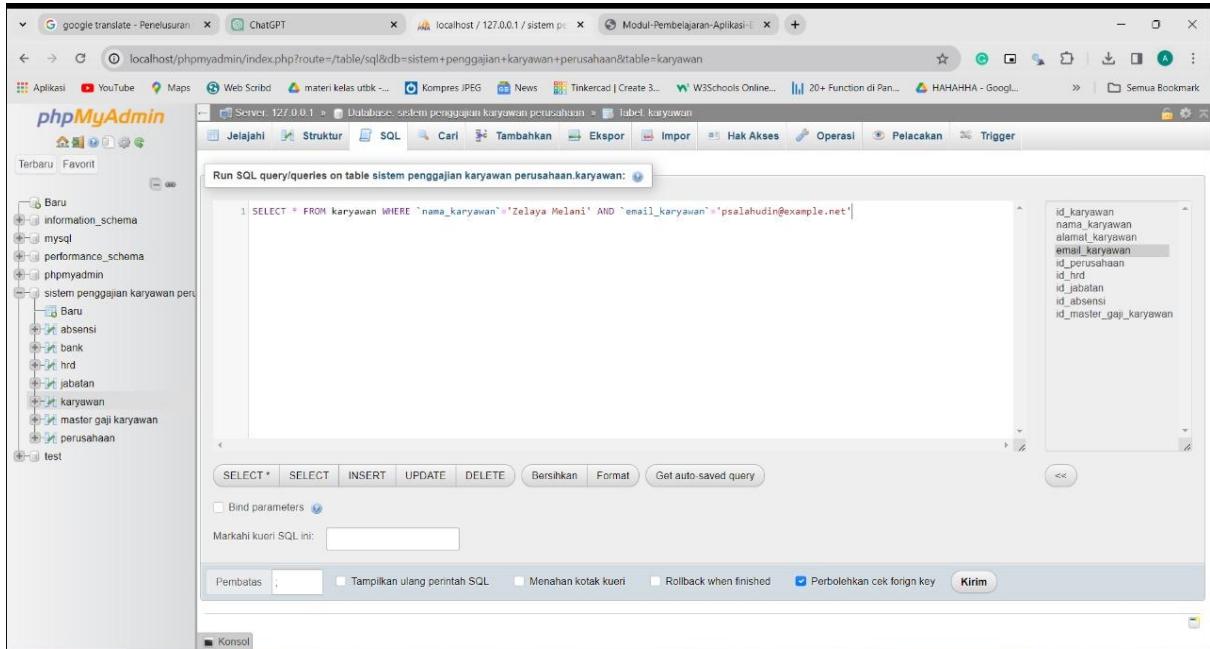
The screenshot shows the phpMyAdmin interface after executing the SQL query. The results are displayed in a grid:

	id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan
1	99f06535-4dd7-4712-83d3-47926da0c66a	Puti Victoria Rajasa	Gg. Moch. Taha No. 190 Batu, Kalimantan Barat 4641...	agnesmarbun@example.net	76768d31-6bee-4d34-4a2b-12a5a14c8a01	6a3ff104-06a1cf9f-d434-4a2b-7253-4623-b200-aa86-74ab6cb1c9b	c1f1ad0b-06a1cf9f-b0db-4a71-bbe0-c6d8ba260b23	92614ac6-12cb-4479-bt29aea519f1e7d	9c632b3f7bb8

## B. OPERATOR LOGIKA AND, OR DAN NOT

Operator logika and dan or digunakan untuk menggabungkan seleksi pada record yang syaratnya lebih dari satu kondisi. Pada operator logika, not digunakan untuk negasi dari kondisi tersebut.

### • LOGIKA AND



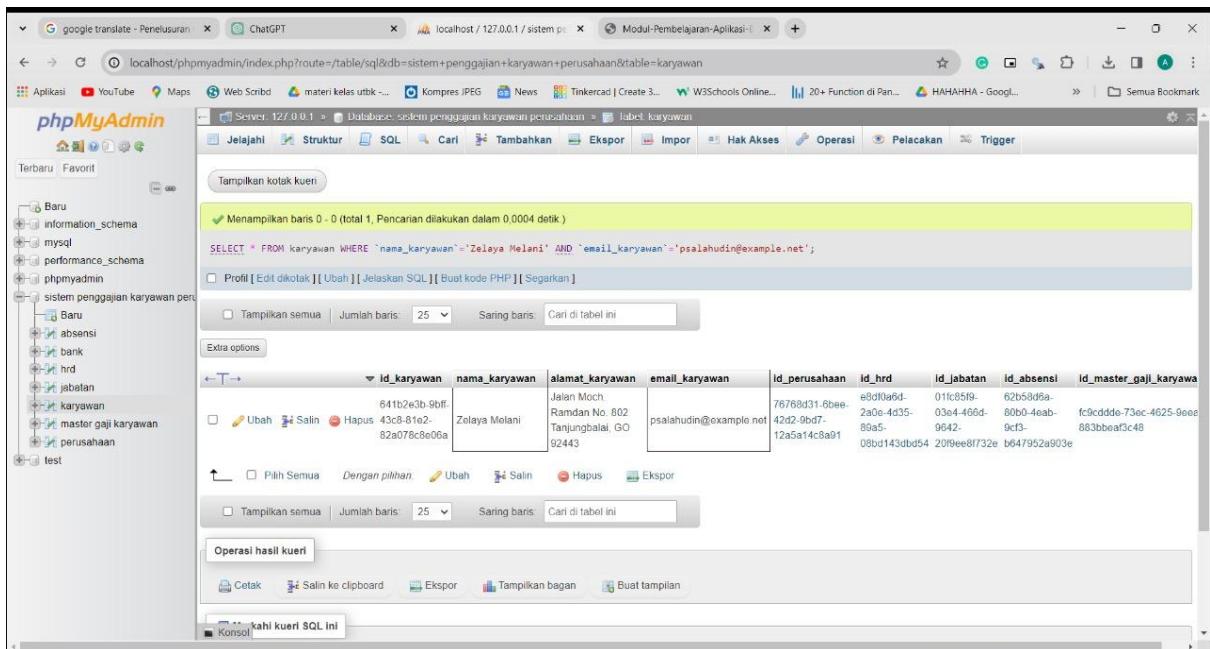
The screenshot shows the phpMyAdmin interface. In the left sidebar, under the 'sistem penggajian karyawan perusahaan' schema, the 'karyawan' table is selected. The main area displays a SQL query:

```
1. SELECT * FROM karyawan WHERE `nama_karyawan`='Zelaya Melani' AND `email_karyawan`='psalahudin@example.net'
```

The results pane on the right shows the following data:

id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan
641b2e3b-9bff-43c8-81e2-82a078c8e06a	Zelaya Melani	Jalan Moch Ramdan No. 802 Tanjungbalai, GO	psalahudin@example.net	76768d31-6bee-42d2-9bd7-12a5a14c8a91	e8df0a9d-2a0e-4d35-80b0-4eab-08bd143dbd54	011c85f9-3a0e-465d-86b0-4eab-08bd143dbd54	62b58d6a-89a5-4c42-9642-9cf3-08bd143dbd54	fc9cddd-e73ec-4625-9eee-883bbeaf3c48

Hasil :



The screenshot shows the phpMyAdmin interface after executing the SQL query. The results pane displays the following message:

Menampilkan baris 0 - 0 (total 1, Pencarian dilakukan dalam 0.0004 detik)

The SQL query is repeated:

```
SELECT * FROM karyawan WHERE `nama_karyawan`='Zelaya Melani' AND `email_karyawan`='psalahudin@example.net';
```

The results table shows one row of data:

id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan
641b2e3b-9bff-43c8-81e2-82a078c8e06a	Zelaya Melani	Jalan Moch Ramdan No. 802 Tanjungbalai, GO	psalahudin@example.net	76768d31-6bee-42d2-9bd7-12a5a14c8a91	e8df0a9d-2a0e-4d35-80b0-4eab-08bd143dbd54	011c85f9-3a0e-465d-86b0-4eab-08bd143dbd54	62b58d6a-89a5-4c42-9642-9cf3-08bd143dbd54	fc9cddd-e73ec-4625-9eee-883bbeaf3c48

## ● LOGIKA OR

The screenshot shows the phpMyAdmin interface. In the left sidebar, the database structure for 'sistem pengajaran karyawan perusahaan' is visible, including tables like 'Baru', 'karyawan', and 'master\_gaji\_karyawan'. The main area shows a SQL query:

```
1. SELECT * FROM karyawan WHERE `nama_karyawan`='Ami Rajasa' OR `id_hrd`='539307bf-6f32-4dbe-99e9-12702fe1481a'
```

The results pane on the right displays the columns for the 'karyawan' table, which include:

- id\_karyawan
- nama\_karyawan
- alamat\_karyawan
- email\_karyawan
- id\_perusahaan
- id\_hrd
- id\_jabatan
- id\_absensi
- id\_master\_gaji\_karyawan

Below the query, there are tabs for SELECT\*, SELECT, INSERT, UPDATE, DELETE, Bersihkan, Format, Bind parameters, and Get auto-saved query. At the bottom, there are buttons for Kembalikan, Tampilkan ulang perintah SQL, Menahan kotak kueri, Rollback when finished, Perbolehkan cek foreign key, and Kirim.

Hasil :

The screenshot shows the phpMyAdmin interface with the results of the previous query. The results table displays two rows of data from the 'karyawan' table:

	<b>id_karyawan</b>	<b>nama_karyawan</b>	<b>alamat_karyawan</b>	<b>email_karyawan</b>	<b>id_perusahaan</b>	<b>id_hrd</b>	<b>id_jabatan</b>	<b>id_absensi</b>	<b>id_master_gaji_karyawan</b>
<input type="checkbox"/>	22e0a035c-2e61410c-ba04-b48a0b448fa1	Ami Rajasa	Gang Pasteur No. 784 Lhokseumawe, AC	raden73@example.org	9e581129-9e8a0851-c5367fb-2660-4748-d97e-41c3-034bf619-7ff6-4250-b1fa-8aeaf7aaee02	42d2-9bd7-95b8-b05d-5b0b0e41363d	12a5a14c8a91	359307bf-6f32-4dbe-99e9-12702fe1481a	1a80cac13c83
<input type="checkbox"/>	33794131-361d-4da5-b917-1d11f18d3e5e	T. Saiful Siregar, M. Farm	Jalan Cikutra Barat No. 8 Kota Administrasi Jakarta..	ssaputra@example.com	76760d31-6bea-8332-4dbe-99e9-50672d80cc77	42d2-9bd7-95b8-b05d-4562-a6b0-98a3-	12a5a14c8a91	12702fe1481a	c7c73737-e47d-4535-a420-3f84cf0b441d

Below the table, there are buttons for Pilih Semua, Dengan pilihan:, Ubah, Salin, Hapus, and Eksport. There are also filters and sorting options at the bottom.

#### • LOGIKA NOT

The screenshot shows the phpMyAdmin interface with the following details:

- Left Panel (Database Structure):** Shows the database structure with the 'sistem penggajian karyawan perusahaan' database selected. Under it, there are tables: Baru, information\_schema, mysql, performance\_schema, phpmyadmin, and test.
- Top Bar:** Shows the URL as `localhost/phpmyadmin/index.php?route=/table/sql&db=sistem+penggajian+karyawan+perusahaan&t=table=karyawan`. The tabs include Jelajah, Struktur, SQL, Caril, Tambahkan, Eksport, Import, Hak Akses, Operasi, Pelacakan, and Trigger.
- SQL Query Editor:** The query entered is: `SELECT * FROM karyawan WHERE NOT `id_hrd`='32dbe08b-d9bc-473f-b225-571b609fdbf1'`. The results pane on the right shows the following columns:
  - id\_karyawan
  - nama\_karyawan
  - alamat\_karyawan
  - email\_karyawan
  - id\_perusahaan
  - id\_hrd
  - id\_jabatan
  - id\_absensi
  - id\_master\_gaji\_karyawan
- Buttons at the bottom:** SELECT\*, SELECT, INSERT, UPDATE, DELETE, Bersihkan, Format, Get auto-saved query, Bind parameters, Markahi kueri SQL ini: (with a text input field), Pembatas (with dropdown menu), Tampilkan ulang perintah SQL, Menahan kotak kueri, Rollback when finished, Perbolehan cek foreign key, and Kirim.

Hasil :

The screenshot shows a browser window with several tabs open:

- Google Translate - Penelusuran
- ChatGPT
- localhost / 127.0.0.1 / sistem pc
- Modul-Pembelajaran-Aplikasi-I

The main content area displays the phpMyAdmin interface for the 'sistem pengajuan karyawan perusahaan' database:

- Left sidebar:** Shows the database structure with tables: Baru, information\_schema, mysql, performance\_schema, phpmyadmin, and sistem pengajuan karyawan perusahaan.
- Top navigation:** Includes links for Jelajahi, Struktur, SQL, Cari, Tambahkan, Eksport, Import, Hak Akses, Operasi, Pelacakan, and Trigger.
- Central area:**
  - A message box says "Menampilkan baris 0 - 24 (total 500, Pencarian dilakukan dalam 0.0003 detik)".
  - SQL query: `SELECT * FROM karyawan WHERE NOT `id_hrd`='32dbe08b-d9bc-473f-b225-5718b609dbf1';`
  - Buttons: Profil, Edit dikotak, Ubah, Jelaskan SQL, Buat kode PHP, Segarkan.
  - Table results:

	Id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji
<input type="checkbox"/>	013df08e-f8ff-4fcf-b37c-0eb5e00259c	Hj Vicky Marbun	Gang Champelas No. 03	gawati03@example.net	7678bd31-6bee-467b-a042-83211c138add	42d2-9bd7-12a5a14c8a91	9c7c7dcf-01e5-4aa9-4c21-bb64-b120-274a37725f16	30113199-59096341-44a9-4c21-9000-42ad-81b35c463696	711728d6-b1f2-81b35c463696
<input type="checkbox"/>	01kd8f0l-77f7-4fa0-a656-029a19be97	Tgk Hana Uyainah, S.Sos	Jl. Jamika No. 146 Melalobah, Aceh	saragihnyana@example.com	76789d31-6bee-4d2d-9bd7-a715-1995160505d	d93a-4799-42d6-4f06-a715-97f1-875-31351f426bb	1a625240-506f-4f06-6226-42da-acd09fd7c7b8-29d97ed1ae4c	300f73e9-6226-42da-acd09fd7c7b8-94b4686b20b	
<input type="checkbox"/>	0241df3e-238d-482b-a93f-14585df6878	T. Ganda Saptono	Jalan Kutisari Selatan No. 427 Batam, Nusa Tenggar...	mala08@example.com	7678bd31-6bee-42d2-9bd7-12a5a14c8a91	c36e1d0a-99ea-415-52604490-d2fa-49fe-b211-4482-0401-4616-5bfe8d0550	99ea1d0a-99ea-415-52604490-d2fa-49fe-b211-4482-0401-4616-5bfe8d0550	0d28a20e-ed2f-bd5d54a76780	
<input type="checkbox"/>	03019eed-0c52-4926-b506-064b99bb0024	Gaduh Siregar, M.M.	Gg. Jamika No. 8 Tual, KB 66952	pudjiastuti.elma@example.com	7678bd31-6bee-42d2-9bd7-12a5a14c8a91	b2c7-e07ccf-3e22aa735b41-3d00d68d50c3-5bfe8d0550	1b57fd9b-0fe8-4d3c-49f7-4a16-1e97-25363c201-8c87fe07ccf	eab7f992-37507fb1-0fe8-4d3c-49f7-4a16-1e97-25363c201-3e22aa735b41-3d00d68d50c3-5bfe8d0550	dc76789c-7558-97435526d62
<input checked="" type="checkbox"/>	Konsol								
  - Buttons: Tampilkan semua, Jumlah baris: 25, Saring baris: Cari di tabel ini, Sort by key: Tidak ada.
  - Extra options button.

## C. Between Dan Not Between

Between digunakan untuk mengolah data suatu nilai dalam range tertentu. Not between merupakan negasinya, yaitu mengolah suatu nilai diluar dari range yang telah ditentukan.

### • BETWEEN

The screenshot shows the phpMyAdmin interface. In the left sidebar, under the 'sistem penggajian karyawan perusahaan' database, the 'karyawan' table is selected. In the main area, the SQL tab contains the following query:

```
1. SELECT * FROM karyawan WHERE `id_karyawan` BETWEEN 1 AND 20000
```

To the right of the query, there is a results grid showing the following data:

id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan
361f3199-	Hj. Vicky Marbun	Gang Champelas No. 03	gawati83@example.net	76768d31-6bee-	9c7c7dc10e5	4aa9-4c21-	9006-42ad-	59068341- 4cbf837c 0ebc5e00259c
467b-a942-	Tgk. Hana Uyainah, S.Sos	Jl. Jamika No. 146 Meulaboh, Aceh	saragihnyana@example.com	42d2-9b07-	a715-	b64-	b120-	81b35c463686
83211c138a01	T. Ganda Saptomo, M.Farm	Jalan Kutisari Selatan No. 427 Batam, Nusa Tenggar...	mala08@example.com	12a5a14c8a01	1905160505d	313515426bb	29d97ed1ae4c	274a37725f16 80ceb4bf715b
303305ca-	Gaduh Siregar, M.M.	Gg. Jamika No. 8 Tual, KB 66952	pudjiastutiema@example.com	42d2-9b07-	3d000d0d850c3	5bfe88d0550	0d28e20e-ed2f b211-4482-	300f139- a065-4106 6226-42da acd09fc1-c7b8 971- 875- 94b446cb26b
919ea105-				12a5a14c8a01	3e22aa735641	1b577d9-	040f-4616- 9d08- b6d564a76180	eb077992- 375f07fb-2f66 6527-4c36- dc76789c-7559 aa14- 3e9fc4ebf3b9

Hasil :

The screenshot shows the results of the SQL query in the phpMyAdmin interface. The results grid displays 251 rows of data from the 'karyawan' table where the 'id\_karyawan' column value is between 1 and 20000. The columns shown are: id\_karyawan, nama\_karyawan, alamat\_karyawan, email\_karyawan, id\_perusahaan, id\_hrd, id\_jabatan, id\_absensi, and id\_master\_gaji\_karyawan. The results are paginated at the bottom of the grid.

