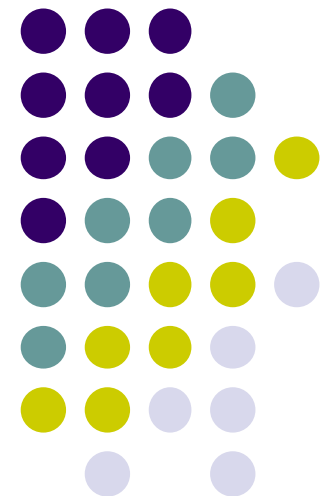


SQL

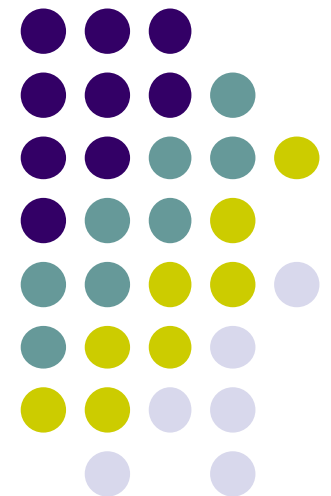
Pemrograman Web II

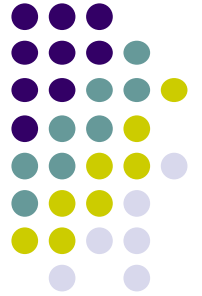
Ganjil 2015 - 2016



Review Database

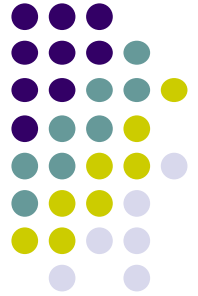
Structured Query Language





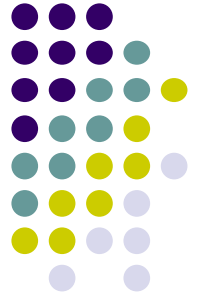
Apa itu database ?

- Kumpulan data terstruktur yang saling berelasi.
- Definisi : Kumpulan data, yang terorganisir secara logika, dikelola menggunakan metode tertentu yang menjamin konsistensi data.



Penerapan Database

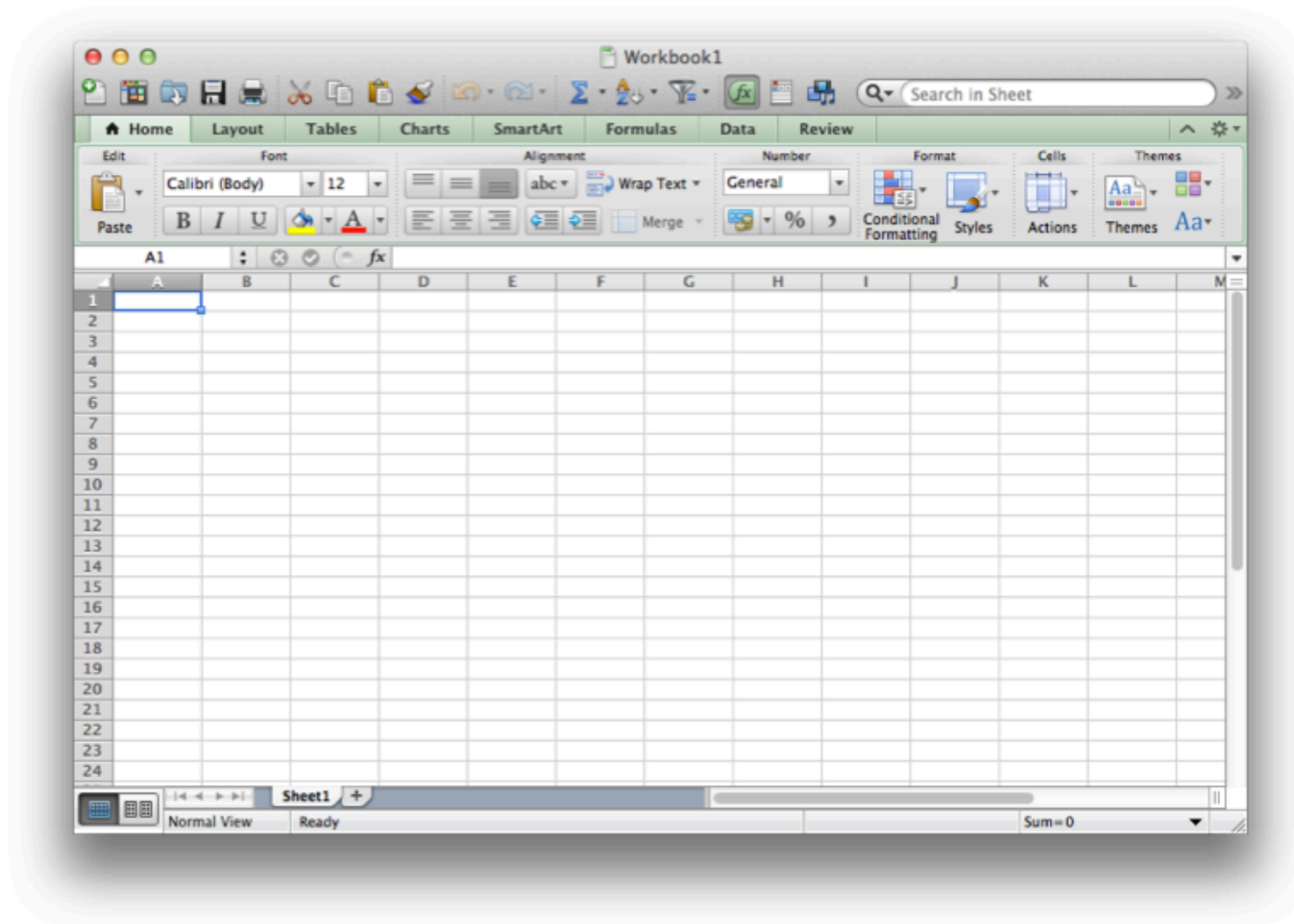
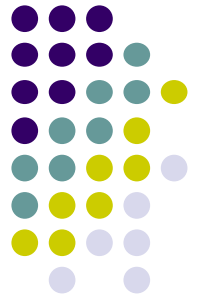
- Meliputi hampir seluruh aspek kehidupan manusia.
- Contoh Penerapan :
 - Perbankan : semua transaksi
 - Penerbangan : reservasi, jadwal
 - Universitas : registrasi, data perkuliahan
 - Perdagangan : produk, pelanggan, transaksi pembelian
 - Manufaktur : produksi, persediaan, pesanan, *supply chain*
 - HRD : pegawai, gaji, pajak
 - Telekomunikasi : *routing*, pelanggan, penggunaan layanan
 - Akun komputer : member, hak akses, *quota*
 - Dan masih banyak lagi....

