



Pengaksesan Basis Data

SQL [3]

Fak. Teknik Prodi Teknik Informatika
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PHPMyAdmin

- PhpMyAdmin adalah kakas administrator basis data dan script PHP yang dimaksudkan untuk memberikan pengguna kemampuan untuk berinteraksi dengan database MySQL.
- Aplikasi menyimpan semua informasi dalam database MySQL dan berinteraksi dengan database untuk menghasilkan informasi dalam situs.
- Tampilan data "mentah" , tabel dan fields disimpan dalam database MySQL dapat diakses melalui phpMyAdmin.

Create Database

- Navigasi ke cPanel-> kakas PhpMyAdmin dan membuka serta membuat database yang baru. Database dan tidak ada tabel. Masukkan nama tabel dan jumlah field. Klik pada tombol Go untuk membuat tabel.
- *Create Database LatihanPBD*

Databases

Create database ?

Database name Collation

Create

Database	Collation	
<input type="checkbox"/> information_schema	utf8_general_ci	Check privileges
<input type="checkbox"/> latihanpbd	latin1_swedish_ci	Check privileges
<input type="checkbox"/> mahasiswa	latin1_swedish_ci	Check privileges
<input type="checkbox"/> mysql	latin1_swedish_ci	Check privileges
<input type="checkbox"/> performance_schema	utf8_general_ci	Check privileges
<input type="checkbox"/> phpmyadmin	utf8_bin	Check privileges
<input type="checkbox"/> test	latin1_swedish_ci	Check privileges
Total: 7	latin1_swedish_ci	

Create Table

- Buat tabel Latihan01















Table structure



Relation view

	#	Name	Type	Collation	Attributes	Null	Default	Extra	Action
<input type="checkbox"/>	1	NIP 	char(10)			No	None		 Change
<input type="checkbox"/>	2	Nama	char(30)			No	None		 Change
<input type="checkbox"/>	3	Alamat	varchar(50)			No	None		 Change
<input type="checkbox"/>	4	Tgl_Lahir	date			No	None		 Change
<input type="checkbox"/>	5	Tahun_Masuk	year(4)			No	None		 Change
<input type="checkbox"/>	6	Gaji	int(11)			No	None		 Change
<input type="checkbox"/>	7	Tunjangan	int(11)			No	None		 Change
<input type="checkbox"/>	8	Pinjaman	int(11)			No	None		 Change

Insert Records [1]

Column	Type	Function	Null	Value
NIP	char(10)	<input type="text"/>		<input type="text"/>
Nama	char(30)	<input type="text"/>		<input type="text"/>
Alamat	varchar(50)	<input type="text"/>		<input type="text"/>
Tgl_Lahir	date	<input type="text"/>		<input type="text"/> 
Tahun_Masuk	year(4)	<input type="text"/>		<input type="text"/>
Gaji	int(11)	<input type="text"/>		<input type="text"/>
Tunjangan	int(11)	<input type="text"/>		<input type="text"/>
Pinjaman	int(11)	<input type="text"/>		<input type="text"/>

Insert Records [2]

```
INSERT INTO `latihan01` (`NIP`, `Nama`, `Alamat`,  
`Tgl_Lahir`, `Tahun_Masuk`, `Gaji`, `Tunjangan`,  
`Pinjaman`)
```

VALUES

```
('P16004', 'Deddy Damhurry', 'Jalaprang 45 Cimahi  
42002', '1994-09-10', '2014', '1500000', '250000',  
'200000');
```

Run SQL query/queries on table latihanpbd.latihan01: ⓘ

```
1 INSERT INTO `latihan01` (`NIP`, `Nama`, `Alamat`, `Tgl_Lahir`, `Tahun_Masuk`, `Gaji`, `Tunjangan`, `Pinjaman`)  
VALUES ('P16004', 'Deddy Damhurry', 'Jalaprang 45 Cimahi 42002', '1994-09-10', '2014', '1500000', '250000',  
'200000');
```