## ● NOT BETWEEN

The screenshot shows the phpMyAdmin interface. In the left sidebar, under the 'sistem penggajian karyawan perusahaan' schema, the 'karyawan' table is selected. In the main area, the 'SQL' tab is active, displaying the following query:

```
1. SELECT * FROM karyawan WHERE `id_karyawan` NOT BETWEEN 1 AND 20000
```

Below the query, the results are shown as a table:

id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan
038e2410-7b03-43a0-aff1-e56330f505eb	Genta Marbun	Jalan Kendalsari No 6 Bakasi, Sulawesi Tengah 745.	wrahimah@example.net	7678bd31-6bee-42d2-9bd7-12a5a14c8a01	420e1c4a-a589db07-3de1-44ff-42d2-9bd7-9b22-dc264c2f6e1	420e1c4a-a589db07-3de1-44ff-4bd8-45ae-9afdf-b9ac-38ceaaacd244	c7c89374-ff6845ae-4bfb-4355-4ac2655-3208-b9ac-4b1cb17591f5-cb4ded1fc04	
0641550a-0e3e-49cb-ab81-d4c705518632	T Liman Wibowo, S.Kom	Og. Rungkul Industri No. 4 Jayapura, NB 99560	balamantri74@example.org	7678bd31-6bee-42d2-9bd7-12a5a14c8a01	00ea4814-420e1c4a-a589db07-3de1-44ff-42d2-9bd7-90e1-00ea4814	67760a3e-1cc4-3c1-9cbe-415e-b01309d4-9cf-b046-d74406d1bc4	fe7435e9-9cbe-415e-b01309d4-9cf-b046-2fabab6522149	
07742e19-7d11-4a40-b603-1462710786cc	Rina Hassanah	Gg. Monginsidi No 208 Bandar Lampung, KB 41285	chutagalung@example.com	7678bd31-6bee-42d2-9bd7-12a5a14c8a01	21cb5eac-7d9d12879b3-420e1c4a-a589db07-3de1-44ff-42d2-9bd7-956c-21cb5eac-7d9d12879b3	59bb8118-e44b7b0b-11cc43c1-9cbe-415e-b01309d4-9cf-b046-ba4fd53cbe34	b7d9d12879b3-d74406d1bc4-4ba4fd53cbe34	
0a990da6-097b-4ca4-8a48-13dd865c1taf	Putri Pranowo, S.I.Kom	Gg. Yos Sudarso No. 57 Temate, BT 95423	lasmantosantoso@example.net	7678bd31-6bee-42d2-9bd7-12a5a14c8a01	22845ee1-3e594829-cdbb-4aa1-ae38-3e594829-cdbb-4aa1-6b91-407d-158045bf-a5bc-b624-dabc89b04d8f	9049027-69de0cac-42d2-9bd7-1393-4a86-c7e1-49d4-0a96c2ec-39e-bba4-3e35c8568c5f	22845ee1-3e594829-cdbb-4aa1-ae38-3e594829-cdbb-4aa1-6b91-407d-158045bf-a5bc-b624-8789-87826d6fd8c4	

Hasil :

The screenshot shows the phpMyAdmin interface with the results of the query in the 'Results' tab. The results table is identical to the one shown in the SQL tab, displaying 25 rows of data from the 'karyawan' table where the 'id\_karyawan' column does not fall between 1 and 20000.

- NOT BETWEEN DENGAN LOGIKA AND

The screenshot shows the phpMyAdmin interface with the following details:

- Left sidebar:** Shows the database structure for the 'sistem penggajian karyawan perusahaan' database, including tables like 'Baru', 'absensi', 'bank', 'hrd', 'jabatan', 'karyawan', 'master\_gaji\_karyawan', and 'perusahaan'.
- Top navigation:** Shows tabs for 'Jelajahi', 'Struktur', 'SQL', 'Cari', 'Tambahkan', 'Eksport', 'Import', 'Hak Akses', 'Operasi', 'Pelacakan', and 'Trigger'. The 'SQL' tab is active.
- SQL Query Editor:**
  - Query text: `SELECT \* FROM karyawan WHERE `nama\_karyawan` NOT BETWEEN 'Eja Nababan' AND 'Fathonah Kuswandari' ORDER BY `nama\_karyawan`;
  - Result pane on the right shows the structure of the 'karyawan' table with columns: id\_karyawan, nama\_karyawan, alamat\_karyawan, email\_karyawan, id\_perusahaan, id\_hrd, id\_jabatan, id\_absensi, and id\_master\_gaji\_karyawan.
  - Buttons at the bottom include: SELECT\*, SELECT, INSERT, UPDATE, DELETE, Bersihkan, Format, Get auto-saved query, Bind parameters, Markah kueri SQL ini:, Pembatas, Tampilkan ulang perintah SQL, Menahan kotak kueri, Rollback when finished, Perbolehkan cek foreign key, and Kirim.

Hasil :

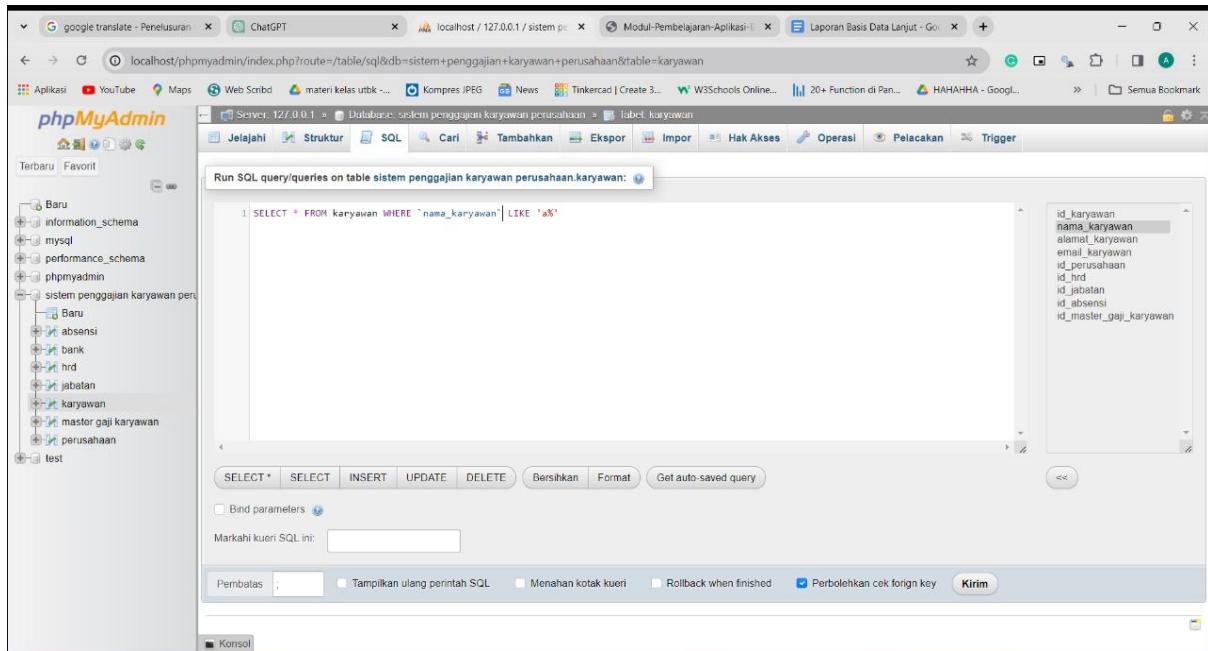
The screenshot shows the phpMyAdmin interface with the following details:

- Left sidebar:** Shows the database structure for the 'sistem penggajian karyawan perusahaan' database, including tables like 'Baru', 'absensi', 'bank', 'hrd', 'jabatan', 'karyawan', 'master\_gaji\_karyawan', and 'perusahaan'.
- Top navigation:** Shows tabs for 'Jelajahi', 'Struktur', 'SQL', 'Cari', 'Tambahkan', 'Eksport', 'Import', 'Hak Akses', 'Operasi', 'Pelacakan', and 'Trigger'. The 'Results' tab is active.
- Results Tab:**
  - Message: "Menampilkan baris 0 - 24 (total 476, Pencarian dilakukan dalam 0.0000 detik) [nama\_karyawan: ADE MANDALA... - ATMAJA BUDIMAN, M.PD.]
  - Query text: `SELECT \* FROM karyawan WHERE `nama\_karyawan` NOT BETWEEN 'Eja Nababan' AND 'Fathonah Kuswandari' ORDER BY `nama\_karyawan`;
  - Buttons: Profil [ Edit dikotak ], [ Ubah ], [ Jelaskan SQL ], [ Buat kode PHP ], [ Segarkan ].
  - Table view showing 25 rows of data from the 'karyawan' table. The columns are: id\_karyawan, nama\_karyawan, alamat\_karyawan, email\_karyawan, id\_perusahaan, id\_hrd, id\_jabatan, id\_absensi, and id\_master\_gaji\_karyawan.
  - Bottom status bar: "localhost/phpmyadmin/index.php?route=/sql&db=sistem+penggajian+karyawan+perusahaan..."

#### D. Like Dan Not Like

Like digunakan untuk mencari suatu teks yang sesuai berdasarkan kata depan (prefix), kata tengah (infix), kata akhir (suffix). Not like merupakan pernyataan negasinya, yaitu mencari suatu teks yang tidak sesuai dengan kriteria like.

- LIKE (a%)



Hasil :

- LIKE (%hot%)

The screenshot shows the phpMyAdmin interface connected to a MySQL database named 'sistem\_penggajian\_karyawan\_perusahaan'. The left sidebar lists databases and tables. The main area contains a SQL query editor with the following content:

```
1 SELECT * FROM karyawan WHERE `nama_karyawan` LIKE '%shot%'
```

Below the query, there are several buttons: SELECT\*, SELECT, INSERT, UPDATE, DELETE, Bersihkan, Format, Get auto-saved query, Bind parameters, and Markahi kueri SQL ini: [input field]. At the bottom, there are checkboxes for Pembatas, Tampilkan ulang perintah SQL, Menahan kotak kueri, Rollback when finished, Perbolehan cek foreign key, and Kirim. To the right, a vertical panel displays the structure of the 'karyawan' table, listing columns: id\_karyawan, nama\_karyawan, alamat\_karyawan, email\_karyawan, id\_perusahaan, id\_hrd, id\_jabatan, id\_absensi, and id\_master\_gaji\_karyawan.

Hasil :

The screenshot shows a browser window with several tabs open. The tabs include "google translate - Penelusuran", "ChatGPT", "localhost / 127.0.0.1 / sistem per", "Modul-Pembelajaran-Aplikasi-i", "Laporan Basis Data Lanjut - Go...", and others. The main content area is a MySQL database management tool (phpMyAdmin) connected to "localhost:127.0.0.1". The database selected is "sistem penggajian karyawan perusahaan". The current table is "karyawan". The interface includes a sidebar with database and schema navigation, a toolbar with various functions like "Jelajahi", "Struktur", "SQL", "Cari", etc., and a main query editor with results and a results grid below.

Tampilan kotak kueri

Menampilkan baris 0 - 3 (total 4, Pencarian diakukan dalam 0.0005 detik)

```
SELECT * FROM karyawan WHERE `nama_karyawan` LIKE "%shot%";
```

Profil [ Edit dikotak ] [ Ubah ] [ Jelaskan SQL ] [ Buat kode PHP ] [ Segarkan ]

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

Extra options

	id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan
<input type="checkbox"/>	4b34aff-6617-009e-4f69-9487-b099d656711	Faizah Sihotang, S.H.	Gg. S. Parman No. 116 Magelang, Kalimantan Selatan..	7678bd31-6bee@gand38@example.net	4202-9bd7-12a5a14c8a91	009b2567-85cc-47e8-b264-96fc90414515737b	b55be819-56f9-49ba-8067-43e2-e045e22d7ca	c8f38eeb-4f67-466e-8b91-670b17b652a7	e0c09346af6f
<input type="checkbox"/>	e1efbd03-3cfb-009e-4470-ab4a-1f69214343ba	Kawaya Sihotang	Jalan Kiaracondono No 2 Lubuklinggau, SN 57829	7678bd31-6bee@osimbonlon@example.org	4202-9bd7-12a5a14c8a91	c6169e8-096e-41ff-b240-4044-8bd2-c7015ebd10ca	1d3ab574-62ea-4e6e-8061-57d7a8a9996a	d8d3ff4a-f671-18a123e8-ac7-421c-968f70263e08c0	f1864ff8c02
<input type="checkbox"/>	ea0f62c-0913-009e-4a77-97f0-b3b4cb8ae265	Tami Sihotang	Gang Veteran No. 60 Magelang, JT 11590	7678bd31-6bee@wahyu78@example.net	4202-9bd7-12a5a14c8a91	e4de75e1-934b-4d46-9237-a582758fb7ca	763087dc-58aa-4241-5192-476a	f9d31c82-f5f8-4b2c-a240-13c2948d7aba	f3c2948d7aba
<input type="checkbox"/>	f18bd14a-d9d6-40d5-9281-1b8a14c8a91	Violet Sihotang	Gang Wonoayu No. 84 Bandar Lampung,	7678bd31-6bee@umaya05@example.org	4202-9bd7-12a5a14c8a91	72a5bc84-8cb6-4bc3-98da-04e2-4753	f8b7cf8-8cb6-4bc3-98da-04e2-4753	b7783b72-35c2-4afe-a954-4412b411c8	b7783b72-35c2-4afe-a954-4412b411c8

- LIKE (\_lon%)

Run SQL query/queries on table sistem penggajian karyawan perusahaan.karyawan:

```
1. SELECT * FROM karyawan WHERE `nama_karyawan` LIKE '_lon%'
```

id\_karyawan nama\_karyawan alamat\_karyawan email\_karyawan id\_perusahaan id\_hrd id\_jabatan id\_absensi id\_master\_gaji\_karyawan

id\_karyawan nama\_karyawan alamat\_karyawan email\_karyawan id\_perusahaan id\_hrd id\_jabatan id\_absensi id\_master\_gaji\_karyawan

SELECT \* SELECT INSERT UPDATE DELETE Bersihkan Format Get auto-saved query Bind parameters Markah kueri SQL ini: Pembatas Tampilkan ulang perintah SQL Menahan kotak kueri Rollback when finished Perbolehkan cek foreign key Kirim Konsol

Hasil :

Tampilkan kotak kueri

Menampilkan baris 0 - 0 (total 1, Pencarian dilakukan dalam 0.0004 detik)

SELECT \* FROM karyawan WHERE `nama\_karyawan` LIKE '\_lon%'

	<b>id_karyawan</b>	<b>nama_karyawan</b>	<b>alamat_karyawan</b>	<b>email_karyawan</b>	<b>id_perusahaan</b>	<b>id_hrd</b>	<b>id_jabatan</b>	<b>id_absensi</b>	<b>id_master_gaji_karyawan</b>
	537ebc4f- b312-41ce- a898- 9bef3ef637cc	Elon Siregar	Gg. Tebel Barat Dalam No. 03 Kota Administrasi Jak...	vhutasoit@example.org	76768d31-8bee- 42d2-9bd7- 12a5a14c8a91	d2421847- 0524-6999- 871c-	7effa588- 036e-475c- a1cb-	63808947- 1196-43c2- 8c78-	dd34dde1-42f3-42ac-8921- d6a033a4f507

Pilih Semua Dengan pilihan: Ubah Salin Hapus Eksport

Cetak Salin ke clipboard Eksport Tampilkan bagan Buat tampilan

Kembali kueri SQL ini Konsol

- NOT LIKE (\_lon%)

The screenshot shows the phpMyAdmin interface. In the left sidebar, the database 'sistem penggajian karyawan perusahaan' is selected. In the main area, the 'SQL' tab is active. A query is entered in the text area:

```
1. SELECT * FROM karyawan WHERE `nama_karyawan` NOT LIKE '_lon%'
```

To the right of the query, a results grid shows the structure of the 'karyawan' table:

	id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan
--	-------------	---------------	-----------------	----------------	---------------	--------	------------	------------	-------------------------

Hasil :

The screenshot shows the phpMyAdmin interface with the results of the query. The results are displayed in a table:

	id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji
1	013d0bae0f-ef0f-4cbf-837c-0ebc5e09259c	Hj Vicki Marbun	Gang Champelas No. 03	gawati83@example.net	76768d31-6bee-42d2-9bd7-12a5a14c8a91	f9c77dc10e5-46b7-a942-bb64-	3013199-4aa9-4c21-b120-	5900634f-81b35c463680	711728d8-b112-80ceb4bf715b
2	01fd80f7-77f7-4eb4-a66c-629a519ebef7	Tgk Hana Uyainah, S.Sos	Jl. Jamika No. 146 Meulaboh, Aceh	zaragihnyana@example.com	76768d31-6bee-42d2-9bd7-12a5a14c8a91	d93a-4799-4f06-4f06	30073a9-6226-42da-a0d0fc7c7b8-	094b486cb29b	
3	024df3e-236d-452b-a93f-f45b5d5f6787	T. Ganda Saptomo, M.Farm	Jalan Kutisari Selatan No. 427 Batam, Nusa Tenggar...	mala08@example.com	76768d31-6bee-42d2-9bd7-12a5a14c8a91	c38ed10a-9f9ea1d5-42f9-499e	52604490-b2114492-04014616-0d29a20e-4d28	b6d5647676160	
4	03019eed-0c52-4926-b566-064b99bb024	Gaduh Siregar, M.M.	Gg. Jamika No. 8 Tual, KB 66952	pudjiajustielma@example.com	76768d31-6bee-42d2-9bd7-12a5a14c8a91	1b677db9-37507fb1-0f68-4d3c-497-a1e5-b7ce-	eab77992-6527-4c36-aa14-3e9fc4ebf3b9	dc76789c-7559-79435526dc02	

## E. In Dan Not In

In digunakan untuk mencari nilai kesesuaian dengan suatu data tertentu yang ada dalam suatu daftar / list nilai. Operator Not In merupakan negasi untuk nilai yang tidak ada dalam daftar / list tersebut.