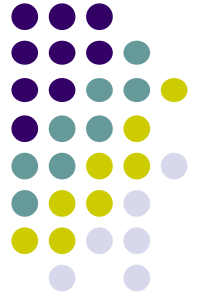


Jenis-jenis Database

- CSV
 - Fgetscsv, fputcsv
- XML
 - simpleXML
- MySQL
 - mysql, mysqli, PDO
- SQLite
 - PDO
- ...

Relational Database

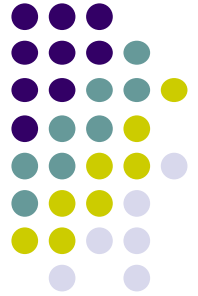




Konsep Relational Database

- Table
 - Kumpulan dari beberapa record
- Record
 - Kumpulan dari data mengenai suatu *item*.
- Field
 - Item data tunggal
- Key field / Primary key
 - Identitas unik setiap *record*.

Table



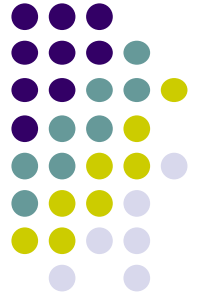
	Member ID	Nama	Alamat	Status
→	2312	Donna	1029 Wolf Avenue	A
→	2313	Shannon	33099 Clark Street	A
→	2314	Adrian	15 Duluth Street	N

Record

Primary Key

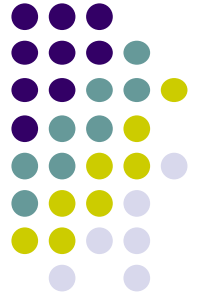
Field

The diagram shows a table with four columns: Member ID, Nama, Alamat, and Status. Three rows of data are shown. A vertical line on the left, labeled 'Record', has three arrows pointing to the first column (Member ID) of each row. An arrow labeled 'Primary Key' points to the first row's Member ID (2312). An arrow labeled 'Field' has three arrows pointing to the Nama, Alamat, and Status columns of the first row.



Aplikasi Database

- Database Management System (DBMS)
 - Aplikasi yang dirancang untuk menyimpan dan mengelola satu atau lebih database.
 - Fungsi :
 - Buat database, tabel, dan struktur pendukung
 - Manipulasi data
 - Menjaga struktur database
 - *Backup dan Recovery*

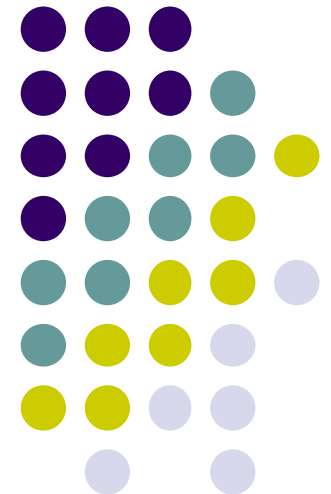


Aplikasi Database

- IBM DB2
- Oracle
- Informix
- Ingres
- Microsoft SQL Server (MS SQL)
- mSQL
- MySQL
- PostgreSQL
- Sybase

MySQL

Konfigurasi



Menjalankan Server MySQL



XAMPP Control Panel v3.2.1 [Compiled: May 7th 2013]

XAMPP Control Panel v3.2.1

Modules

Service	Module	PID(s)	Port(s)	Actions
<input checked="" type="checkbox"/>	Apache			Start Admin Config Logs
<input checked="" type="checkbox"/>	MySQL	1660	3306	Stop Admin Config Logs
<input checked="" type="checkbox"/>	FileZilla			Start Admin Config Logs
<input type="checkbox"/>	Mercury			Start Admin Config Logs
<input type="checkbox"/>	Tomcat			Start Admin Config Logs

Config
Netstat
Shell
Explorer
Services
Help
Quit

8:00:59 AM [main] Checking for prerequisites
8:00:59 AM [main] All prerequisites found
8:00:59 AM [main] Initializing Modules
8:00:59 AM [main] The Mercury module is disabled
8:00:59 AM [main] The Tomcat module is disabled
8:00:59 AM [main] Starting Check-Timer
8:00:59 AM [main] Control Panel Ready
8:01:03 AM [mysql] Attempting to start MySQL app...
8:01:03 AM [mysql] Status change detected: running



Masuk ke MySQL (Command Prompt)

```
Command Prompt - mysql -u root -p
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>cd\

C:\>cd xampp/mysql/bin

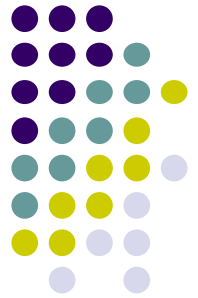
C:\xampp\mysql\bin>mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 4
Server version: 5.5.32 MySQL Community Server (GPL)

Copyright (c) 2000, 2013, Oracle and/or its affiliates. All rights reserved.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```



Masuk ke MySQL (Command Prompt)

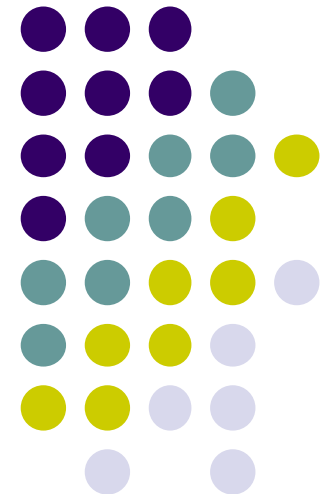
1. Jalankan server mysql lewat XAMPP Control Panel
2. Buka Command Prompt, lalu arahkan ke dalam folder :

xampp/mysql/bin
3. Jalankan perintah: **mysql -u root -p**
4. Password default untuk mysql di windows adalah kosong, jadi tekan enter saja ketika diminta password (bisa dikonfigurasi sendiri)

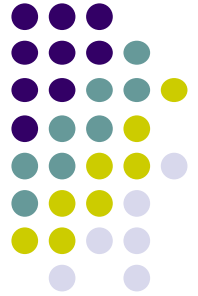
MySQL

Manipulasi Data

<http://dev.mysql.com/doc/refman/5.5/en/sql-syntax.html>



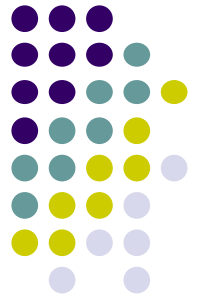
DDL (Data Definition Language)



- **SHOW DATABASES**
- **CREATE DATABASE**
- **ALTER DATABASE**
- **DROP DATABASE**
- **USE**

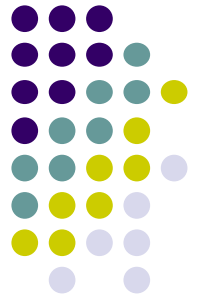
- **DESCRIBE**
- **CREATE TABLE**
- **ALTER TABLE**
- **DROP TABLE**
- **RENAME TABLE**

DML (Data Manipulation Language)



- **SELECT**
- **INSERT**
- **UPDATE**
- **DELETE**

DML – Data Manipulation Language

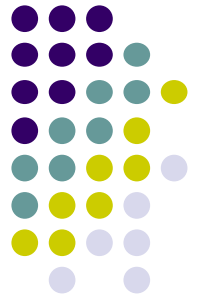


- **Rekam Data**

- `INSERT INTO nama_tabel (field1, field2, ...)
VALUES (value1, value2, ...);`

- Jika field tidak dideklarasikan, data yang dimasukkan jumlahnya harus sama dengan jumlah field dari table tersebut.

DML – Data Manipulation Language



- **Cari Data**

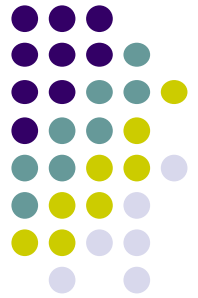
- ```
SELECT * FROM nama_tabel