Browse

Sort by key: None

+ Options

		NIP	Nama	Alamat	Tgl_Lahir	Tahun_Masuk	Gaji	Tunjangan	Pinjaman
<input type="checkbox"/>	Edit Copy Delete	P16001	Abdul Ngawur	Cisatu 123 Bandung 40123	1995-12-01	2014	1500000	250000	150000
<input type="checkbox"/>	Edit Copy Delete	P16002	Buddy Shamballa	Jend. Ahmad Yani 77a Bandung 40221	1992-11-08	2013	1750000	300000	400000
<input type="checkbox"/>	Edit Copy Delete	P16003	Cahyadi Rukmana	Cisangkuy 23b Bandung 40114	1991-03-01	2015	1250000	200000	0
<input type="checkbox"/>	Edit Copy Delete	P16004	Deddy Damhurry	Jalaprang 45 Cimahi 42002	1994-09-10	2014	1500000	250000	200000

☐ Check all With selected: [Edit](#) [Copy](#) [Delete](#) [Export](#)

☐ Show all

Number of rows: 25

Filter rows:













Select .. From






```
SELECT NIP, Nama FROM `latihan01`
```

☐ Show all | Number of rows: 25 ▾ Filter rows:

Sort by key:

+ Options

					NIP	Nama	
<input type="checkbox"/>		Edit		Copy		Delete	P16001 Abdul Ngawur
<input type="checkbox"/>		Edit		Copy		Delete	P16002 Buddy Shamballa
<input type="checkbox"/>		Edit		Copy		Delete	P16003 Cahyadi Rukmana
<input type="checkbox"/>		Edit		Copy		Delete	P16004 Deddy Damhurry

 ☐ Check all With selected:  Edit  Copy  Delete  Export

☐ Show all | Number of rows: 25 ▾ Filter rows:

Latihan SQL [1]

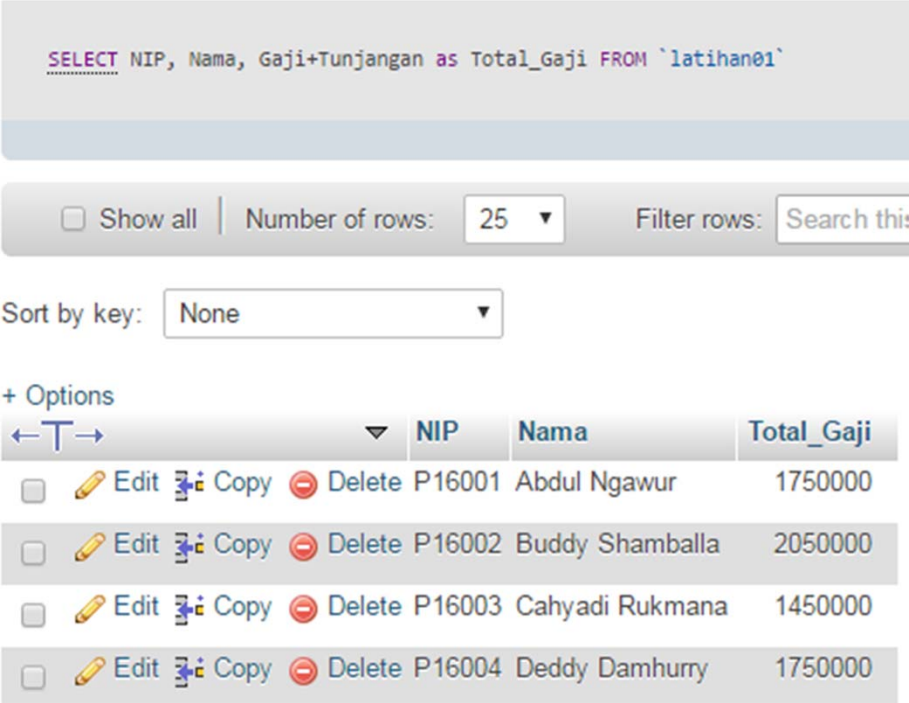
```
SELECT NIP, Nama  
FROM `latihan01`  
WHERE Tahun_Masuk = '2014'
```

The screenshot shows a SQL query execution interface. At the top, the query is displayed: `SELECT NIP, Nama FROM `latihan01` WHERE Tahun_Masuk = '2014'`. Below the query, there are controls for displaying the results: a checkbox for "Show all", a "Number of rows" dropdown set to 25, and a "Filter rows" input field. A "Sort by key" dropdown is set to "None". Below these controls, there is a section for "+ Options" with a table icon. The results are displayed in a table with two columns: "NIP" and "Nama". The first row shows "P16001" and "Abdul Ngawur". The second row shows "P16004" and "Deddy Damhurry". Each row has a checkbox, an "Edit" icon, a "Copy" icon, and a "Delete" icon.