### • IN

The screenshot shows the phpMyAdmin interface. On the left, the database structure is visible, including the 'karyawan' table under the 'sistem penggajian karyawan perusahaan' schema. The main area contains an SQL query:

```
1 SELECT * FROM karyawan WHERE `id_hrd` IN ('af3c77c8-a1e3-4dcf-89c4-981d142a2cd4', '1dd502a7-2e76-490d-b044-cd4ec11d5b68')
```

The results pane on the right shows two rows of data from the 'karyawan' table:

id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan
5e68eb50-5c9a-4e1e-89f7-6a0d25b66dd3	Niyaga Waskita	Jl. Ciwaringin No. 6 Tanjungbalai, LA	panji40@example.com	76768d31-6bee-42d2-9bd7-b044-cd4ec11d5b68	1dd502a7-2e76-490d-b044-cd4ec11d5b68	19adbda4-3f4f-44c0-9508-73c696883b491	f352fa16-eff5-460d2cc-33c0-41334ba3-b71e-2a8a166aaee0	43f903a43703
2928b42c-c34c-43c7-a30c-41c302c5906	Jl. Otto Iskandar	Bandar Lampung, Sitorus	vanyanigroho@example.com	76768d31-6bee-42d2-9bd7-b044-cd4ec11d5b68	af3c77c8-a1e3-4dcf-89c4-981d142a2cd4	b812408f-3503-41a2-97a8-9c1553440cef	dec05e84-265-48f6-8fe1-98fb2f07b9b2	06df0717-3cd9-4057279d4bb186a0

Hasil :

The screenshot shows the phpMyAdmin interface with the results of the previous query. A message at the top indicates 2 rows found. The results pane displays the same two rows of data from the 'karyawan' table as shown in the previous screenshot.

## ● NOT IN

The screenshot shows the phpMyAdmin interface. In the left sidebar, the database 'sistem pengajaran karyawan perusahaan' is selected. In the main area, the 'SQL' tab is active. A query is entered in the text area:

```
1. SELECT * FROM karyawan WHERE `id_hrd` not IN ('3822186f-d0cd-4530-beb5-757525adb1e8', '680c4e43-f3c4-4769-916b-6b4e01a4621f')
```

To the right of the query, there is a column labeled 'Tabel: karyawan' with a scrollable list of columns:

- id\_karyawan
- nama\_karyawan
- alamat\_karyawan
- email\_karyawan
- id\_perusahaan
- id\_hrd
- id\_jabatan
- id\_absensi
- id\_master\_gaji\_karyawan

Below the query, there are several buttons: SELECT\*, SELECT, INSERT, UPDATE, DELETE, Bersihkan, Format, Get auto-saved query, Bind parameters, Markah kueri SQL ini:, Pembalas, Tampilkan ulang perintah SQL, Menahan kotak kueri, Rollback when finished, Perbolehkan cek foreign key, and Kirim.

Hasil :

The screenshot shows the phpMyAdmin interface with the 'Results' tab active. The results of the previous query are displayed in a table:

	<b>id_karyawan</b>	<b>nama_karyawan</b>	<b>alamat_karyawan</b>	<b>email_karyawan</b>	<b>id_perusahaan</b>	<b>id_hrd</b>	<b>id_jabatan</b>	<b>id_absensi</b>	<b>id_master_gaji</b>
1	013d0baef0f-	Hj Vicki Marbun	Gang Cihampelas No. 03	gawati83@example.net	76768d31-6bee-42d2-9bd7-467b-a942-12e5a14c8a91	19c77dcf0e5-4aa9-4c21-bb54-b120-83211c138add	3013199-5900834f-4a9a-4c21-9000-42ad-711728d6-b112		
2	01fd80f77f7-	Tgk Hana	Jl. Jamika No. 146	meulaboh, Aceh	76768d31-6bee-42d2-9bd7-a715-12e5a14c8a91	1a625140-d93a-4799-9f66-40f6-87f5-3d351f542bb	30073a9-6226-42da-acd9fc7c7b8-94b4496cb29b		
3	024df3e-236d-	T. Ganda Saptomo	Jalan Kutisari Selatan No. 427	M.Farm	76768d31-6bee-42d2-9bd7-4c8ed10a-12e5a14c8a91	9f9ea1d5-d2f9-498e-b211-4482-040f4618-52604490-0d28a2e-ed2f			
4	03019eed-	Gaduh Siregar,	Gg. Jamika No. 8	M.M.	76768d31-6bee-42d2-9bd7-3e22aa73564f-12e5a14c8a91	b577d9-3750fb266-497-a165-497-a165-aa14-1e253630c201	eab77992-6527-4c36-dc76789c-7556-79435526d62-3e9fc4ebf3b9		
5	0c524926-								
6	b566-								
7	064b99b6b024								

At the top of the results table, there are buttons for Tampilkan semua, Jumlah baris: 25, and Sort by key: Tidak ada. Below the table, there are buttons for Extra options, Ubah, Salin, Hapus, Profil, Edit dikotak, Ubah, Jelaskan SQL, Buat kode PHP, Segarkan, and Konsol.

## F. Order By

Order By digunakan untuk melakukan pengurutan berdasarkan suatu field, yang merupakan hasil dari pernyataan select secara ascending atau descending. Default pengurutan klausula order by adalah ascending.

- ORDER BY DESC

The screenshot shows the phpMyAdmin interface. In the left sidebar, under the database 'sistem penggajian karyawan perusahaan', the table 'karyawan' is selected. The main area displays a SQL query: 'SELECT \* FROM karyawan ORDER BY `nama\_karyawan` DESC'. To the right of the query, a results grid shows the columns: id\_karyawan, nama\_karyawan, alamat\_karyawan, email\_karyawan, id\_perusahaan, id\_hrd, id\_jabatan, id\_absensi, and id\_master\_gaji\_karyawan. Below the query, there are several tabs: SELECT\*, SELECT, INSERT, UPDATE, DELETE, Bersihkan, Format, Bind parameters, and Get auto-saved query. At the bottom, there are buttons for Pembatalan, Tampilkan ulang perintah SQL, Menahan kotak kueri, Rollback when finished, Perbolehkan cek foreign key, and Kirim. A status bar at the bottom indicates 'Konsol'.

Hasil :

The screenshot shows the results of the executed SQL query. The message at the top says 'Menampilkan baris 0 - 24 (total 501, Pencarian dilakukan dalam 0.00006 detik) [nama\_karyawan: ZULFA ANGGRIAWAN... - VIOLET SIHOTANG...]' followed by the query 'SELECT \* FROM karyawan ORDER BY `nama\_karyawan` DESC;'. The results grid displays 24 rows of data corresponding to the first 24 entries in the 'karyawan' table, ordered by name in descending order. The columns are identical to the previous screenshot. The status bar at the bottom indicates 'Konsol'.

- ORDER BY ASC

The screenshot shows the phpMyAdmin interface connected to a MySQL database named 'sistem penggajian karyawan perusahaan'. The left sidebar lists databases and tables, with 'Baru' and 'sistem penggajian karyawan perusahaan' expanded. The 'karyawan' table is selected under 'perusahaan'. The main area contains a SQL query editor with the following content:

```
1 SELECT * FROM karyawan ORDER BY `nama_karyawan` ASC
```

Below the query, there are several buttons: **SELECT\***, **SELECT**, **INSERT**, **UPDATE**, **DELETE**, **Bersihkan**, **Format**, and **Get auto-saved query**. There is also a checkbox for **Bind parameters** and a text input field for **Markahi kueri SQL ini:**. At the bottom, there are checkboxes for **Pembatas**, **Tampilkan ulang perintah SQL**, **Menahan kotak kueri**, **Rollback when finished**, and **Perbolehan cek foreign key**, followed by a **Kirim** button.

Hasil :

The screenshot shows the phpMyAdmin interface with the following details:

- Left sidebar:** Shows the database structure with databases like Baru, information\_schema, mysql, performance\_schema, phpmyadmin, and sistem pengajian karyawan perusahaan.
- Top navigation:** Includes links for Aplikasi, YouTube, Maps, Web Scribd, materi kelas utbk..., Kompres JPEG, News, Tinkercad | Create 3..., W3Schools Online..., 20+ Function di Pan..., HAHHAHA - Google..., and Semua Bookmark.
- Main Content:**
  - Server:** localhost:127.0.0.1
  - Database:** sistem pengajian karyawan perusahaan
  - Table:** karyawan
  - Query Results:** Displays 24 rows of data from the karyawan table, ordered by nama\_karyawan ASC. The columns are id\_karyawan, nama\_karyawan, alamat\_karyawan, email\_karyawan, id\_perusahaan, id\_hrd, id\_jabatan, id\_absensi, and id\_master\_gaji\_k...
  - Query Editor:** Shows the SQL query: `SELECT * FROM karyawan ORDER BY `nama_karyawan` ASC;`
  - Buttons:** Profil, Edit dikotak, Ubah, Jelaskan SQL, Buat kode PHP, Segarkan.
  - Search and Filter:** Jumlah baris: 25, Saring baris: Cari di tabel ini, Sort by key: Tidak ada.
  - Extra Options:** Includes buttons for Insert, Update, Delete, and Print.

## G. Select Distinct

Distinct digunakan untuk menghilangkan duplikasi pada suatu tampilan, dengan cara menghilangkan tampilan record dengan nilai yang sama untuk hasil suatu perintah SQL, tetapi bukan menghapus record secara fisik.

### • SELECT DISTINCT (MENAMPILKAN)

The screenshot shows the phpMyAdmin interface. On the left, the database structure is visible under the 'sistem penggajian karyawan perusahaan' schema. In the center, a query window contains the SQL command: 'SELECT DISTINCT `nama\_karyawan` FROM karyawan'. To the right, the results of the query are displayed in a table with columns: id\_karyawan, nama\_karyawan, alamat\_karyawan, email\_karyawan, id\_perusahaan, id\_brd, id\_jabatan, id\_absensi, and id\_master\_gaji\_karyawan. The table shows 501 rows of data.

Hasil :

The screenshot shows the results of the 'SELECT DISTINCT `nama\_karyawan` FROM karyawan;' query. The results table has 501 rows, each containing a unique name. The names listed are: Hj. Vicky Marbun, Tgk. Hana Uyainah, S.Sos, Gaduh Siregar, M.M., Genta Marbut, Cut Ciaobella Rajata, Jawa Tamplublon, T. Limen Wibowo, S.Kom, Uchta Maryadi, Rina Hassanah, Drs. Anita Wijaya, M.Farm, and Putri Pranowo, S.I.Kom.

## ● SELECT DISTINCT (JUMLAH)

The screenshot shows the phpMyAdmin interface for a database named 'sistem penggajian karyawan perusahaan'. In the left sidebar, under the 'sistem penggajian karyawan perusahaan' schema, there is a 'karyawan' table. The main area displays an SQL query:

```
1. SELECT COUNT(DISTINCT `nama_karyawan`) FROM karyawan
```

To the right of the query, a results grid shows the following columns:

id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan

Below the query editor, there are several tabs: SELECT\*, SELECT, INSERT, UPDATE, DELETE, Bersihkan, Format, Get auto-saved query, Bind parameters, Markah kueri SQL ini, Pembalas, Tampilkan ulang perintah SQL, Menahan kotak kueri, Rollback when finished, Perbolehkan cek foreign key, and Kirim.

Hasil :

The screenshot shows the results of the executed SQL query. The message area at the top says 'Tampilkan kotak kueri' and 'Kueri SQL Anda berhasil dieksekusi'. The query itself is:

```
SELECT COUNT(DISTINCT `nama_karyawan`) FROM karyawan;
```

The result of the query is displayed in a table:

COUNT(DISTINCT `nama_karyawan`)
501

Below the results, there are several buttons: Cetak, Salin ke clipboard, Eksport, Tampilkan bagan, and Buat tampilan. There is also a 'Markah kueri SQL ini' section with fields for 'Judul:' and 'Izinkan semua pengguna untuk mengakses markah ini'.

## H. Group By

Group By digunakan untuk melakukan pengelompokan berdasarkan suatu field atau beberapa field.

- GROUP BY (SINTAKS 1)

The screenshot shows the phpMyAdmin interface. On the left, the database tree is visible with the 'sistem penggajian karyawan perusahaan' schema selected. In the center, the SQL tab contains the following query:

```
1 SELECT COUNT(`nama_karyawan`), `id_hrd` FROM karyawan GROUP BY `id_hrd`
```

To the right of the query, there is a results grid showing the output of the query. The columns are labeled:

id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan

Below the query, there are several buttons: SELECT\*, SELECT, INSERT, UPDATE, DELETE, Bersihkan, Format, Bind parameters, Markah ikuu SQL ini:, Pembatas:, Tampilkan ulang perintah SQL, Menahan kotak kueri, Rollback when finished, Perbolehkan cek foreign key, and Kirim. At the bottom, there is a Konsol tab.

Hasil :

The screenshot shows the phpMyAdmin interface after the query has been executed. The results are displayed in a table below the query input area. The table has one row with the following data:

COUNT(`nama_karyawan`)	id_hrd
1	009e2567-85cc-47e6-b2e4-00414515737b

At the top of the results table, there is a message: "Menampilkan baris 0 - 24 (total 499, Pencarian dilakukan dalam 0.0030 detik)". Below the table, there are buttons for Extra options, Tampilkan semua, Jumlah baris: 25, Saring baris: Cari di tabel ini, and a Profil dropdown.

## ● GROUP BY (SINTAKS 2)

The screenshot shows the phpMyAdmin interface with the following details:

- Left Panel:** Shows the database structure with the 'sistem pengajaran karyawan perusahaan' schema selected. Inside, there are tables: Baru, information\_schema, mysql, performance\_schema, phpmadmin, and karyawan.
- SQL Tab:** Contains the SQL query: `SELECT COUNT(`nama_karyawan`), `id_hrd` FROM karyawan GROUP BY `id_hrd` ORDER BY COUNT(`nama_karyawan`) DESC`.
- Results Tab:** Displays the column definitions for the 'karyawan' table:
 

id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan
-------------	---------------	-----------------	----------------	---------------	--------	------------	------------	-------------------------
- Buttons:** SELECT\*, SELECT, INSERT, UPDATE, DELETE, Bersihkan, Format, Get auto-saved query, Bind parameters, Markah kueri SQL ini:, Pembatas, Tampilkan ulang perintah SQL, Menahan kotak kueri, Rollback when finished, Perbolehkan cek foreign key, Kirim, Konsol.