WHERE syarat1, syarat2

ORDER BY field ASC
```

- Jika menggunakan \*, semua field pada tabel tersebut di tampilkan.
- Where dan order by optional

# DML – Data Manipulation Language



- **Manipulasi Data**

- **Edit**

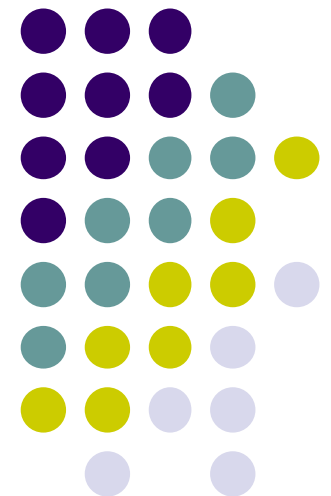
- `UPDATE nama_tabel`  
    `SET field1=value1, field2=value2, ...`  
    `WHERE syarat1, syarat2, ...`

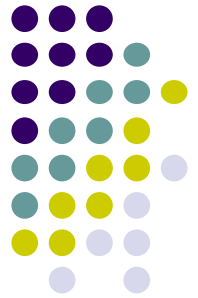
- **Hapus**

- `DELETE FROM nama_tabel`  
    `WHERE syarat1, syarat2, ...`

# MySQL

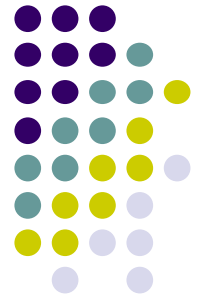
## Latihan





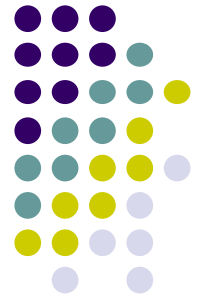
# Buat database 'unpas'

```
+-----+
| Database |
+-----+
| information_schema |
| coba |
| musprop |
| mysql |
| performance_schema |
| simari_adm |
| unpas |
+-----+
```



# Buat buat tabel 'mahasiswa'

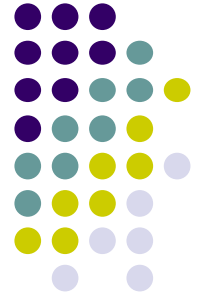
| Field    | Type        | Null | Key | Default | Extra          |
|----------|-------------|------|-----|---------|----------------|
| id       | int(3)      | NO   | PRI | NULL    | auto_increment |
| nrp      | varchar(10) | NO   |     | NULL    |                |
| nama     | varchar(50) | NO   |     | NULL    |                |
| fakultas | varchar(50) | NO   |     | NULL    |                |
| jurusan  | varchar(50) | NO   |     | NULL    |                |
| ipk      | varchar(5)  | NO   |     | NULL    |                |
| status   | varchar(12) | NO   |     | NULL    |                |



# Isi 5 baris data

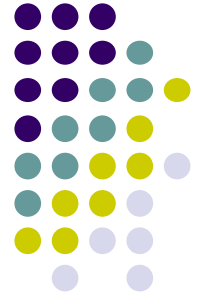
| id | nrp       | nama                 | fakultas | jurusan            | ipk  | status |
|----|-----------|----------------------|----------|--------------------|------|--------|
| 1  | 043040023 | Sandhika Galih       | Teknik   | Teknik Informatika | 3.00 | lulus  |
| 2  | 033040100 | Hendra Komara        | Teknik   | Teknik Informatika | 3.60 | lulus  |
| 3  | 033040028 | Anggoro Ari Nurcahyo | Teknik   | Teknik Informatika | 3.80 | Lulus  |
| 4  | 023040010 | Erik                 | Teknik   | Teknik Informatika | 3.50 | Lulus  |
| 5  | 063040099 | Acep Hendra          | Teknik   | Teknik Informatika | 3.50 | Lulus  |





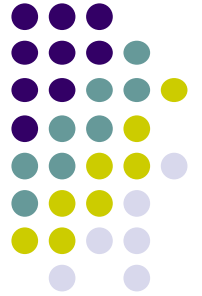
## Ubah status baris 1 dan 2 jadi 'tidak lulus'

| id | nrp       | nama                 | fakultas | jurusan            | ipk  | status      |
|----|-----------|----------------------|----------|--------------------|------|-------------|
| 1  | 043040023 | Sandhika Galih       | Teknik   | Teknik Informatika | 3.00 | Tidak Lulus |
| 2  | 033040100 | Hendra Komara        | Teknik   | Teknik Informatika | 3.60 | Tidak Lulus |
| 3  | 033040028 | Anggoro Ari Nurcahyo | Teknik   | Teknik Informatika | 3.80 | Lulus       |
| 4  | 023040010 | Erik                 | Teknik   | Teknik Informatika | 3.50 | Lulus       |
| 5  | 063040099 | Acep Hendra          | Teknik   | Teknik Informatika | 3.50 | Lulus       |



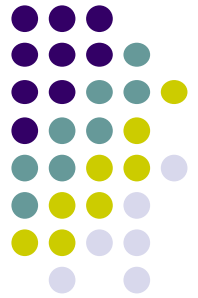
# Hapus baris terakhir

| id | nrp       | nama                 | fakultas | jurusan            | ipk  | status      |
|----|-----------|----------------------|----------|--------------------|------|-------------|
| 1  | 043040023 | Sandhika Galih       | Teknik   | Teknik Informatika | 3.00 | Tidak Lulus |
| 2  | 033040100 | Hendra Komara        | Teknik   | Teknik Informatika | 3.60 | Tidak Lulus |
| 3  | 033040028 | Anggoro Ari Nurcahyo | Teknik   | Teknik Informatika | 3.80 | Lulus       |
| 4  | 023040010 | Erik                 | Teknik   | Teknik Informatika | 3.50 | Lulus       |



# Hapus tabel mahasiswa