	NIP	Nama
<input type="checkbox"/> Edit Copy Delete	P16001	Abdul Ngawur
<input type="checkbox"/> Edit Copy Delete	P16004	Deddy Damhurry

Latihan SQL [2]

```
SELECT NIP, Nama,  
Gaji+Tunjangan as Total_Gaji  
FROM `latihan01`
```



The screenshot shows a SQL query execution interface. At the top, the query is displayed: `SELECT NIP, Nama, Gaji+Tunjangan as Total_Gaji FROM `latihan01``. Below the query, there are controls for displaying the results: "Show all" (checked), "Number of rows: 25", and "Filter rows: Search this:". Below these controls, there is a "Sort by key:" dropdown menu set to "None". Below the sorting controls, there is a "+ Options" button and a table icon. The table has four columns: "NIP", "Nama", and "Total_Gaji". The table contains four rows of data, each with a checkbox, an "Edit" button, a "Copy" button, and a "Delete" button. The data is as follows:

	NIP	Nama	Total_Gaji
<input type="checkbox"/> Edit Copy Delete	P16001	Abdul Ngawur	1750000
<input type="checkbox"/> Edit Copy Delete	P16002	Buddy Shamballa	2050000
<input type="checkbox"/> Edit Copy Delete	P16003	Cahyadi Rukmana	1450000
<input type="checkbox"/> Edit Copy Delete	P16004	Deddy Damhurry	1750000

Latihan SQL [3]

```
SELECT NIP, Nama, Gaji+Tunjangan as Total_Gaji  
FROM `latihan01`  
WHERE Nama LIKE 'A%'
```

`SELECT NIP, Nama, Gaji+Tunjangan as Total_Gaji FROM `latihan01` WHERE Nama LIKE 'A%'`

☐ Show all | Number of rows: 25 ▼ | Filter rows:

+ Options

	NIP	Nama	Total_Gaji
<input type="checkbox"/> Edit <input type="text" value="P16001"/> Copy <input type="text" value="Abdul Ngawur"/> Delete	P16001	Abdul Ngawur	1750000

↑ ☐ Check all | With selected: Edit Copy Delete Export

☐ Show all | Number of rows: 25 ▼ | Filter rows:

Latihan SQL [4]

```
SELECT NIP, Nama,  
Gaji+Tunjangan-Pinjaman as Gaji_Pegawai  
FROM `latihan01`  
WHERE Tahun_Masuk BETWEEN '2012' AND '2014'
```

SELECT NIP, Nama, Gaji+Tunjangan-Pinjaman as Gaji_Pegawai FROM `latihan01` WHERE Tahun_Masuk BETWEEN '2012' AND '2014'

☐ Show all

Number of rows: 25

Filter rows:

Sort by key:

None

+ Options

←

→

▼

				NIP	Nama	Gaji_Pegawai			
<input type="checkbox"/>		Edit		Copy		Delete	P16001	Abdul Ngawur	1600000
<input type="checkbox"/>		Edit		Copy		Delete	P16002	Buddy Shamballa	1650000
<input type="checkbox"/>		Edit		Copy		Delete	P16004	Deddy Damhurry	1550000

↑

☐ Check all

With selected:

Edit

Copy

Delete

Export

☐ Show all

Number of rows: 25

Filter rows:

Latihan SQL [5]

```
SELECT NIP, Nama, Alamat  
FROM `latihan01`  
WHERE Alamat LIKE '%Bandung%'  
AND Gaji > 1250000
```

`SELECT NIP, Nama, Alamat FROM `latihan01` WHERE Alamat LIKE '%Bandung%' AND Gaji > 1250000`