Hasil :

The screenshot shows the phpMyAdmin interface with the following details:

- Left Panel:** Shows the database structure with the 'sistem pengajaran karyawan perusahaan' schema selected. Inside, there are tables: Baru, information\_schema, mysql, performance\_schema, phpmadmin, and karyawan.
- Results Tab:** Shows the output of the query: `SELECT COUNT(`nama_karyawan`), `id_hrd` FROM karyawan GROUP BY `id_hrd` ORDER BY COUNT(`nama_karyawan`) DESC;`. The message indicates 499 rows found.
- Table Data:** A table showing the results:
 

COUNT(`nama_karyawan`)	1	id_hrd
2		522ee8d9-c921-4ffa-f0429fce3bac
2		7b90ec28-b90d-4b25-bd26-9aaaddc7fe09a
1		d96313f1-c1d9-4c8-b67d-462b728f8e76
1		e5e0d75e-6600-444d-b4c3-56879ddc369f
1		f529f187-fdb5-458c-9c4d-f7abbdbd62e
1		012acd34-58d8-4572-a669-2c0435d2c78b
1		0b55ed8-08c0-4333-b6a3-8eb4539676f3
1		1a56895b-78f6-49cc-b768-91beb69ccca8a
1		2b364980-97eb-40e5-a573-b9b9dacaec573
1		3b706668-94f9-45de-554b-89127d094b25
1		4a1bed27-1305-43a6-8a15-35836c266d9e
1		56996713-3324-4e40-a055-fb56f900e06b
1		717c7906-063b-4303-914d-ecc9f6b1822a
1		81828322-8490-448c-89a1-b832bae1d0a
1		95cb5bc1-86e0-4a77-aed-d340b1b9a008
- Buttons:** Tampilkan kotak kueri, Profil [ Edit dikotak ], [ Ubah ], [ Jelaskan SQL ], [ Buat kode PHP ], [ Segarkan ].

## ● GROUP BY (SINTAKS 3)

Menampilkan baris 0 - 24 (total 501). Pencarian dilakukan dalam 0.0003 detik.

```
SELECT * FROM `karyawan`
```

	<b>id_karyawan</b>	<b>nama_karyawan</b>	<b>alamat_karyawan</b>	<b>email_karyawan</b>	<b>id_perusahaan</b>	<b>id_hrd</b>	<b>id_jabatan</b>	<b>id_absensi</b>	<b>id_master_gaji</b>
Ubah	013dcf0a-efff-4cbf-f37c-0ebc5e09259c	Hj Vicki Marbun	Gang Cimampelas Tomohon, BB 21237	gawati83@example.net	70768631-0bea-4629-8ed7-1265a14cd5a91	4676-4942- 83211c138ad8	95767d6-10e3-4a93-4c21- 274a37725f16	3613199- b664-	5906834f- 8000-42ad- 7112895-5112- 81b35c483688
Ubah	010d80f7-77f7-4eb4-a788-6395ef1aeb97	Tgk. Hana Uyanah, S.Sos	Jl. Jamika No. 140 Medanlah, Aceh 25086	saarighnayana@example.com	70768631-0bea-42c2-8ea7-1265a14cd5a91	a715- 11905160505	035939ca- 9711-4006- 12a5a14cd5a91	30017369- 971- 274a37725f16	6228-42de- 94b4489c278b
Ubah	024fd53e-236d-4fb2-a03f-45b5d5f58878	T. Ganda Saptono	Jalan Kultarsi Selatan No. 427 Batum, Nusa Tenggar.	mala08@example.com	78778631-8bea-42c2-8ed7-1265a14cd5a91	c36ed10e- 12a5a14cd5a91	9f6e1d5- 3e22aa73594- 8c02-	5200490- b2114482- b08-	0401-4616- 028a20e-4d2e- b6d564a76180
Ubah	03019eed-0c52-4926-b566-04099bbb024	Gaduh Siregar, M.Farm	Gg. Jamika No. 8 Tua, KB 66952	putriastutelma@example.com	76768631-0bea-42c2-9ed7-1265a14cd5a91	1b577db5- 12a5a14cd5a91	375107fb-1206-406-433c- 8c798e07ccf	ebd77992- 497-a1e5- 1c253636c201	6522-42de- aa14- 3e964ebf0369
Ubah	03862410-7b03-4380-9b6a-70034380	Genta Marhun	Jalan Kendalsari No. 6	wrahimah@example.net	78778631-8bea-42c2-9ed7-1265a14cd5a91	420efc4- 3e0e1-44f1-	e586-4bd7- 4661-4355-	c7c8937- 4da-2655-3200	0401-4616- 4da-2655-3200

Run SQL query/queries on table sistem\_penggajian\_karyawan\_perusahaan\_karyawan:

```
1: SELECT `id_karyawan` AS 'ID_PEGAWAI', `alamat_karyawan` AS 'ALAMAT' FROM karyawan
```

	<b>ID_PEGAWAI</b>	<b>ALAMAT</b>
Ubah	013dcf0a-efff-4cbf-f37c-0ebc5e09259c	Gang Cimampelas No. 03 Tomohon, BB 21237
Ubah	010d80f7-77f7-4eb4-a686-629a519eb097	Jl. Jamika No. 146 Medanlah, Aceh 25086
Ubah	024fd53e-236d-4fb2-a03f-45b5d5f58878	Jalan Kultarsi Selatan No. 427 Batum, Nusa Tenggar.
Ubah	03019eed-0c52-4926-b566-04099bbb024	Cg. Ampera Tua, KB 66952
Ubah	03862410-7b03-4380-9b6a-70034380	Jalan Kendalsari No. 6 Bekasi, Sulawesi Tengah 745
Ubah	04dfc3cd-b695-4f5c-9700-af154e49c979	Jalan Jakarta No. 560 Tangerang Selatan, KS 33131
Ubah	04f3e507-0b8-44c7-a98e-0bb5e34bec4b	Og. Astana Anyar No. 25 Kota Administrasi Jakarta
Ubah	0641550a-0e3e-49cb-ab81-d4c79b519632	Og. Rungkul Industri No. 4 Jayapura, NB 99560

Hasil :

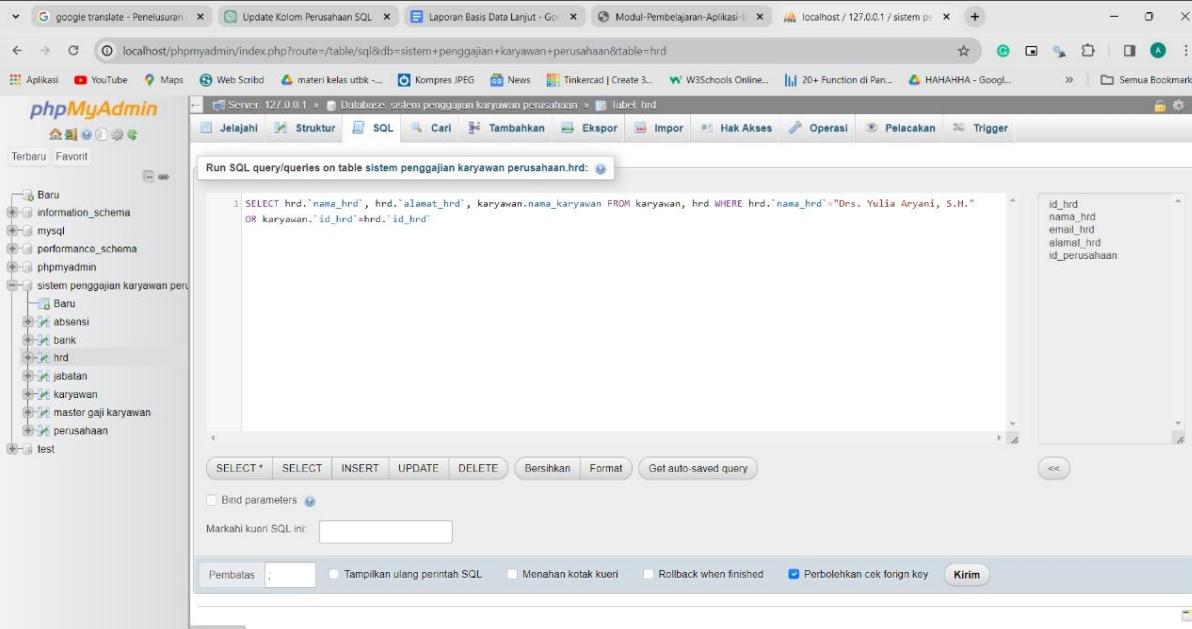
Tampilkan kotak kueri

Menampilkan baris 0 - 24 (total 501). Pencarian dilakukan dalam 0.0003 detik.

```
SELECT `id_karyawan` AS 'ID_PEGAWAI', `alamat_karyawan` AS 'ALAMAT' FROM karyawan;
```

	<b>ID_PEGAWAI</b>	<b>ALAMAT</b>
Ubah	013dcf0a-efff-4cbf-f37c-0ebc5e09259c	Gang Cimampelas No. 03 Tomohon, BB 21237
Ubah	010d80f7-77f7-4eb4-a686-629a519eb097	Jl. Jamika No. 146 Medanlah, Aceh 25086
Ubah	024fd53e-236d-4fb2-a03f-45b5d5f58878	Jalan Kultarsi Selatan No. 427 Batum, Nusa Tenggar.
Ubah	03019eed-0c52-4926-b566-04099bbb024	Cg. Ampera Tua, KB 66952
Ubah	03862410-7b03-4380-9b6a-70034380	Jalan Kendalsari No. 6 Bekasi, Sulawesi Tengah 745
Ubah	04dfc3cd-b695-4f5c-9700-af154e49c979	Jalan Jakarta No. 560 Tangerang Selatan, KS 33131
Ubah	04f3e507-0b8-44c7-a98e-0bb5e34bec4b	Og. Astana Anyar No. 25 Kota Administrasi Jakarta
Ubah	0641550a-0e3e-49cb-ab81-d4c79b519632	Og. Rungkul Industri No. 4 Jayapura, NB 99560

## ● GROUP BY DENGAN LOGIKA OR (SINTAKS 4)

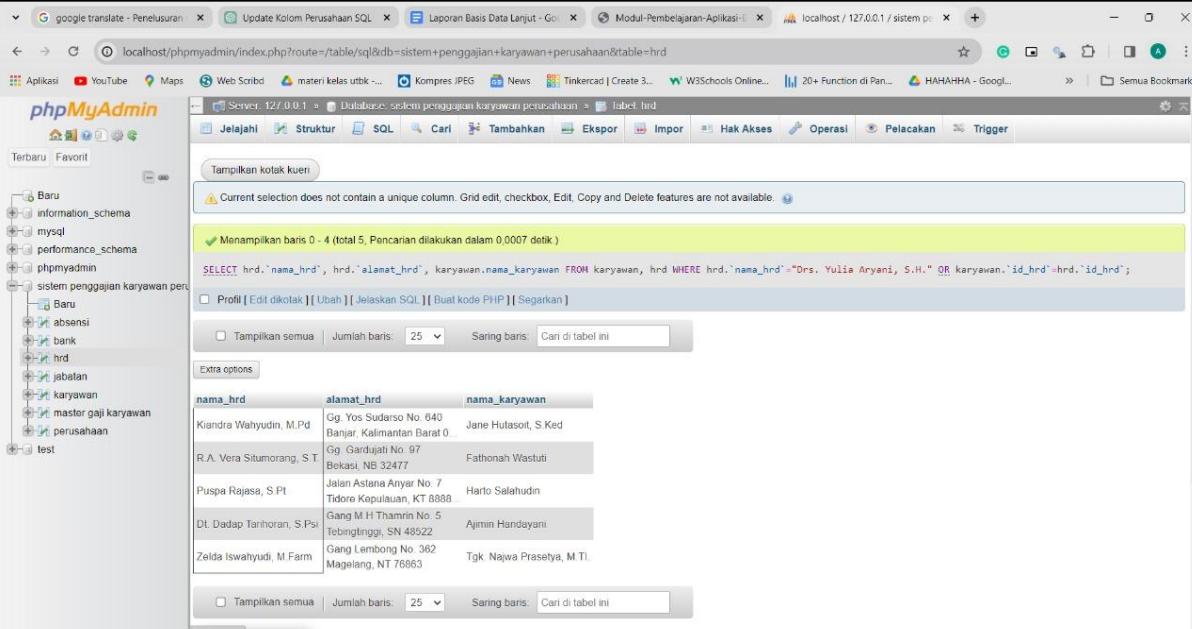


The screenshot shows the phpMyAdmin interface with the following details:

- Left Panel:** Shows the database structure. The main database is "sistem pengajaran karyawan perusahaan". Inside it, there are tables: Baru, absensi, bank, hrd, jabatan, karyawan, master gaji karyawan, and perusahaan.
- SQL Tab:** Contains the following SQL query:
 

```
1 SELECT hrd.`nama_hrd`, hrd.`alamat_hrd`, karyawan.nama_karyawan FROM karyawan, hrd WHERE hrd.`nama_hrd`="Drs. Yulia Aryani, S.H." OR karyawan.`id_hrd`=hrd.`id_hrd`;
```
- Result Preview:** On the right, a preview of the result table is shown with columns: id\_hrd, nama\_hrd, email\_hrd, alamat\_hrd, and id\_perusahaan. The data includes rows for Drs. Yulia Aryani, S.H. and Jane Hutasoit, S.Ked.
- Buttons:** Below the query editor are buttons for SELECT\*, SELECT, INSERT, UPDATE, DELETE, Bersihkan, Format, Get auto-saved query, Bind parameters, Markah kueri SQL ini:, Pembalas, Tampilkan ulang perintah SQL, Menahan kotak kueri, Rollback when finished, Perbolehkan cek foreign key, and Kirim.

Hasil :



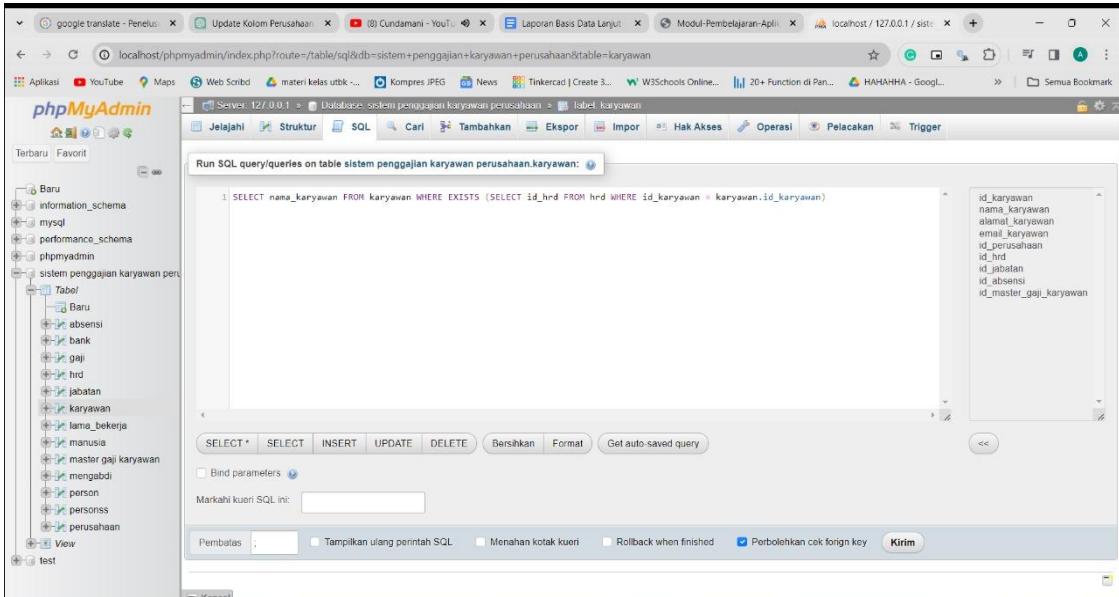
The screenshot shows the phpMyAdmin interface with the following details:

- Left Panel:** Shows the database structure. The main database is "sistem pengajaran karyawan perusahaan". Inside it, there are tables: Baru, absensi, bank, hrd, jabatan, karyawan, master gaji karyawan, and perusahaan.
- Result Preview:** The results of the executed query are displayed in a table with columns: nama\_hrd, alamat\_hrd, and nama\_karyawan. The data includes rows for Kiandra Wahyudin, M.Pd, R.A. Vera Situmorang, S.T, Puspa Rajasa, S.Pt, Dt. Dadap Tarhiran, S.Psi, and Zelda Iswahyudi, M.Farm.
- Buttons:** Below the result table are buttons for Tampilkan semua, Jumlah baris: 25, Saring baris, Cari di tabel ini, and Konsol hasil kueri.

nama_hrd	alamat_hrd	nama_karyawan
Kiandra Wahyudin, M.Pd	Gg. Yos Sudarso No. 640 Banjar, Kalimantan Barat 0	Jane Hutasoit, S.Ked
R.A. Vera Situmorang, S.T	Gg. Gadingjati No. 97 Bekasi, NB 32477	Fathonah Wastuti
Puspa Rajasa, S.Pt	Jalan Astana Anyar No. 7 Tidore Kepulauan, KT 8888	Harto Salahudin
Dt. Dadap Tarhiran, S.Psi	Gang M.H.Thamrin No. 5 Tebingtinggi, SN 48522	Ajimin Handayani
Zelda Iswahyudi, M.Farm	Gang Lempong No. 362 Magelang, NT 76863	Tgk. Najwa Prasetya, M.Ti.

## I. EXIST DAN NOT EXIST

Perintah Exists biasanya digunakan untuk check keberadaan suatu obyek di suatu database. Operator EXISTS mengembalikan nilai true jika subquery mengembalikan satu atau beberapa record. Kata kunci EXIST dan NOT EXIST dirancang hanya untuk digunakan di subquery. Kata kunci-kata kunci ini menghasilkan nilai TRUE atau FALSE. EXIST akan mengirim nilai TRUE jika dan hanya jika terdapat sedikitnya satu baris di table hasil yang dikirim oleh subquery. EXIST mengirim nilai FALSE jika subquery mengirim table kosong NOT EXIST kebalian dari EXIST. Karena EXIST dan NOT EXIST hanya memeriksa keberadaan baris-baris di table hasil subquery.