```
mysql> show tables;
Empty set (0.00 sec)
```



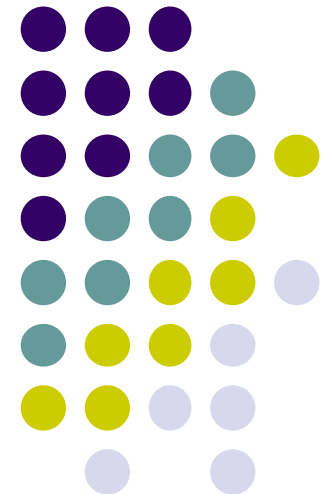
# Hapus database unpas

```
+-----+
| Database |
+-----+
| information_schema |
| coba |
| musprop |
| mysql |
| performance_schema |
| simari_adm |
+-----+
```

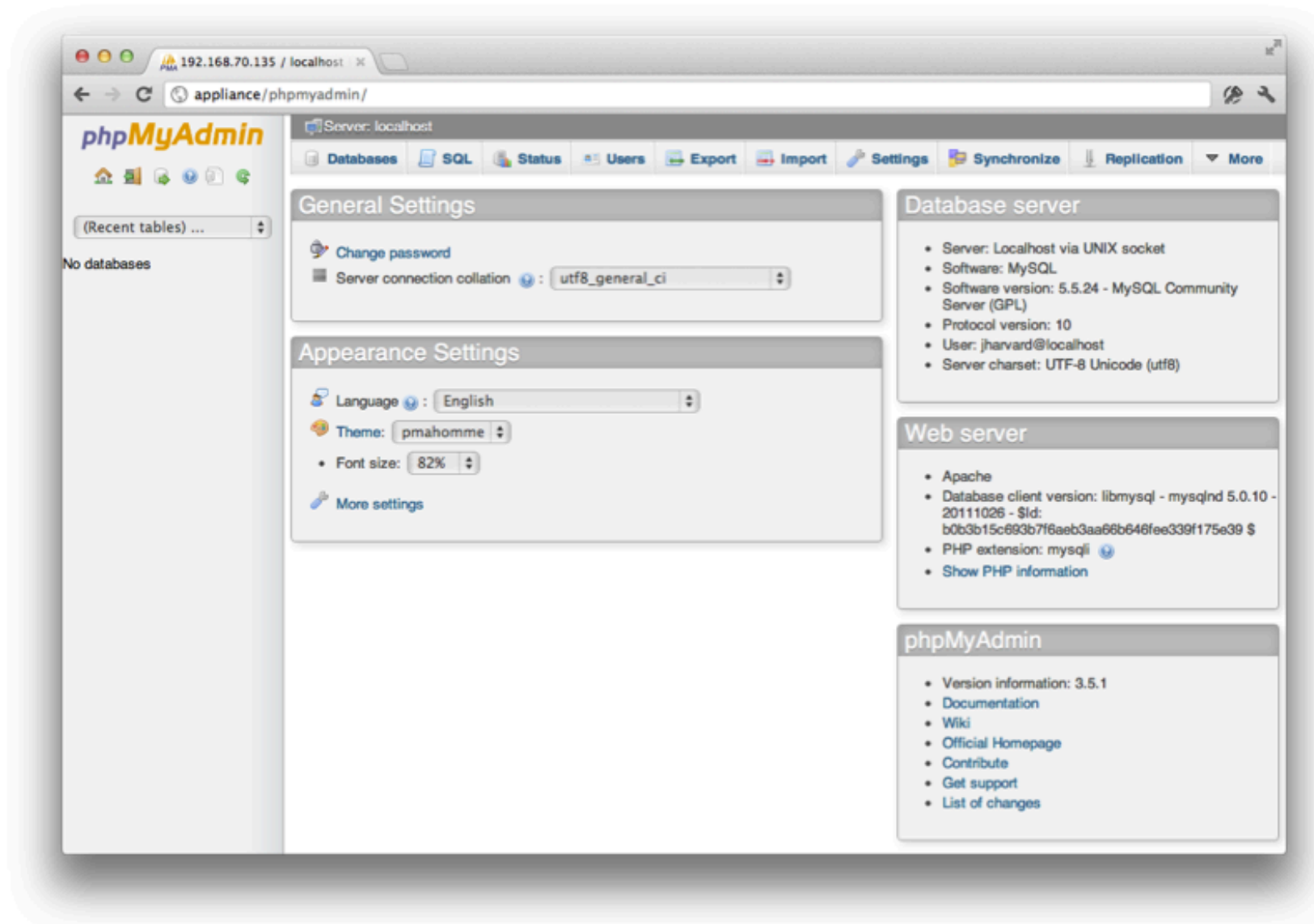
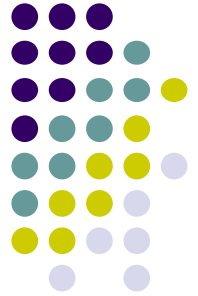
# phpmyadmin

---

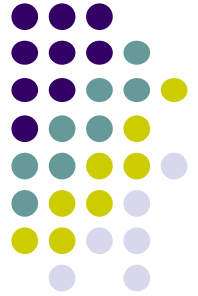
<http://localhost/phpmyadmin>



# phpmyadmin



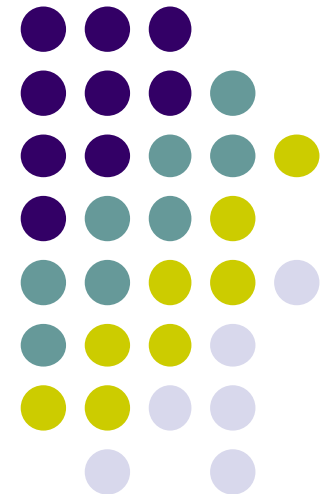
**Lakukan hal yang sama seperti  
menggunakan command prompt**



# DBMS

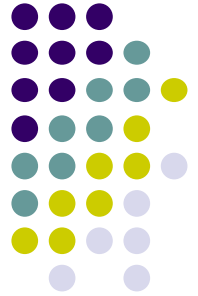
---

MySQL





# Struktur Tabel

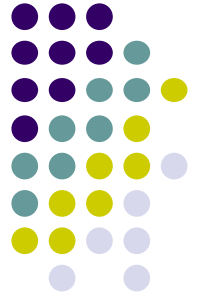


**Add columns** ✕

| Structure ? |           |                 |           |           |            |                          |       |                          |          |
|-------------|-----------|-----------------|-----------|-----------|------------|--------------------------|-------|--------------------------|----------|
| Name        | Type ?    | Length/Values ? | Default ? | Collation | Attributes | Null                     | Index | A_I                      | Comments |
|             | VARCHAR ▾ |                 | None ▾    |           |            | <input type="checkbox"/> | ---   | <input type="checkbox"/> |          |

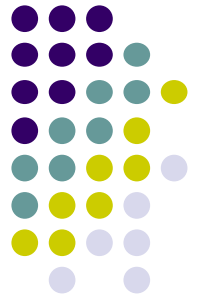
Save

# Tipe Data MySQL

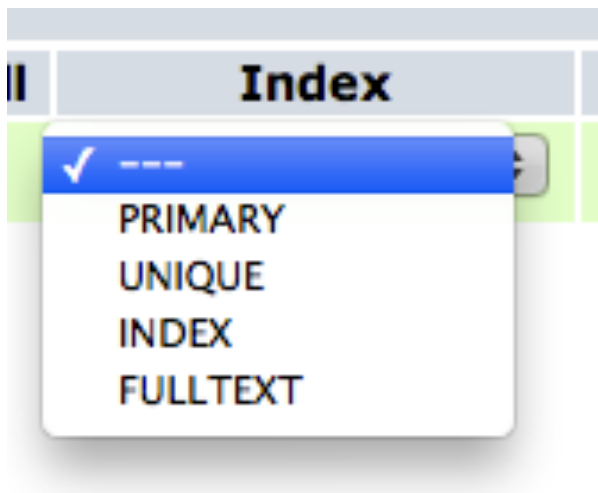


- CHAR
- VARCHAR
- TEXT
- TINYTEXT
- MEDIUMTEXT
- LONGTEXT
- DATE
- DATETIME
- YEAR
- TIME
- TIMESTAMP
- TINYINT
- SMALLINT
- MEDIUMINT
- INT
- BIGINT
- FLOAT
- DOUBLE
- DECIMAL
- TINYBLOB
- BLOB
- MEDIUMBLOB
- LONGBLOB
- BINARY
- VARBINARY
- ENUM
- SET

# Index



- Agar pencarian data lebih cepat dan optimal.
- Diperlukan untuk membuat relasi (primary & foreign key) antar tabel
- Jenis Index



# Index



[Browse](#)
[Structure](#)
[SQL](#)
[Search](#)
[Insert](#)
[Export](#)
[Import](#)
[Operations](#)
[Triggers](#)

| #                          | Name      | Type        | Collation         | Attributes | Null | Default | Extra          | Action |  |  |  |  |  |
|----------------------------|-----------|-------------|-------------------|------------|------|---------|----------------|--------|--|--|--|--|--|
| <input type="checkbox"/> 1 | <u>id</u> | int(5)      |                   |            | No   | None    | AUTO_INCREMENT |        |  |  |  |  |  |
| <input type="checkbox"/> 2 | judul     | varchar(50) | latin1_swedish_ci |            | No   | None    |                |        |  |  |  |  |  |
| <input type="checkbox"/> 3 | pengarang | varchar(50) | latin1_swedish_ci |            | No   | None    |                |        |  |  |  |  |  |
| <input type="checkbox"/> 4 | penerbit  | varchar(50) | latin1_swedish_ci |            | No   | None    |                |        |  |  |  |  |  |

[Check All / Uncheck All](#)
With selected:

[Print view](#)
[Relation view](#)
[Propose table structure](#)

Add  column(s)
☒ At End of Table
☐ At Beginning of Table
☐ After

**Indexes**

Indexes ?

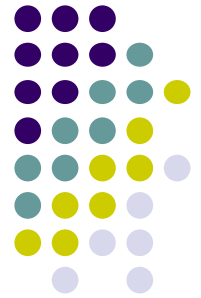
| Action | Keyname | Type  | Unique | Packed | Column | Cardinality | Collation | Null | Comment |
|--------|---------|-------|--------|--------|--------|-------------|-----------|------|---------|
|        | PRIMARY | BTREE | Yes    | No     | id     | 3           | A         | No   |         |

Create an index on  columns

# RELATION

## mahasiswa

| id | nrp       | nama              | fakultas | jurusan            | ipk  | status |
|----|-----------|-------------------|----------|--------------------|------|--------|
| 2  | 043040007 | Doddy Ferdiansyah | Teknik   | Teknik Informatika | 3.90 | lulus  |
| 4  | 023040123 | Erik              | Hukum    | Ilmu Hukum         | 4.00 | lulus  |
| 5  | 043040023 | Sandhika Galih    | Teknik   | Teknik Informatika | 3.00 | Lulus  |



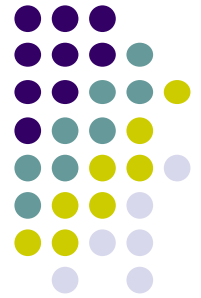
## buku

| id | judul                                | pengarang         | penerbit |
|----|--------------------------------------|-------------------|----------|
| 1  | Jaringan Komputer                    | Iwan Kurniawan    | Pasundan |
| 2  | Harry Potter and The Sorcerers Stone | J.K. Rowling      | Gramedia |
| 3  | Pemrograman Sistem Berbasis Objek    | Bambang Hariyanto | UNPAS    |

# RELATION

## mahasiswa (master)

| id | nrp       | nama              | fakultas | jurusan            | ipk  | status |