☐ Show all | Number of rows: 25 ▼ | Filter rows:

Sort by key:

+ Options
⬅️⬆️⬅️

	NIP	Nama	Alamat
<input type="checkbox"/> Edit Copy Delete	P16001	Abdul Ngawur	Cisatu 123 Bandung 40123
<input type="checkbox"/> Edit Copy Delete	P16002	Buddy Shamballa	Jend. Ahmad Yani 77a Bandung 40221

⬆️ ☐ Check all | With selected: Edit Copy Delete Export

☐ Show all | Number of rows: 25 ▼ | Filter rows:

IF

- Fungsi MySQL IF adalah salah satu fungsi aliran kontrol MySQL yang mengembalikan nilai berdasarkan kondisi tertentu.
- Fungsi IF kadang-kadang disebut sebagai IF ELSE atau IF THEN fungsi ELSE.
- Sintaks : `SELECT ... IF(kondisi, jika kondisi terpenuhi, jika kondisi tidak terpenuhi) .. FROM`

Latihan IF

```
SELECT NIP, Nama,  
IF (Alamat like '%Bandung%',  
    'Penduduk Bandung', 'Bukan Penduduk Bandung')  
    as Status_Penduduk  
FROM `latihan01`
```

```
SELECT NIP, Nama, IF (Alamat like '%Bandung%', 'Penduduk Bandung', 'Bukan Penduduk Bandung') as Status_Penduduk FROM `latihan01`
```

[\[Edit inline \]](#)

☐ Show all
 | Number of rows: 25
 | Filter rows:

Sort by key: None

+ Options

←

→

▼

NIP

Nama

Status_Penduduk

<input type="checkbox"/>	Edit	Copy	Delete	P16001	Abdul Ngawur	Penduduk Bandung
<input type="checkbox"/>	Edit	Copy	Delete	P16002	Buddy Shamballa	Penduduk Bandung
<input type="checkbox"/>	Edit	Copy	Delete	P16003	Cahyadi Rukmana	Penduduk Bandung
<input type="checkbox"/>	Edit	Copy	Delete	P16004	Deddy Damhurry	Bukan Penduduk Bandung

↑

☐ Check all

With selected:

Edit

Copy

Delete

Export

☐ Show all
 | Number of rows: 25
 | Filter rows:

CASE

- Fungsi CASE MySQL memiliki fungsi pernyataan IF-THEN-ELSE dengan memungkinkan pengguna untuk mengevaluasi kondisi dan mengembalikan nilai saat kondisi pertama bertemu.
- Sintaks :

```
CASE [ expression ]  
  
    WHEN condition_1 THEN result_1  
    WHEN condition_2 THEN result_2  
    ...  
    WHEN condition_n THEN result_n  
  
    ELSE result  
  
END
```


Latihan CASE

```
SELECT Nama, Alamat,  
CASE YEAR(Tgl_Lahir)  
WHEN '1991' THEN 'Umur 25 Tahun'  
WHEN '1992' THEN 'Umur 24 Tahun'  
WHEN '1993' THEN 'Umur 23 Tahun'  
WHEN '1994' THEN 'Umur 22 Tahun'  
WHEN '1995' THEN 'Umur 20 Tahun'  
END AS Umurnya  
FROM `latihan01`
```

+ Options

Nama	Alamat	Umurnya
Abdul Ngawur	Cisatu 123 Bandung 40123	Umur 20 Tahun
Buddy Shamballa	Jend. Ahmad Yani 77a Bandung 40221	Umur 24 Tahun
Cahyadi Rukmana	Cisangkuy 23b Bandung 40114	Umur 25 Tahun
Deddy Damhurry	Jalaprang 45 Cimahi 42002	Umur 22 Tahun

Create View

Create view

Details

OR REPLACE ☐

ALGORITHM UNDEFINED ▾

Definer

SQL SECURITY ▾

VIEW name

Column names

AS

```
1 SELECT NIP, Nama, Gaji
2 FROM `latihan01`
3 WHERE Gaji > 1500000
```

WITH CHECK OPTION ▾

Go **Close**