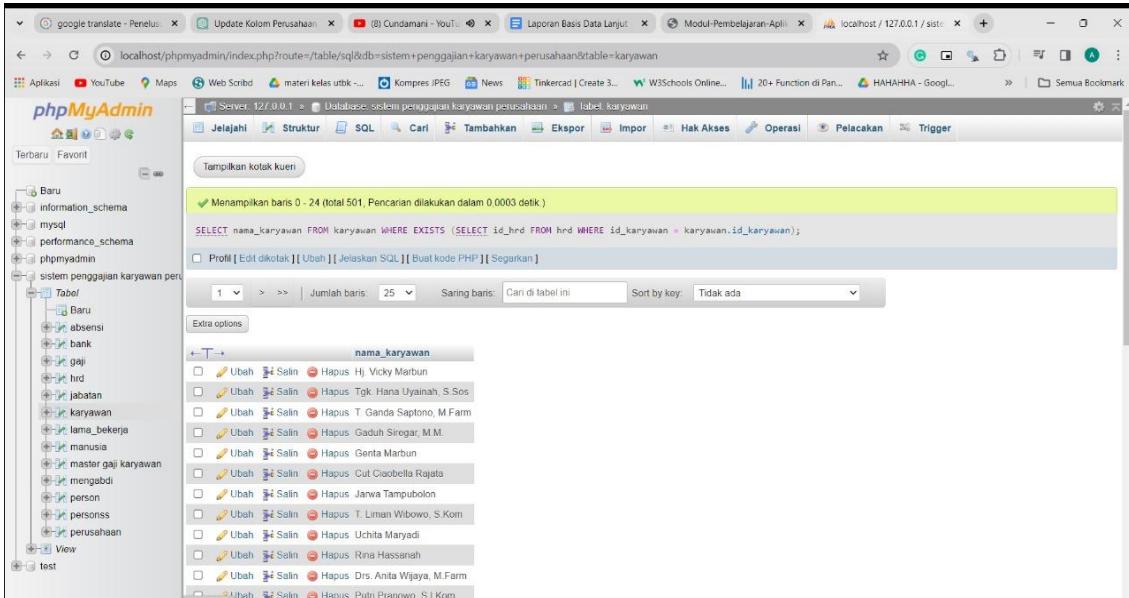
The screenshot shows the phpMyAdmin interface. In the left sidebar, under the 'sistem penggajian karyawan perusahaan' database, the 'Tabel' (Tables) section is expanded, showing tables like Baru, absensi, bank, gaji, hrd, jabatan, karyawan, lama\_bekerja, manusia, master\_gaji\_karyawan, mengabdi, person, personss, and perusahaan. The 'SQL' tab is selected in the top navigation bar. A SQL query is entered in the main area:

```
1 SELECT nama_karyawan FROM karyawan WHERE EXISTS (SELECT id_hrd FROM hrd WHERE id_karyawan = karyawan.id_karyawan)
```

The results pane on the right shows the following table:

id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan

Hasil :



The screenshot shows the phpMyAdmin interface after executing the SQL query. The results pane displays the following message:

Menampilkan baris 0 - 24 (total 501, Pencarian dilakukan dalam 0.0003 detik.)

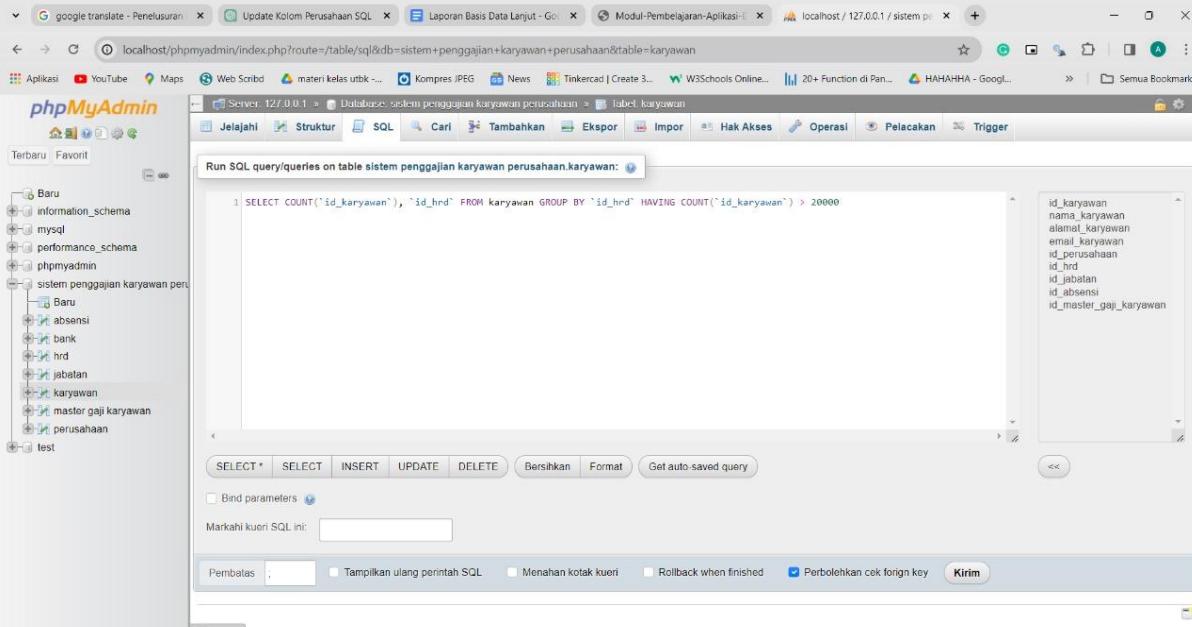
SELECT nama\_karyawan FROM karyawan WHERE EXISTS (SELECT id\_hrd FROM hrd WHERE id\_karyawan = karyawan.id\_karyawan);

Below this, a list of 501 rows is shown, each with edit, delete, and search options. The first few rows are:

id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan
1	Hj. Vicky Marbun	Jl. Sisingaan No. 12, Bandung	vicky.marbun@outlook.com	1	1	1	1	1
2	Tgk. Hana Uyanah, S.Sos	Jl. Ciputat Raya No. 35, Tangerang	hana.uyanah@outlook.com	1	2	2	2	2
3	T. Ganda Saptono, M.Farm	Jl. Puncak Jaya No. 5, Bogor	ganda.saptono@outlook.com	1	3	3	3	3
4	Gaduh Siregar, M.M.	Jl. Ciputat Raya No. 35, Tangerang	gaduh.siregar@outlook.com	1	4	4	4	4
5	Genta Marbun	Jl. Sisingaan No. 12, Bandung	genta.marbun@outlook.com	1	5	5	5	5
6	Cici Ciobella Rajata	Jl. Ciputat Raya No. 35, Tangerang	cici.rajata@outlook.com	1	6	6	6	6
7	Jarna Tampubolon	Jl. Sisingaan No. 12, Bandung	jarna.tampubolon@outlook.com	1	7	7	7	7
8	T. Liman Wilbowo, S.Kom	Jl. Ciputat Raya No. 35, Tangerang	liman.wilbowo@outlook.com	1	8	8	8	8
9	Uchita Maryadi	Jl. Sisingaan No. 12, Bandung	uchita.maryadi@outlook.com	1	9	9	9	9
10	Rina Hassanah	Jl. Ciputat Raya No. 35, Tangerang	rina.hassanah@outlook.com	1	10	10	10	10
11	Drs. Anita Wijaya, M.Farm	Jl. Sisingaan No. 12, Bandung	anita.wijaya@outlook.com	1	11	11	11	11
12	Putri Pranowo, S.I.Kom	Jl. Ciputat Raya No. 35, Tangerang	putri.pranowo@outlook.com	1	12	12	12	12

## J. HAVING

HAVING ditambahkan ke SQL karena kata kunci WHERE tidak dapat digunakan dengan fungsi agregat. HAVING digunakan untuk menentukan kondisi bagi GROUP BY. Kelompok yang memenuhi HAVING saja yang akan dihasilkan.

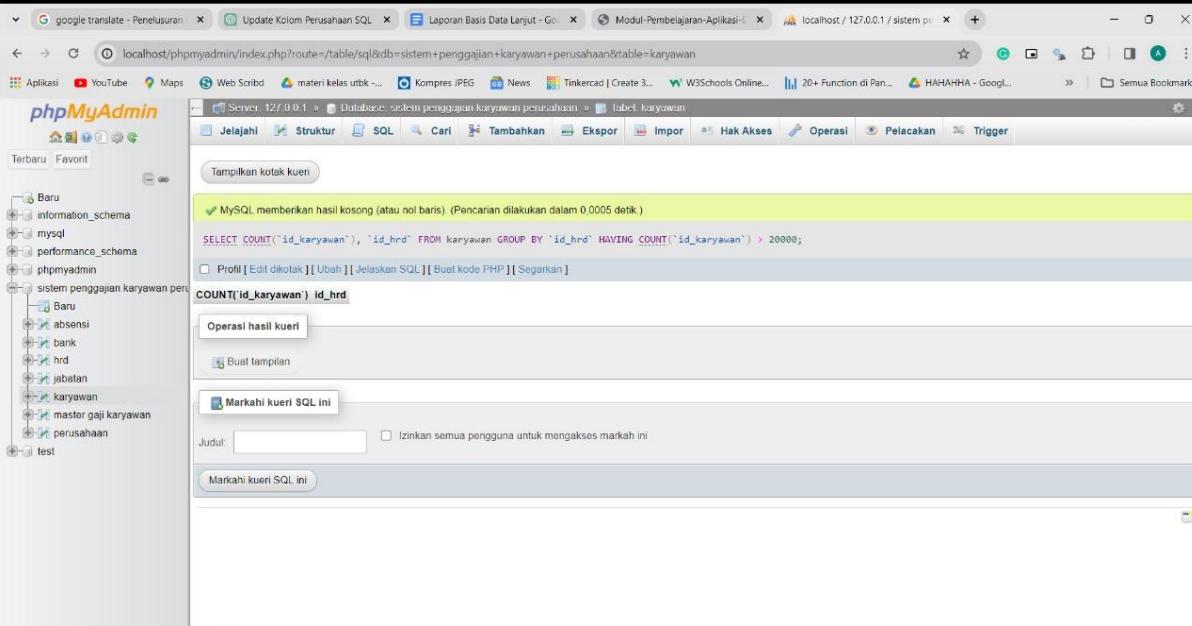


```
SELECT COUNT(`id_karyawan`), `id_hrd` FROM karyawan GROUP BY `id_hrd` HAVING COUNT(`id_karyawan`) > 20000
```

The results pane displays the schema for the karyawan table:

id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan
-------------	---------------	-----------------	----------------	---------------	--------	------------	------------	-------------------------

Hasil :



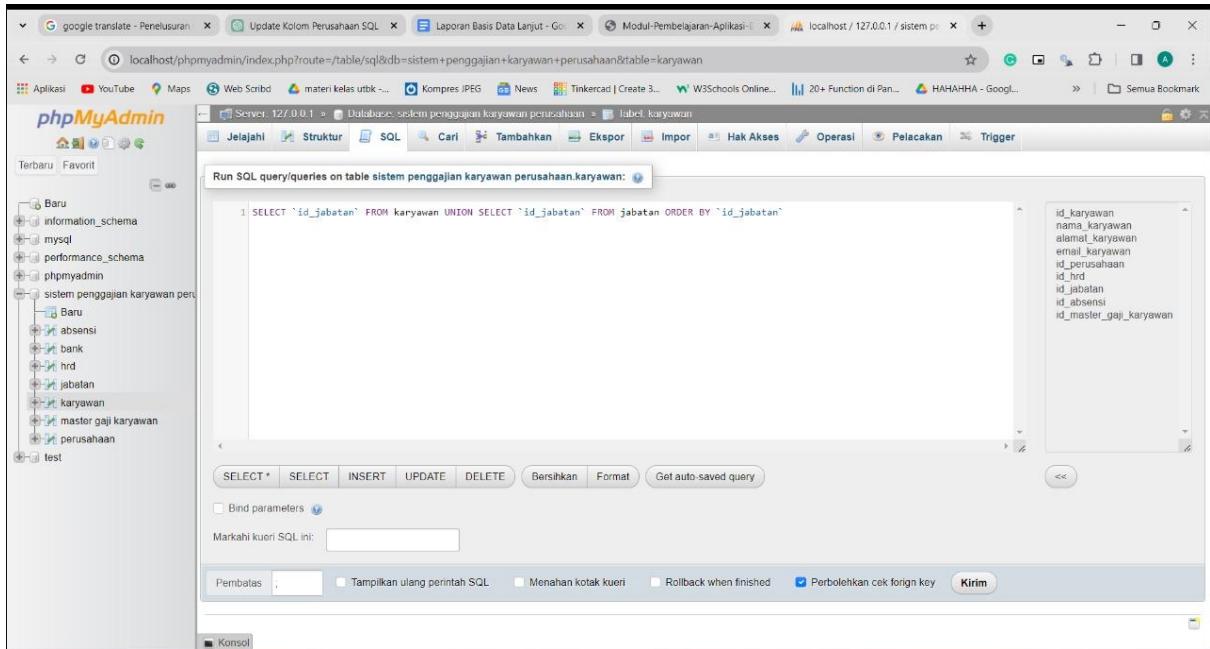
MySQL memberikan hasil kosong (atau nol baris). (Pencarian dilakukan dalam 0.0005 detik)

```
SELECT COUNT(`id_karyawan`), `id_hrd` FROM karyawan GROUP BY `id_hrd` HAVING COUNT(`id_karyawan`) > 20000;
```

## K. UNION

Operator UNION digunakan untuk menggabungkan hasil-set dari dua atau lebih pernyataan SELECT. Dengan persyaratan sebagai yaitu: Setiap pernyataan SELECT dalam UNION harus memiliki jumlah kolom yang sama, Kolom juga harus memiliki tipe data yang sama, dan Kolom di setiap pernyataan SELECT juga harus berada dalam urutan yang sama.

- Sintaks Pertama :



```
SELECT 'id_jabatan' FROM karyawan UNION SELECT 'id_jabatan' FROM jabatan ORDER BY 'id_jabatan'
```

Hasil :

<img alt="Screenshot of phpMyAdmin showing the results of the UNION query. The results pane displays 501 rows from the 'jabatan' table, ordered by 'id\_jabatan'. The first few rows are: 000f09e-88af-4529-807a-ba1ebf2adc09, 007f690-970c-49af-ad28-0e10763721f, 0065c26-674c-4680-b189-7517209fb3b1, 01582443-1fe4-42cb-ac03-237171644be, 01fc51b-03e4-466d-9642-209ee81f32e, 02e99f11-7999-460b-b6a7-a075a000ac05, 02fac5bb-cb79-4ce8-b80d-2a009de808ea, 0401fb0c-e35-4640-b1af-75179ade00de, 04ed92d5-e8e2-44eb-ab2c-4e0220204b33, 0591b59-b3d6-480c-ace3-66493c39daef, 063046ce-54db-4698-9a8a-690b15c5eac4, 06449ce5-a6ff-43db-9fc3-10e5c9177e69, 0703203-3a23-aa86-29a8519f2e7d</pre>

## ● Sintaks Kedua :

The screenshot shows the phpMyAdmin interface for a database named 'sistem pengajaran karyawan perusahaan'. The left sidebar lists databases like 'Baru', 'information\_schema', 'mysql', 'performance\_schema', 'phpmyadmin', 'sistem pengajaran karyawan perusahaan', 'test', and tables such as 'absensi', 'bank', 'hrd', 'jabatan', 'karyawan', 'master gaji karyawan', and 'perusahaan'. The main area shows a SQL query window with the following code:

```
1. SELECT `id_jabatan` FROM karyawan UNION ALL SELECT `id_jabatan` FROM jabatan ORDER BY `id_jabatan`
```

To the right of the query, a results grid displays the following columns:

id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji_karyawan

Below the query window are buttons for SELECT\*, SELECT, INSERT, UPDATE, DELETE, Bersihkan, Format, Get auto-saved query, Bind parameters, Markah kueri SQL ini:, and a toolbar with options like Pembalas, Tampilkan ulang perintah SQL, Menahan kotak kueri, Rollback when finished, Perbolehkan cek foreign key, and Kirim.

Hasil :

The screenshot shows the results of the executed SQL query. The top message bar says 'Tampilkan kotak kueri' and 'Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.' Below this, a green message indicates 'Menampilkan baris 0 - 24 (Total 1001. Pencarian dilakukan dalam 0.0009 detik)'.