|----|-----------|-------------------|----------|--------------------|------|--------|
| 2  | 043040007 | Doddy Ferdiansyah | Teknik   | Teknik Informatika | 3.90 | lulus  |
| 4  | 023040123 | Erik              | Hukum    | Ilmu Hukum         | 4.00 | lulus  |
| 5  | 043040023 | Sandhika Galih    | Teknik   | Teknik Informatika | 3.00 | Lulus  |



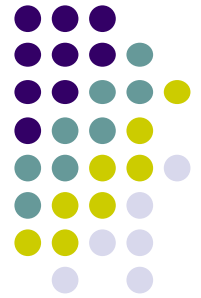
## buku (master)

| id | judul                                | pengarang         | penerbit |
|----|--------------------------------------|-------------------|----------|
| 1  | Jaringan Komputer                    | Iwan Kurniawan    | Pasundan |
| 2  | Harry Potter and The Sorcerers Stone | J.K. Rowling      | Gramedia |
| 3  | Pemrograman Sistem Berbasis Objek    | Bambang Hariyanto | UNPAS    |

## peminjaman (transaksi)

| id | tanggal_pinjam | tanggal_kembali | id_mhs | id_buku |
|----|----------------|-----------------|--------|---------|
| 1  | 2013-11-08     | 2013-11-10      | 2      | 2       |
| 2  | 2013-11-07     | 2013-11-11      | 4      | 3       |
| 3  | 2013-11-07     | 2013-11-11      | 4      | 1       |

# RELATION



Database management interface showing table structure and actions.

Navigation tabs: Browse, Structure, SQL, Search, Insert, Export, Import, Operations, Triggers.

| #                        | Name              | Type   | Collation | Attributes | Null | Default | Extra          | Action                                         |
|--------------------------|-------------------|--------|-----------|------------|------|---------|----------------|------------------------------------------------|
| <input type="checkbox"/> | 1 <u>id</u>       | int(5) |           |            | No   | None    | AUTO_INCREMENT | [Edit] [Delete] [View] [Add] [Key] [U] [S] [T] |
| <input type="checkbox"/> | 2 tanggal_pinjam  | date   |           |            | No   | None    |                | [Edit] [Delete] [View] [Add] [Key] [U] [S] [T] |
| <input type="checkbox"/> | 3 tanggal_kembali | date   |           |            | No   | None    |                | [Edit] [Delete] [View] [Add] [Key] [U] [S] [T] |
| <input type="checkbox"/> | 4 id_mhs          | int(5) |           |            | No   | None    |                | [Edit] [Delete] [View] [Add] [Key] [U] [S] [T] |
| <input type="checkbox"/> | 5 id_buku         | int(5) |           |            | No   | None    |                | [Edit] [Delete] [View] [Add] [Key] [U] [S] [T] |

Check All / Uncheck All With selected: [Edit] [Delete] [View] [Add] [Key] [U] [S] [T]

Print view **Relation view** Propose table structure ?

Add 1 column(s) [At End of Table] [At Beginning of Table] [After id] Go

+ Indexes

# RELATION

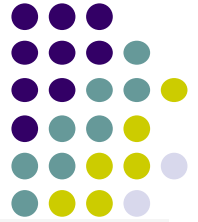


Relations

| Column          | Foreign key constraint (INNODB)                                                                                                                    |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| id              | <input type="text"/>                                                                                                                               |
| tanggal_pinjam  | No index defined!                                                                                                                                  |
| tanggal_kembali | No index defined!                                                                                                                                  |
| id_mhs          | <input type="text" value="`coba`.`mahasiswa`.`id`"/> ON DELETE <input type="text" value="CASCADE"/> ON UPDATE <input type="text" value="CASCADE"/> |
| id_buku         | <input type="text" value="`coba`.`buku`.`id`"/> ON DELETE <input type="text" value="CASCADE"/> ON UPDATE <input type="text" value="CASCADE"/>      |



# RELATION

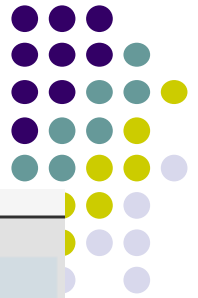


Relations

| Column          | Foreign key constraint (INNODB)                                                                                                                    |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| id              | <input type="text"/>                                                                                                                               |
| tanggal_pinjam  | No index defined!                                                                                                                                  |
| tanggal_kembali | No index defined!                                                                                                                                  |
| id_mhs          | <input type="text" value="`coba`.`mahasiswa`.`id`"/> ON DELETE <input type="text" value="CASCADE"/> ON UPDATE <input type="text" value="CASCADE"/> |
| id_buku         | <input type="text" value="`coba`.`buku`.`id`"/> ON DELETE <input type="text" value="CASCADE"/> ON UPDATE <input type="text" value="CASCADE"/>      |

- id\_mhs merupakan **foreign key** di tabel peminjaman dan **primary key** di tabel mahasiswa
- id\_buku merupakan **foreign key** di tabel peminjaman dan **primary key** di tabel buku

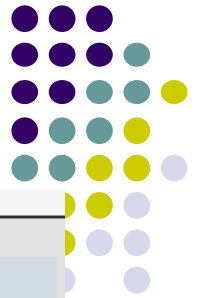
# RELATION



Relations

| Column          | Foreign key constraint (INNODB)                                                                                                                    |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| id              | <input type="text"/>                                                                                                                               |
| tanggal_pinjam  | No index defined!                                                                                                                                  |
| tanggal_kembali | No index defined!                                                                                                                                  |
| id_mhs          | <input type="text" value="`coba`.`mahasiswa`.`id`"/> ON DELETE <input type="text" value="CASCADE"/> ON UPDATE <input type="text" value="CASCADE"/> |
| id_buku         | <input type="text" value="`coba`.`buku`.`id`"/> ON DELETE <input type="text" value="CASCADE"/> ON UPDATE <input type="text" value="CASCADE"/>      |

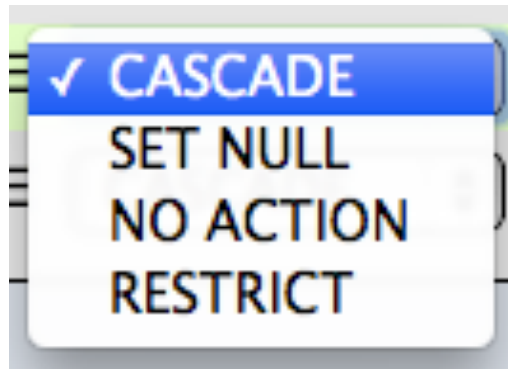
# RELATION



Relations

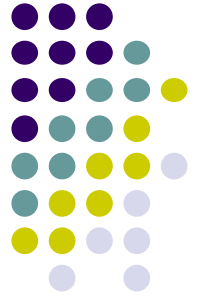
| Column          | Foreign key constraint (INNODB)                                                                                                                    |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| id              | <input type="text"/>                                                                                                                               |
| tanggal_pinjam  | No index defined!                                                                                                                                  |
| tanggal_kembali | No index defined!                                                                                                                                  |
| id_mhs          | <input type="text" value="`coba`.`mahasiswa`.`id`"/> ON DELETE <input type="text" value="CASCADE"/> ON UPDATE <input type="text" value="CASCADE"/> |
| id_buku         | <input type="text" value="`coba`.`buku`.`id`"/> ON DELETE <input type="text" value="CASCADE"/> ON UPDATE <input type="text" value="CASCADE"/>      |

- Tipe Relasi:

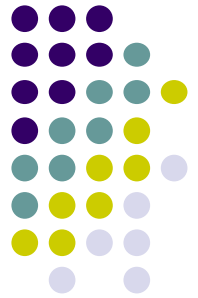


- **Cascade** : jika id\_mhs di tabel mahasiswa diubah/dihapus, maka id\_mhs di tabel peminjaman juga akan berubah/terhapus
- **Restrict**: operasi ubah/hapus id\_mhs di tabel mahasiswa tidak diperbolehkan

# JOIN



- Bagaimana cara menampilkan data peminjaman, tetapi menampilkan nama dan judul buku?

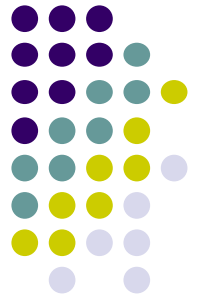


# JOIN

- Bagaimana cara menampilkan data peminjaman, tetapi menampilkan nama dan judul buku?

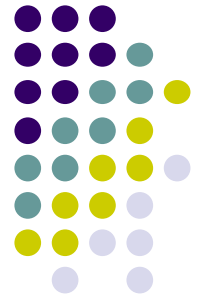
| nama              | judul                                | tanggal_pinjam | tanggal_kembali |
|-------------------|--------------------------------------|----------------|-----------------|
| Doddy Ferdiansyah | Harry Potter and The Sorcerers Stone | 2013-11-08     | 2013-11-10      |
| Erik              | Pemrograman Sistem Berbasis Objek    | 2013-11-07     | 2013-11-11      |
| Erik              | Jaringan Komputer                    | 2013-11-07     | 2013-11-11      |

# JOIN



| nama              | judul                                | tanggal_pinjam | tanggal_kembali |
|-------------------|--------------------------------------|----------------|-----------------|
| Doddy Ferdiansyah | Harry Potter and The Sorcerers Stone | 2013-11-08     | 2013-11-10      |
| Erik              | Pemrograman Sistem Berbasis Objek    | 2013-11-07     | 2013-11-11      |
| Erik              | Jaringan Komputer                    | 2013-11-07     | 2013-11-11      |