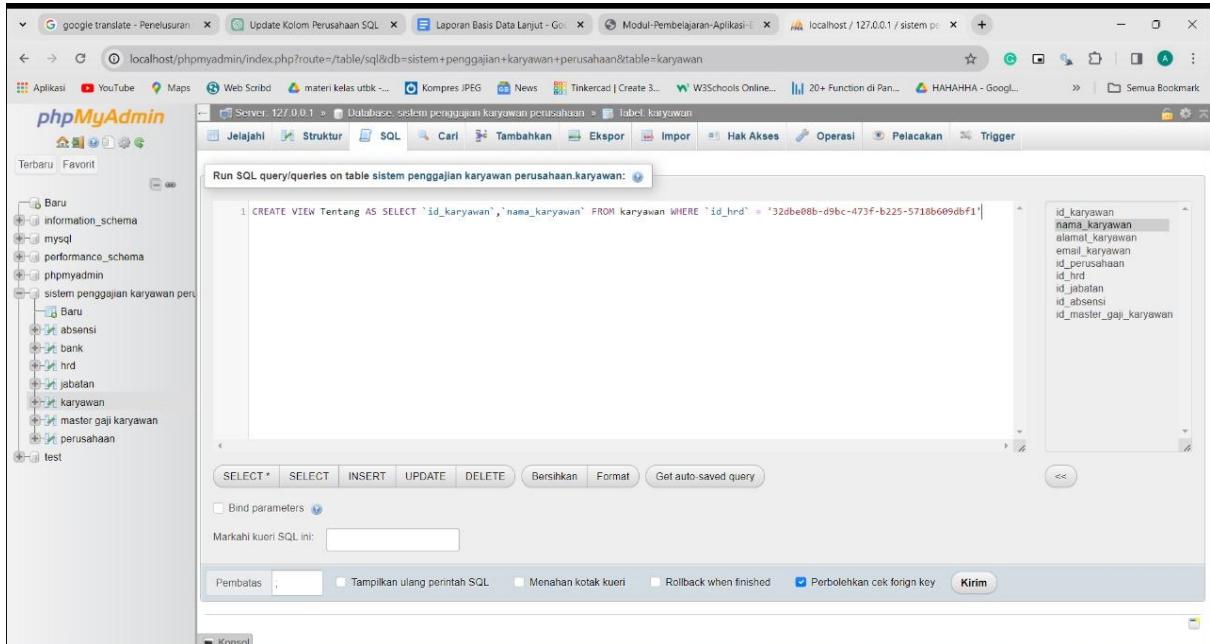
The results grid shows the output of the query:

```
SELECT `id_jabatan` FROM karyawan UNION ALL SELECT `id_jabatan` FROM jabatan ORDER BY `id_jabatan`;
```

Below the grid are buttons for Profil [Edit dikotak] [Ubah] [Jelaskan SQL] [Buat kode PHP] [Segarkan], and a table header with 'Jumlah baris: 25' and 'Sort by key: id\_jabatan (ASC)'. At the bottom, there is an 'Extra options' section and a 'Konsol' button.

## L. VIEW

View adalah tabel virtual berdasarkan hasil-set pernyataan SQL. Tampilan berisi baris dan kolom, seperti tabel sebenarnya. Bidang dalam tampilan adalah bidang dari satu atau lebih tabel nyata dalam database. Dalam view dapat menambahkan fungsi SQL, WHERE, dan JOIN statements untuk melihat dan menyajikan data seolah-olah data berasal dari satu tabel tunggal.

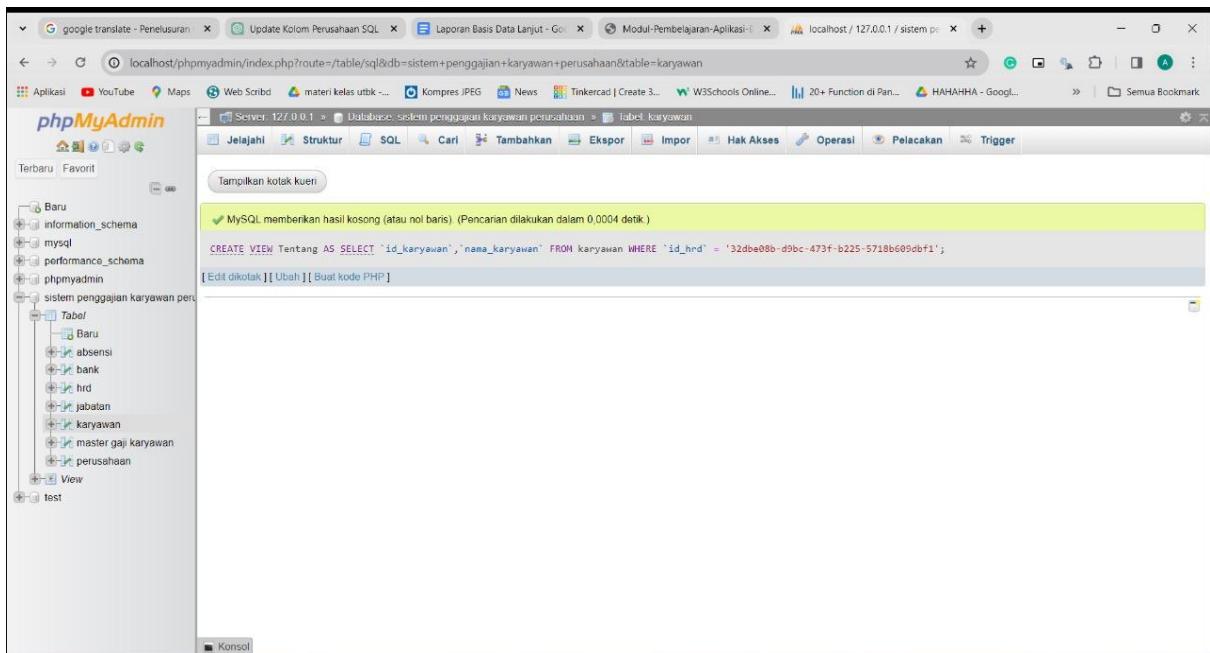


The screenshot shows the phpMyAdmin interface for a database named 'sistem pengajaran karyawan perusahaan'. In the left sidebar, under the 'Tabel' section, there is a 'View' folder which contains a single entry named 'Tentang'. The main query window displays the SQL command:

```
CREATE VIEW Tentang AS SELECT 'id_karyawan','nama_karyawan' FROM karyawan WHERE `id_hrd` = '32dbe08b-d9bc-473f-b225-5718b609dbf1';
```

To the right of the query window, a list of columns from the 'karyawan' table is shown:

id_karyawan
nama_karyawan
alamat_karyawan
email_karyawan
id_perusahaan
id_hrd
id_jabatan
id_absensi
id_master_gaji_karyawan



The screenshot shows the phpMyAdmin interface after the SQL query has been executed. The message at the top indicates that MySQL returned no results (0 rows). The query itself is displayed again:

```
CREATE VIEW Tentang AS SELECT 'id_karyawan','nama_karyawan' FROM karyawan WHERE `id_hrd` = '32dbe08b-d9bc-473f-b225-5718b609dbf1';
```

Below the query, there are three buttons: 'Edit dikotak', 'Ubah', and 'Buat kode PHP'.

## Hasil :

The screenshot shows the phpMyAdmin interface with the following details:

- Database:** sistem penggajian karyawan perusahaan
- Table:** karyawan
- Structure:**
  - id\_karyawan (Primary Key, auto-increment)
  - nama\_karyawan (varchar(100))
  - alamat\_karyawan (text)
  - email\_karyawan (text)

### ● CREATE TABLE DENGAN NOT NULL

The screenshot shows the phpMyAdmin interface with the following details:

- Database:** sistem penggajian karyawan perusahaan
- Table:** Gaji
- SQL Query:**

```
1 CREATE TABLE Gaji (id_gaji varchar(100) NOT NULL, besar_gaji int(100) NOT NULL)
```

The screenshot shows the phpMyAdmin interface for a MySQL database named 'sistem+penggajian+karyawan+perusahaan'. A new table named 'Gaji' has been created with the following SQL command:

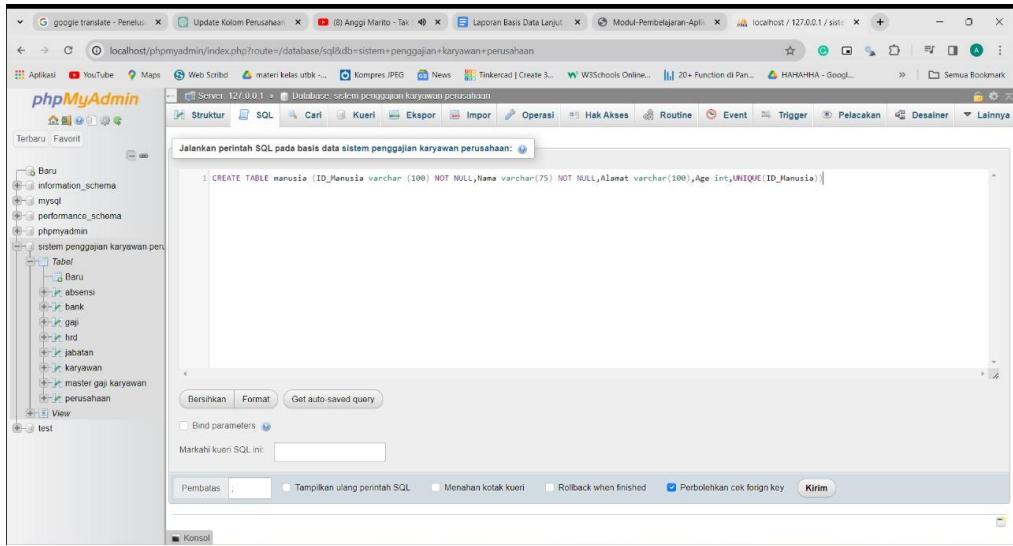
```
CREATE TABLE Gaji (id_gaji varchar(100) NOT NULL, besar_gaji int(100) NOT NULL);
```

Hasil :

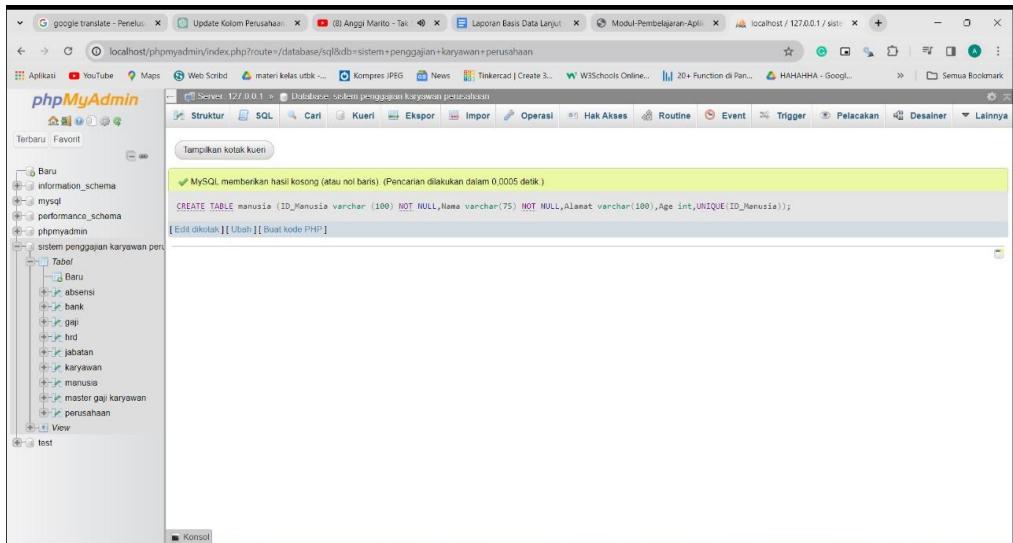
The screenshot shows the phpMyAdmin interface displaying a list of tables in the 'sistem+penggajian+karyawan+perusahaan' database. The tables listed are:

Tabel	Tindakan	Baris	Jenis	Penyortiran	Ukuran	Beban
absensi	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	500	InnoDB	utf8mb4_general_ci	208,0 KB	-
bank	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	1	InnoDB	utf8mb4_general_ci	16,0 KB	-
gaji	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_general_ci	16,0 KB	-
hrd	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	5	InnoDB	utf8mb4_general_ci	32,0 KB	-
jabatan	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	500	InnoDB	utf8mb4_general_ci	176,0 KB	-
karyawan	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	501	InnoDB	utf8mb4_general_ci	752,0 KB	-
master gaji karyawan	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	500	InnoDB	utf8mb4_general_ci	432,0 KB	-
perusahaan	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	1	InnoDB	utf8mb4_general_ci	16,0 KB	-
tentang	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	~0	Gambaran	---	-	-
9 tabel	Jumlah	~2,008	InnoDB	utf8mb4_general_ci	1,6 MB	0 B

## ● CREATE TABLE DENGAN UNIQUE



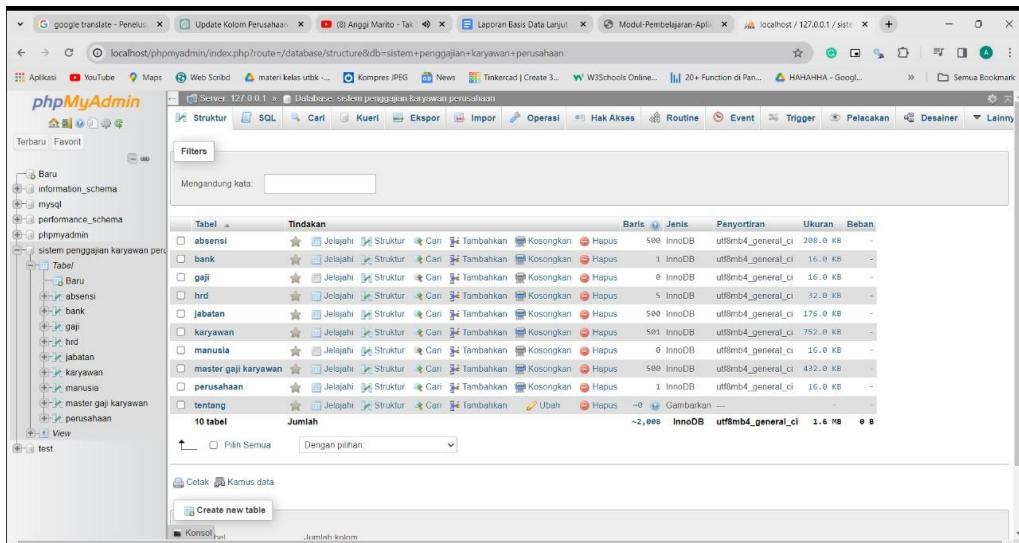
```
CREATE TABLE manusia (ID_Manusia varchar (100) NOT NULL,Name varchar(75) NOT NULL,Alamat varchar(100),Age int,UNIQUE (ID_Manusia))
```



MySQL memberikan hasil kosong (atau no baris) (Pencarian dilakukan dalam 0.0005 detik)

```
CREATE TABLE manusia (ID_Manusia varchar (100) NOT NULL,Name varchar(75) NOT NULL,Alamat varchar(100),Age int,UNIQUE (ID_Manusia));
```

Hasil :



Tabel	Tindakan	Baris	Jenis	Penyortiran	Ukuran	Beban
absensi		See	InnoDB	utf8mb4_general_ci	286,0 KB	-
bank		1	InnoDB	utf8mb4_general_ci	16,0 KB	-
gaji		0	InnoDB	utf8mb4_general_ci	16,0 KB	-
hrd		5	InnoDB	utf8mb4_general_ci	32,0 KB	-
jabatan		500	InnoDB	utf8mb4_general_ci	176,0 KB	-
karyawan		501	InnoDB	utf8mb4_general_ci	752,0 KB	-
manusia		0	InnoDB	utf8mb4_general_ci	16,0 KB	-
master_gaji_karyawan		See	InnoDB	utf8mb4_general_ci	432,0 KB	-
perusahaan		1	InnoDB	utf8mb4_general_ci	16,0 KB	-
tentang		-0	Gambarkan	---		
10 tabel	Jumlah	~2,088	InnoDB	utf8mb4_general_ci	1,6 MB	0 B

## ● CREATE TABLE DENGAN PRIMARY KEY

The screenshot shows the phpMyAdmin interface. In the left sidebar, under the database 'sistem penggajian karyawan perusahaan', there is a table named 'Baru'. The 'Tabel' section contains several tables: absensi, bank, gaji, hrd, jabatan, karyawan, lama\_bekerja, manusia, master\_gaji\_karyawan, perusahaan, and tentang. The 'Run SQL query/queries on table sistem penggajian karyawan perusahaan.manusia:' field contains the following SQL code:

```
CREATE TABLE LAMA_BEKERJA (ID varchar (100) NOT NULL, lamanya int NOT NULL, PRIMARY KEY (ID))
```

Below the SQL field, there are several tabs: SELECT\*, SELECT, INSERT, UPDATE, DELETE, Bersihkan, Format, and Get auto-saved query. There is also a 'Bind parameters' checkbox and a 'Markahi kueri SQL ini:' input field. At the bottom, there are buttons for Pembaras, Tampilkan ulang perintah SQL, Menahan kotak kueri, Rollback when finished, Perbolehan cek foreign key, and Kirim.

The screenshot shows the phpMyAdmin interface after executing the SQL query. The status bar at the top indicates 'MySQL memberikan hasil kosong (atau no1 baris) (Pencarian dilakukan dalam 0.0005 detik)'. The SQL field now displays the executed command:

```
CREATE TABLE LAMA_BEKERJA (ID varchar (100) NOT NULL, lamanya int NOT NULL, PRIMARY KEY (ID));
```

Below the SQL field, there are buttons for Edit, Dokumentasi, Ubah, and Buat kode PHP. The rest of the interface is identical to the first screenshot, showing the same sidebar and table structure.