```
SELECT mahasiswa.nama,
 buku.judul,
 peminjaman.tanggal_pinjam,
 peminjaman.tanggal_kembali
FROM mahasiswa, buku, peminjaman
WHERE peminjaman.id_mhs = mahasiswa.id
 AND peminjaman.id_buku = buku.id;
```

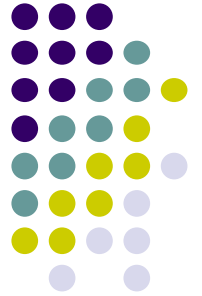


# JOIN

| nama              | judul                                | tanggal_pinjam | tanggal_kembali |
|-------------------|--------------------------------------|----------------|-----------------|
| Doddy Ferdiansyah | Harry Potter and The Sorcerers Stone | 2013-11-08     | 2013-11-10      |
| Erik              | Pemrograman Sistem Berbasis Objek    | 2013-11-07     | 2013-11-11      |
| Erik              | Jaringan Komputer                    | 2013-11-07     | 2013-11-11      |

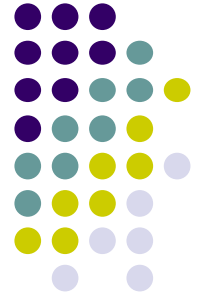
```
SELECT mahasiswa.nama,
 buku.judul,
 peminjaman.tanggal_pinjam,
 peminjaman.tanggal_kembali
FROM mahasiswa
INNER JOIN peminjaman ON
 mahasiswa.id = peminjaman.id_mhs
INNER JOIN buku ON
 buku.id = peminjaman.id_buku;
```

# JOIN

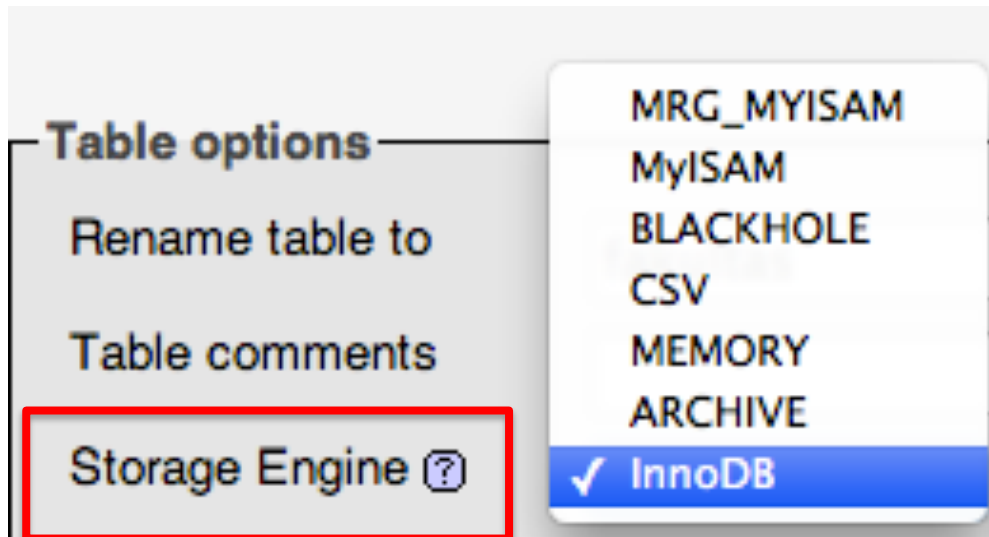


- Tipe JOIN:
  - JOIN
  - LEFT JOIN
  - RIGHT JOIN
  - INNER JOIN

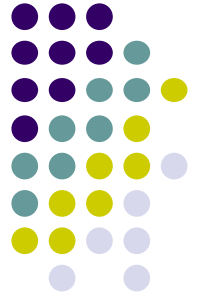




# Storage Engine



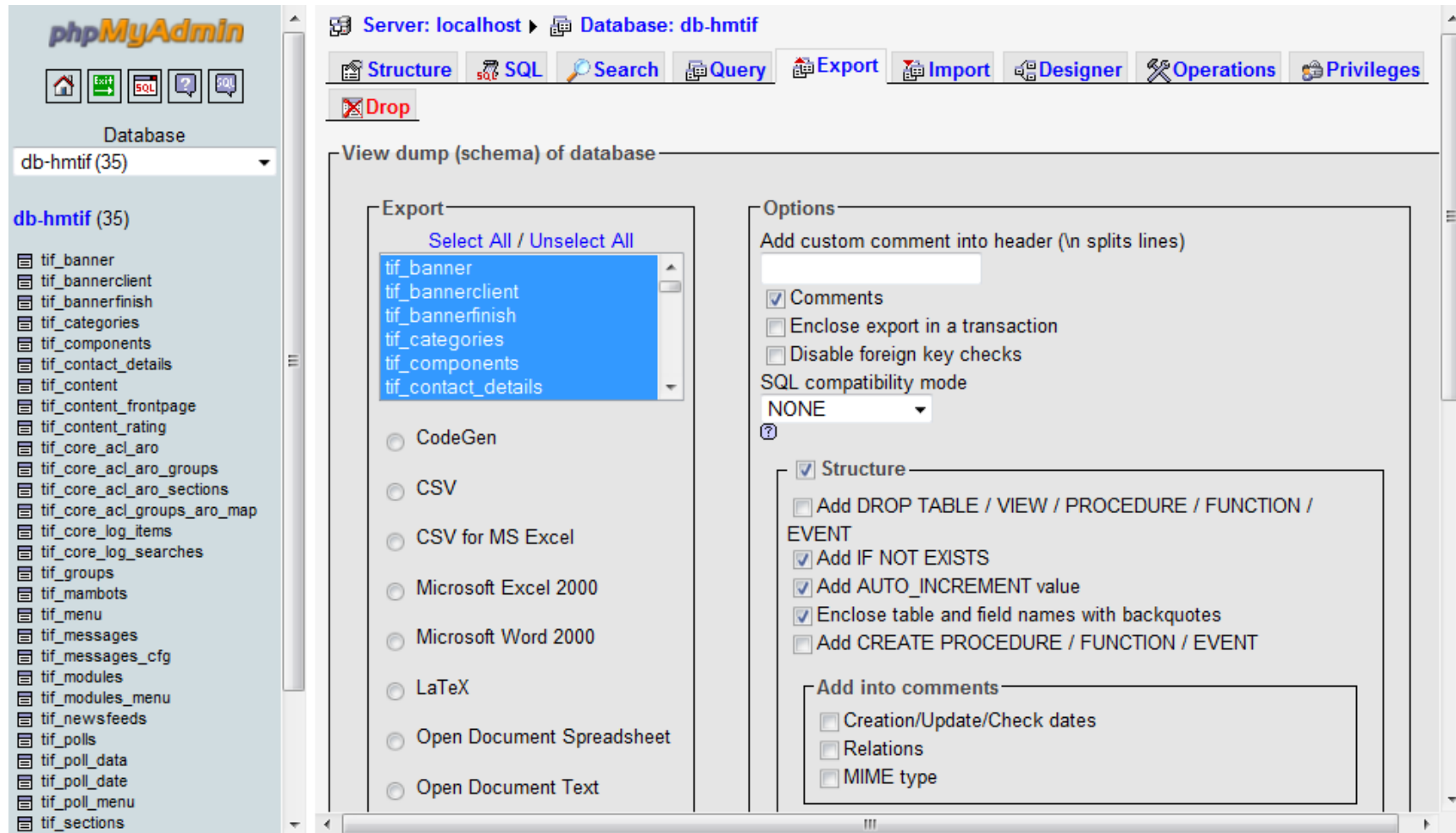
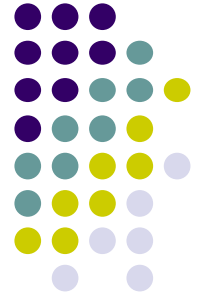
# Backup and Recovery (import/export)

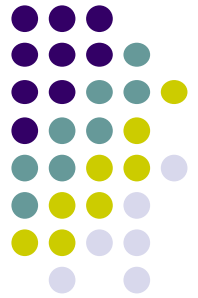