Hasil :

The screenshot shows the phpMyAdmin interface with the 'Struktur' tab selected for the 'LAMA\_BEKERJA' table. The table structure is displayed in a grid format:

Tabel	Tindakan	Baris	Jenis	Penyortiran	Ukuran	Beban
absensi		500	InnoDB	utf8mb4_general_ci	208,0 KB	-
bank		1	InnoDB	utf8mb4_general_ci	16,0 KB	-
gaji		0	InnoDB	utf8mb4_general_ci	16,0 KB	-
hrd		5	InnoDB	utf8mb4_general_ci	52,0 KB	-
jabatan		see	InnoDB	utf8mb4_general_ci	176,0 KB	-
karyawan		501	InnoDB	utf8mb4_general_ci	752,0 KB	-
lama_bekerja		0	InnoDB	utf8mb4_general_ci	16,0 KB	-
manusia		see	InnoDB	utf8mb4_general_ci	432,0 KB	-
master_gaji_karyawan		1	InnoDB	utf8mb4_general_ci	16,0 KB	-
perusahaan		-2,008	InnoDB	utf8mb4_general_ci	1,6 MB	0 B
tentang		0	Gambarkan		-	-
<b>Jumlah</b>						

At the bottom of the table grid, there are buttons for Pilih Semua and Dengan pilihan. Below the table, there are buttons for Cetak, Komus data, and Konsol. A 'Konsol' button is highlighted with a red box.

## ● CREATE TABLE DENGAN FOREIGN KEY

Jalankan perintah SQL pada basis data sistem penggajian karyawan perusahaan:

```
CREATE TABLE mengabdi (ID VARCHAR(100) NOT NULL, nama INT NOT NULL, FOREIGN KEY (ID) REFERENCES lama_bekerja(ID))
```

Bersihkan Format Get auto-saved query Bind parameters Markah kuiri SQL ini: Pembatalan Tampilkan ulang perintah SQL Menahan kotak kuiri Rollback when finished Perbolehan cek foreign key Kirim

Tampilkan kotak kuiri

MySQL memberikan hasil kosong (atau nol baris). (Pencarian dilakukan dalam 0.0004 detik.)

```
CREATE TABLE mengabdi (ID VARCHAR(100) NOT NULL, nama INT NOT NULL, FOREIGN KEY (ID) REFERENCES lama_bekerja(ID))
```

Edit dikenal [ ] Ulah [ ] Buat kode PHP [ ]

Hasil :

Mengandung kata:

Tabel	Tindakan	Baris	Jenis	Penyortiran	Ukuran	Beban
absensi	Struktur  Cari  Tambahkan  Kosongkan  Hapus	800	InnoDB	utf8mb4_general_ci	200.0 KB	-
bank	Struktur  Cari  Tambahkan  Kosongkan  Hapus	1	InnoDB	utf8mb4_general_ci	16.0 KB	-
gaji	Struktur  Cari  Tambahkan  Kosongkan  Hapus	0	InnoDB	utf8mb4_general_ci	16.0 KB	-
hrd	Struktur  Cari  Tambahkan  Kosongkan  Hapus	5	InnoDB	utf8mb4_general_ci	32.0 KB	-
jabatan	Struktur  Cari  Tambahkan  Kosongkan  Hapus	500	InnoDB	utf8mb4_general_ci	176.0 KB	-
karyawan	Struktur  Cari  Tambahkan  Kosongkan  Hapus	501	InnoDB	utf8mb4_general_ci	752.8 KB	-
lama_bekerja	Struktur  Cari  Tambahkan  Kosongkan  Hapus	0	InnoDB	utf8mb4_general_ci	16.0 KB	-
manusia	Struktur  Cari  Tambahkan  Kosongkan  Hapus	0	InnoDB	utf8mb4_general_ci	16.0 KB	-
master_gaji_karyawan	Struktur  Cari  Tambahkan  Kosongkan  Hapus	500	InnoDB	utf8mb4_general_ci	432.0 KB	-
mengabdi	Struktur  Cari  Tambahkan  Kosongkan  Hapus	0	InnoDB	utf8mb4_general_ci	32.0 KB	-
perusahaan	Struktur  Cari  Tambahkan  Kosongkan  Hapus	1	InnoDB	utf8mb4_general_ci	16.0 KB	-
tentang	Struktur  Cari  Tambahkan  Ubah  Hapus	~0	Gambarkan			
12 tabel	Jumlah	~2,888	InnoDB	utf8mb4_general_ci	1.7 MB	8 B

Pilih Semua Dengan pilihan:

Cetak Kamus data Konsol

## ● CREATE TABLE DENGAN CHECK

Jalankan perintah SQL pada basis data sistem penggajian karyawan perusahaan:

```
CREATE TABLE PERSON ( ID varchar(100) NOT NULL,Name varchar(75) NOT NULL,Age int, CHECK ('Age' >= 18) );
```

Bersihkan Format Get auto-saved query  
Bind parameters  
Markahi kueri SQL ini:  
Pembatas Tampilkan ulang perintah SQL Menahan kotak kueri Rollback when finished Perbolehkan cek foreign key Kirim  
Konsol

Tampilkan kotak kueri

MySQL memberikan hasil kosong (atau no lans) (Pencarian dilakukan dalam 0.0008 detik)

```
CREATE TABLE PERSON ( ID varchar(100) NOT NULL,Name varchar(75) NOT NULL,Age int, CHECK ('Age' >= 18) );
```

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

Konsol

Hasil :

Tabel	Tindakan	Baris	Jenis	Penyortiran	Ukuran	Beban
absensi	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	500	InnoDB	utf8mb4_general_ci	205.0 KB	-
bank	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	1	InnoDB	utf8mb4_general_ci	16.0 KB	-
hrd	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_general_ci	16.0 KB	-
jabatan	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	5	InnoDB	utf8mb4_general_ci	52.0 KB	-
karyawan	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	500	InnoDB	utf8mb4_general_ci	176.0 KB	-
lama_bekerja	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_general_ci	16.0 KB	-
manusia	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	1	InnoDB	utf8mb4_general_ci	16.0 KB	-
master_gaji_karyawan	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	500	InnoDB	utf8mb4_general_ci	432.0 KB	-
mengabdi	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_general_ci	32.0 KB	-
person	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_general_ci	16.0 KB	-
perusahaan	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	1	InnoDB	utf8mb4_general_ci	16.0 KB	-
tentang	Jelajahi Struktur Cari Tambahkan Ubah Hapus	~0	Gambarkan		-	-
13 tabel	Jumlah	~2,009	InnoDB	utf8mb4_general_ci	1.7 MB	0 B

Pilih Semua Dengan priliman... Kemas data

## ● CREATE TABLE DENGAN DEFAULT

Jalankan perintah SQL pada basis data sistem penggajian karyawan perusahaan:

```
CREATE TABLE Persons ( ID varchar(255) NOT NULL,Name varchar(75) NOT NULL, Age int DEFAULT 18);
```

Bersinkron | Format | Get auto saved query | Bind parameters | Markahi kuiri SQL ini: | Kirim | Pembatas | Tampilkan ulang perintah SQL | Menahan kotak kuiri | Rollback when finished | Perbolehkan cek foreign key | Konsol

Tampilan kotak kuiri

MySQL memberikan hasil kosong (atau no1 baris). (Pencarian dilakukan dalam 0.0004 detik.)

```
CREATE TABLE Persons ( ID varchar(255) NOT NULL,Name varchar(75) NOT NULL, Age int DEFAULT 18);
```

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

Hasil :

Tabel	Tindakan	Baris	Jenis	Penyortiran	Ukuran	Beban
absensi		500	InnoDB	utf8mb4_general_ci	288,0 KB	-
bank		1	InnoDB	utf8mb4_general_ci	16,0 KB	-
gaji		0	InnoDB	utf8mb4_general_ci	16,0 KB	-
hrd		5	InnoDB	utf8mb4_general_ci	52,0 KB	-
jabatan		500	InnoDB	utf8mb4_general_ci	176,0 KB	-
karyawan		501	InnoDB	utf8mb4_general_ci	752,0 KB	-
lama_bekerja		0	InnoDB	utf8mb4_general_ci	16,0 KB	-
manusia		1	InnoDB	utf8mb4_general_ci	16,0 KB	-
master_gaji_karyawan		500	InnoDB	utf8mb4_general_ci	432,0 KB	-
mengabdi		0	InnoDB	utf8mb4_general_ci	32,0 KB	-
person		0	InnoDB	utf8mb4_general_ci	16,0 KB	-
personss		0	InnoDB	utf8mb4_general_ci	16,0 KB	-
perusahaan		1	InnoDB	utf8mb4_general_ci	16,0 KB	-
tentang		~0	Gambarkan	...	-	-
14 tabel	Jumlah	~2,009	InnoDB	utf8mb4_general_ci	1,7 MB	0 B

Pilih Semua Dengan pilihan: Konsol

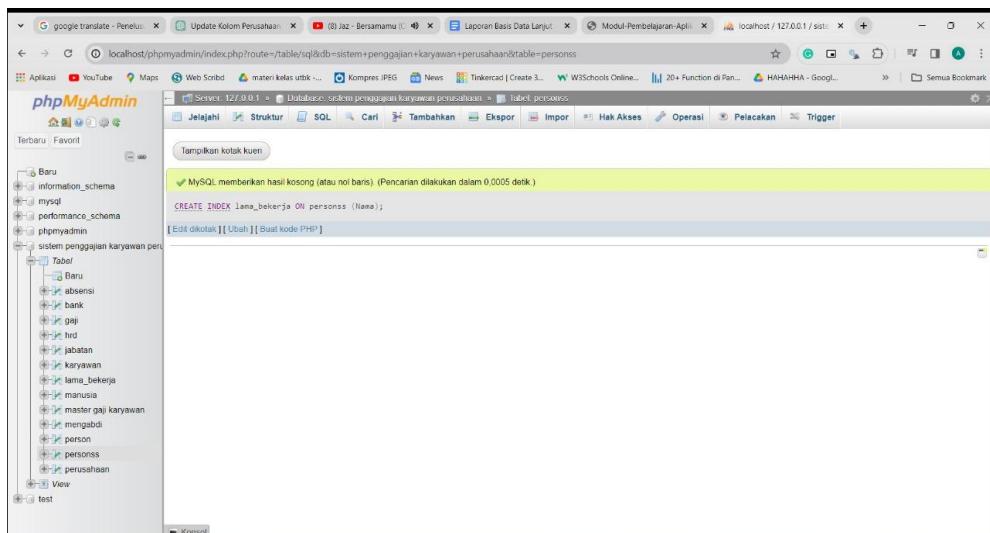
## ● CREATE INDEX

Run SQL query/queries on table sistem\_penggajian\_karyawan\_perusahaan.personss:

```
CREATE INDEX lama_bekerja ON personss (Nama)
```

Result pane shows the table structure:

ID	Nama	Age



Hasil :

Struktur tabel

#	Nama	Jenis	Penyortiran	Atribut	Tak Ternilai	Bawaan	Komentar	Ekstra	Tindakan
1	ID	varchar(255)	utf8mb4_general_ci	Tidak	Tidak ada				<a href="#">Ubah</a> <a href="#">Hapus Lainnya</a>
2	Nama	varchar(75)	utf8mb4_general_ci	Tidak	Tidak ada				<a href="#">Ubah</a> <a href="#">Hapus Lainnya</a>
3	Age	int(11)		Ya	18				<a href="#">Ubah</a> <a href="#">Hapus Lainnya</a>

Indeks

Tindakan	Nama kunci	Jenis	Unik	Dipadatkan	Kolom	Kardinalitas	Penyortiran	Tak Ternilai	Komentar
<a href="#">Ubah</a> <a href="#">Rename</a> <a href="#">Hapus</a>	lama_bekerja	BTREE	Tidak	Tidak	Nama	0	A	Tidak	

Create an index on 1 columns [Kirim](#)

Partitions

No partitioning defined

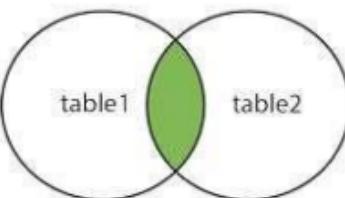
## OPERASI JOIN

Merupakan operasi yang digunakan untuk menghasilkan kumpulan record dari dua buah table atau lebih. Secara umum operasi join dapat dikelompokan menjadi:

### A. INNER JOIN

Merupakan operasi join yang digunakan untuk menghasilkan kumpulan record dari dua buah table atau lebih dengan nilai yang sama, nilai tersebut merupakan irisan yang terdapat pada tabel-tabel tersebut.

INNER JOIN



The screenshot shows the phpMyAdmin interface with the database 'sistem\_pengajuan\_karyawan\_perusahaan' selected. The 'Tabel' tab is open, displaying the 'karyawan' table. The table has columns: id\_karyawan, nama\_karyawan, alamat\_karyawan, email\_karyawan, id\_perusahaan, id\_hrd, id\_jabatan, id\_absensi, and id\_master\_gaji. The results show several rows of employee data, such as Gang Champelas (id 01360faa-ef1f) and Hj Vicki Marbut (id 01680f07-77f7). The interface includes a toolbar at the top and a sidebar on the left with various database and table options.

The screenshot shows the phpMyAdmin interface with the database 'sistem\_pengajuan\_karyawan\_perusahaan' selected. The 'Tabel' tab is open, displaying the 'jabatan' table. The table has columns: id\_jabatan, v1, nama\_jabatan, and id\_karyawan. The results show various job titles like 'Radiation protection practitioner' (id 33c10ef-3704-44da-ab59-e0d3d43d173) and 'Chief of Staff' (id 567593de-1546-400f-8696-b79e58f3d74). The interface includes a toolbar at the top and a sidebar on the left with various database and table options.

Jalankan perintah SQL pada basis data sistem penggajian karyawan perusahaan:

```
1. SELECT karyawan.nama_karyawan, jabatan.id_jabatan FROM karyawan INNER JOIN jabatan ON karyawan.id_karyawan = jabatan.id_karyawan;
```

Bersihkan Format Get auto-saved query  
 Bind parameters  
 Markah kueri SQL ini:  
 Pemberlas /  Tampilkan ulang perintah SQL  Menahan kotak kueri  Rollback when finished  Perbolehan cek foreign key Kirim  
 Konsol

Hasil :

Tampilan kotak kueri

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

Menampilkan baris 0 - 24 (total 499). Pencarian dilakukan dalam 0.0023 deflik

```
SELECT karyawan.nama_karyawan, jabatan.id_jabatan FROM karyawan INNER JOIN jabatan ON karyawan.id_karyawan = jabatan.id_karyawan;
```

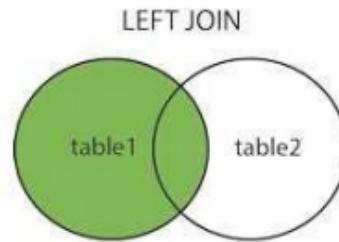
Profil [ Edit dikotak ] [ Ubah ] [ Jelaskan SQL ] [ Buat kode PHP ] [ Segarkan ]

nama_karyawan	id_jabatan
Hj. Vicky Marbun	301f3189-4ad9-4c21-bb64-274a3772516
Tgk. Hana Uyanah, S.Sos	1a625f40-1066-4f06-9771-3051f54769b
T. Ganda Septono, M.Farm	9f9ea1d5-521f-4482-b9bd-3d00d0e850c3
Gaduh Siagari, M.M	375107fb-2268-4f97-a1e5-1e253936c201
Genta Marbun	a586dbd7-fdf6-45ae-9efd-38ceaaed244
Cut Ciabellia Rajata	51624924-1275-42ff-b638-0e19c6276c4f
Jarwa Tamapuloh	bc7ea393-5724-41eb-a0ba-798281f835b
T. Liman Wibowo, S.Kom	67760a3e-11cc-43c1-a1b5-d74406d1bcb4c
Uchita Maryadi	719cd344-e612-4556-8b0d-43e848cc3799
Rima Hassannah	59b68118-1313-4a88-ab16-b1e93d5b03a16
Drs. Anita Wijaya, M.Farm	51368848-3029-4554-bf65-33221759327f
Putri Pranowo, S.I.Kom	69da0cac-cd94-4aa1-b624-e4732728c2f6
Ela Mawarnig	0e73fb5-e033-4615-8435-1e35def37c28

Konsol

## B. LEFT OUTER JOIN

Merupakan operasi join yang digunakan untuk menghasilkan kumpulan record dari dua buah table atau lebih, dengan asumsi bahwa table sebelah kiri sebagai rujukan. Anggotanya adalah semua yang memiliki nilai sama dengan asumsi table sebelah kiri tersebut.



Screenshot of phpMyAdmin showing the results of a LEFT JOIN query on the 'karyawan' table. The query is:

```
SELECT * FROM `karyawan`
```

The results show all records from 'karyawan' (table1) even if there is no matching record in 'jabatan' (table2). The columns displayed are: id\_karyawan, nama\_karyawan, alamat\_karyawan, email\_karyawan, id\_perusahaan, id\_hrd, id\_jabatan, id\_absensi, id\_master\_gaji.

id_karyawan	nama_karyawan	alamat_karyawan	email_karyawan	id_perusahaan	id_hrd	id_jabatan	id_absensi	id_master_gaji
013dcf0a.eff5	Hj. Vicky Marbun	Gang Cihampelas No. 03	gawati83@example.net	76768d31.6bee	9c7c7dcf0e5	361f199-4a8b-4c21-b120-81b35c463986	5006834f-467b-4942-8d45-274a3772516	
011d8d0f77f7	Tgk. Hana Umarinah, S.Sos	Jl. Jamika No. 146 Meulaboh, Aceh	saragithmyana@example.com	76768d31.6bee	035365ca-4162-5f40-9f65-4f05	300f73a9-6226-42da-acd0fdcd77b8	274a3772516	
0246f02e-23d6	T. Ganda Sapto	Jalan Kulisari Selatan No. 427 Balam, Nusa Tenggar	mala08@example.com	76768d31.6bee	c36ed10a-69ea-41d5-8d2c-2a735b41	52604490-421f-4610-8d28a20e0d2e	415b505d31351f542b6b	
03019ed6-4926-5b66-064b-96bb024	Gaduh Siregar, M.M.	Gg. Jamika No. 8 Tuol, KB 00502	pudijustitelm@gmail.com	76768d31.6bee	07577db0-4066-4f65-4d3c-407-a1c5-8a14-79435520d02	0ab77992-6527-4c36-8c14-79435520d02	403a-4799-0f65-4f05	
03862410	Genta Marbun	Jalan Kondakari No. 6 Bekasi, Sulawesi Tengah 745.	wrahimah@example.net	76768d31.6bee	a586dbd7-420fcf4a-3de1-44f4-8d62-9622-38ceaaacd244	c789374-42bf-4355-4dac2055-3208	42d2-9bdf-4b6f-458e-9a0d-4b1c8175915	

Screenshot of phpMyAdmin showing the results of a query ordered by 'id\_jabatan'. The query is:

```
SELECT * FROM `jabatan` ORDER BY `id_jabatan` DESC
```

The results show all records from 'jabatan' (table2). The columns displayed are: id\_jabatan, nama\_jabatan, id\_karyawan.

id_jabatan	nama_jabatan	id_karyawan
333c10ef-3704-44da-a5d9-59e0dd34d173	Radiation protection practitioner	
0675630d-154a-400f-8095-b79c58b03d74	Chief of Staff	
8e0767dd-2e2d-4ca9-8f03-5250a0bceefc	Surveyor, land/geomatics	
8d0875dc-3322-4f56-bb27-f9b3ca2f0469	Arts development officer	
a09a0958-69d4-4101-a92d-2cd3cb993b31	Historic buildings inspector/conservation officer	
ec39f103-81c0-4346-8d94-145939195f57	Child psychotherapist	
42ce1552-6e47-4f2b-9fb8-1cb6ebc334e	Scientist, marine	
10be8d1a-1167-4136-9dfe-241fe05e4dfa	Museum/gallery conservator	
41d12a55-356a-49f1-9c31-01cc157abfb1	Furniture designer	
8f513947-4b0d-4b8e-83ca-49ac4cc0c18	Therapist, horticultural	
7810537c-ee2d-47b0-aadd-5d6f1c151f036	Administrator	
ae054a5f-85f8-450b-9b25-5b02f5420696	Dentist	
e0010866-f1a5-400c-9c8a-37cb33ec764	Artist	
9177c7ed-b26e-489f-97b0-7d5743645375	Passenger transport manager	
2857b62a-05a9-4956-911d-442d2477d341	Art therapist	
33794131-361d-46a5-bf17-1d111f8d3e56	Health and safety inspector	

Jalankan perintah SQL pada basis data sistem penggajian karyawan perusahaan:

```
1. SELECT karyawan.nama_karyawan, jabatan.id_jabatan FROM karyawan LEFT JOIN jabatan ON karyawan.id_karyawan=jabatan.id_karyawan ORDER BY karyawan.nama_karyawan
```

Bersihkan Format Get auto-saved query  
Bind parameters  
Markah kueri SQL ini:  
Pembalas Tampilkan ulang perintah SQL Menahan kotak kueri Rollback when finished Perbolehan cek foreign key Kirim  
Konsol

Hasil :

Tampilan kotak kueri

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

Menampilkan baris 0 - 24 (total 501, Pencarian dilakukan dalam 0.0010 deflik) [nama\_karyawan: ADE MANDALA... - ATMAJA BUDIMAN, M.PD..]

```
SELECT karyawan.nama_karyawan, jabatan.id_jabatan FROM karyawan LEFT JOIN jabatan ON karyawan.id_karyawan=jabatan.id_karyawan ORDER BY karyawan.nama_karyawan;
```

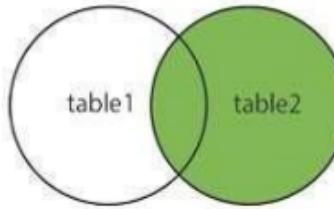
Jumlah baris: 25 Saring baris: Cari di tabel ini Sort by: Tidak ada

nama_karyawan	id_jabatan
Ade Mandala	a3af2b15-becb-46fa-a772-3e3c4f7bc234
Adinata Sunyatni	492fc12-ddcf413b-90de-746e30204941
Aditya Lestari	3cc03c7e-3532-4fe4-b65b-8436ee4dd9d9
Agus Gunawan	6e1b7f55-7074-4e88-a40d-6b2515ad03c7
Ajeng Wahyudin	be109ccc-cbe5-42ed-9967-4909839e9d3
Ajimat Saragih	f6554b68-c031-4244-864f-1027f7f2e61d
Ajimin Handayani	136daea0-fb4-4276-8dd0-abf330268b5
alfaro	NULL
Almira Hidayat, S.I.P	e69545b0-7304-4e0b-9c6e-0fcfc5c2e185
Ami Rajasa	5ba80851-2680-4748-b8f2-5bb89e41383d
Ana Budiyanto	b6b22e9b-bfab-401d-b90f-bbb2c23e3b4d
Ana Suarini	214a9759-9f3a-4142-a547-36aad9b22a27
Annastasia Mahendra	ff2bbb5-275e-44c0-b077-1667af185fb5

## C. RIGHT OUTER JOIN

Merupakan operasi join yang digunakan untuk menghasilkan kumpulan record dari dua buah table atau lebih dengan asumsi bahwa table sebelah kanan sebagai rujukan, sehingga anggotanya adalah semua yang memiliki nilai sama dengan asumsi table sebelah kanan tersebut.

RIGHT JOIN



Screenshot of the phpMyAdmin interface showing the results of a RIGHT JOIN query:

```
SELECT * FROM `jabatan` ORDER BY `id_jabatan` DESC
```

	<b>id_jabatan</b>	<b>nama_jabatan</b>	<b>id_karyawan</b>
	1	Radiation protection practitioner	33310ef370444da-ad5b-59e9dd3d4d173
	2	Chief of Staff	567533d-154a-40f-6996-79c58bf3d74
	3	Surveyor, landgeomatics	8e0f767a-2e2d-4ca9-803-5250a08ccef6
	4	Arts development officer	8d0875d-1a32-4f5b-bb2-7963ca21e49
	5	Historic buildings inspector/conservation officer	a0fa859b-69d4-4101-a923-2cd3cb9d9031
	6	Child psychotherapist	ec38102-81c5-434e-8dta-14593391e97
	7	Scientist, marine	42ce1552-6e44-4762-8fb6-1cb6ebc334e
	8	Museum/gallery conservator	10be8d1a-167-4136-8d8a-241e05e4d8
	9	Furniture designer	41d12a-3596a-49f1-bc21-01cc167abf11
	10	Therapist, horticultural	8f513947-a6cd-4be8-96ca-49a0cc10c18
	11	Administrator	78105327-8c46-476b-aadd-6a8b1c151036
	12	Dentist	ae05a35-8546-45b9-9b25-5fb2f1542065
	13	Artist	e0010669-f1a5-409c-9c8a-37cf33ec764
	14	Passenger transport manager	9177c7ed-b26a-4895-b7b8-7d6743645375
	15	Art therapist	2857b62a-b9a5-4956-911d-4d2b477d341
	16	Health and safety inspector	33704131-361d-4da5-5917-d11ff8d3e5e

Screenshot of the phpMyAdmin interface showing the results of a RIGHT JOIN query:

```
SELECT * FROM `karyawan`
```

	<b>id_karyawan</b>	<b>nama_karyawan</b>	<b>alamat_karyawan</b>	<b>email_karyawan</b>	<b>id_perusahaan</b>	<b>id_hrd</b>	<b>id_jabatan</b>	<b>id_absensi</b>	<b>id_master_gaji</b>
	013dcfca-41bf	Gang Champelas	No. 03	gawati83@example.net	76769d31-6bee	9c7cdc0e5	3615199-	5906834f-	
	04cb187c-	Hj. Vicki Marbun	Tomohon, BB 21237		4232-9bd7-	467b-e042-	4aa9-4c21-	9000-42d-	7117286-b1f2-
	029b519ebe97	Uyahain, S Sos			125a14c8a91	8321c138add	b664-	b120-	81b35c463086
	01680977-7717	Tgk. Hana	Jl. Jamika No. 146		76769d31-9b6e	093a-4799-	f0e6-4f09-	6220-42d3-	acd09fc4-27b8-
	04cb4-4f89-	Medabut, Aceh			125a14c8a91	1195610505d6	a715-	9171-	8f75-
	0249fb3c-236d-	T. Ganda Saptono	Selatan No. 427	mala08@example.com	76769d31-9b6e	d26-498-	b2f1-4482-	040f-4616-	944486c028b
	052c4920-	M. Farm	Balam, Nusa		125a14c8a91	3d2e2a735baf	8x02-	b5bd-	bb6564a76180
	084b996bb024	Gaduh Siregar,	Jalan Kondalsari		76769d31-9b6e	c36ed10a-	99ea1d5	52604490-	
	03016eed	M.M.	No. 6		125a14c8a91	3d0000088503	8x178e07cef	3bfe6806550	
	038e2410-		Bekasi, Sulawesi		76769d31-9b6e	1b577fb-	37567b-126-	ca877992-	
	0703-43a0-	Genta Marbun	Tengah 745-	wrahimah@example.net	4232-9bd7-	b7c0-	4671-a1e5-	0527-4c36-	dc76789c-7559
	01ff1				125a14c8a91	9a08-	8a14-	4b75-36c201	7943526d02
	0563369850eb				76769d31-9b6e	8x87707cef	369fcfab7b		

Jalankan perintah SQL pada basis data sistem penggajian karyawan perusahaan:

```
1 SELECT jabatan.id_jabatan, karyawan.nama_karyawan, karyawan.alamat_karyawan,karyawan.email_karyawan FROM karyawan RIGHT JOIN jabatan ON jabatan.id_karyawan = karyawan.id_karyawan ORDER BY jabatan.id_karyawan
```

Bersihkan Format Get auto-saved query  
Bind parameters  
Markah kueri SQL ini:  
Pembalas Tampilkan ulang perintah SQL Menahan kotak kueri Rollback when finished Perbolehan cek foreign key Kirim  
Konsol

Hasil :

Tampilan kotak kueri

Menampilkan baris 0 - 24 (total 500, Pencarian dilakukan dalam 0.00007 detik)

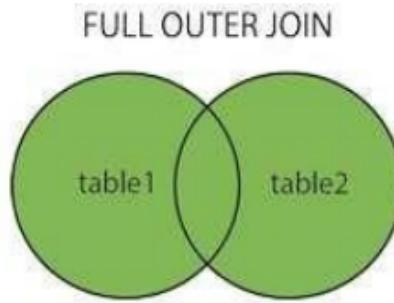
```
SELECT jabatan.id_jabatan, karyawan.nama_karyawan, karyawan.alamat_karyawan,karyawan.email_karyawan FROM karyawan RIGHT JOIN jabatan ON jabatan.id_karyawan = karyawan.id_karyawan ORDER BY jabatan.id_karyawan;
```

Profil [Edit dikotak] [Ubah] [Jelaskan SQL] [Buat kode PHP] [Segarkan]

<b>id_jabatan</b>	<b>nama_karyawan</b>	<b>alamat_karyawan</b>	<b>email_karyawan</b>
435ddb1c-7b4f-44ec-a784-7631f27141c2	NULL	NULL	NULL
361f3199-4aa9-4c21-bb64-274a37725f16	Hj. Vicky Marbun	Gang Cihampelas No. 03 Tomohon, BB 21237	gawat83@example.net
1a625f40-f0e6-4f06-9f71-3f3515426bb	Tgk. Hana Uyainah, S.Sos	Jl. Jamika No. 146 Meulaboh, Aceh 25086	sareghihnyana@example.com
9f9ea1d5-b21f-4482-b99d-3d00d0d850c3	T. Ganda Saptono, M.T Farm	Jalan Kutsan Selatan No. 427 Batam, Nusa Tenggara...	mala08@example.com
3750f7fb-f266-4f97-a1e5-1e253636c201	Gaduh Siregar, M.M	Gg. Jamika No. 8 Tual, KB 66952	budistutieima@example.com
a586dd07-ff06-45ae-9af3-3ceaaacd244	Genta Marbun	Jalan Kendari No. 6 Bekasi, Sulawesi Tengah 745...	wrahimah@example.net
51624924-1275-42ff-b838-0e19c6276c4f	Cut Ciabolla Rajata	Jalan Jakarta No. 560 Tangerang Selatan, KS 73131	farhunnisamandala@example.com

## D. FULL OUTER JOIN

Merupakan operasi join yang digunakan untuk menghasilkan kumpulan record dari dua buah table atau lebih anggotanya adalah semua yang memiliki nilai sama ataupun tidak sama.



The screenshot shows the phpMyAdmin interface with the database 'sistem\_penggajian\_karyawan\_perusahaan' selected. In the SQL tab, two queries are displayed:

```

-- Menggunakan LEFT OUTER JOIN
SELECT karyawan.id_karyawan, karyawan.nama_karyawan, absensi.id_absensi
FROM karyawan
LEFT OUTER JOIN absensi ON karyawan.id_karyawan = absensi.id_karyawan
UNION
-- Menggunakan RIGHT OUTER JOIN
SELECT karyawan.id_karyawan, karyawan.nama_karyawan, absensi.id_absensi
FROM karyawan
RIGHT OUTER JOIN absensi ON karyawan.id_karyawan = absensi.id_karyawan

```

Hasil :

The screenshot shows the results of the LEFT OUTER JOIN query. A message at the top states: "Menampilkan baris 0 - 24 (total 502). Pencarian dilakukan dalam 0.0035 detik." Below this, the query used is shown again:

```
-- Menggunakan LEFT OUTER JOIN
SELECT karyawan.id_karyawan, karyawan.nama_karyawan, absensi.id_absensi
FROM karyawan
LEFT OUTER JOIN absensi ON karyawan.id_karyawan = absensi.id_karyawan
UNION
-- Menggunakan RIGHT OUTER JOIN
SELECT karyawan.id_karyawan, karyawan.nama_karyawan, absensi.id_absensi
FROM karyawan
RIGHT OUTER JOIN absensi ON karyawan.id_karyawan = absensi.id_karyawan;
```

The results table displays columns: id\_karyawan, nama\_karyawan, and id\_absensi. The data includes various employee names and their corresponding absent IDs.

id_karyawan	nama_karyawan	id_absensi
013dcfba-e1f1-4cf1-837c-0ebc5e00259c	Hj. Vicki Marbun	5906834f-9000-42ad-b120-80cab4b715b
01f680f1-7717-4eb4-a686-6298519eb697	Tgk. Hanu Uyanah, S.Sos	300f73a8-6226-42d8-8f75-29d97ed1ae4c
024df3fe-236d-482b-a93f-f45b5df6878	T. Ganda Saptono, M.Farm	52604490-040f-4616-9d08-5bffe88d0550
03019eed-0552-4926-b566-06a699bb8027	Gaduh Siregar, M.M	eab77992-6527-4c3a-a114-3e9fc4efb399
038e2410-7bd3-43ab-aff1-e65336950eb	Genta Marbun	c789374-4bbf-4355-b9ac-c94de1ffcc04
04d1c3cd-6695-4f5c-9700-af154e49c979	Cut Ciobella Rajata	d10f0551-97ab-4545-86e3-8a6bc150042a
04fd507-97b6-44c7-a89e-0bb3e34be4b	Jawa Tamputololo	292d097a-68a0-406a-b609-9c329e18b8e8
06415509-0e36-49cb-ab81-d4c769518632	T. Luman Wibowo, S.Kom	fe7435e9-9ce6-415e-b046-ba46f5353be34
06d885c-03e8-4574-ab5e-6d0959de30b5	Uchita Maryadi	46a0662b-c26b-45af-9811-e5a5ff4bb0c
07742e19-7d11-4440-b603-14627107660c	Rina Hassanal	e4ab06b1-c1e1-4b64-b0a4-503155640a45
08ac556e-7018-4e88-424c-9eb0-1cb7e20919da	Drs. Anita Wijaya, M.Farm	2bd78ff8-8456-48ad-b089-3d223e04035
0949027d-b691-407d-87a9-2b7f58a79677	Putri Pranowo, S.I.Kom	9049027d-b691-407d-87a9-2b7f58a79677