## Kenapa harus dilakukan Backup berkala ?

- Ancaman jarang terjadi, tapi bisa saja terjadi.
  - Aplikasi DBMS error.
  - File tabel atau database rusak.
  - Komputer server sewaktu-waktu bisa rusak.
  - Harddisk bisa *corrupt*.
  - Kebakaran.
  - Bencana alam.
- 
- Setidaknya pernah buat 1 file *full database backup*.
  - Sebaiknya lakukan backup berkala.
  - Simpan file backup setidaknya di 3 lokasi berbeda.
    - Komputer yang sama, komputer berbeda atau DVD, dan gedung berbeda.

# Backup





# Recovery

Server: localhost ▶ Database: db-hmtif

Structure SQL Search Query Export Import Designer Operations Privileges

☒ Drop

**File to import**

Location of the text file  Browse... (Max: 128 MiB)

Character set of the file: utf-8 ▼

Imported file compression will be automatically detected from: None, gzip, bzip2, zip

**Partial import**

☒ Allow the interruption of an import in case the script detects it is close to the PHP timeout limit. This might be good way to import large files, however it can break transactions.

Number of records (queries) to skip from start

**Format of imported file**

☐ DocSQL

☒ SQL

**Options**

SQL compatibility mode NONE ▼

☐ ?

☒ Do not use AUTO\_INCREMENT for zero values

☐ ?

Go

# Terima Kasih

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**Pemrograman Web 2 - 20152016**

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