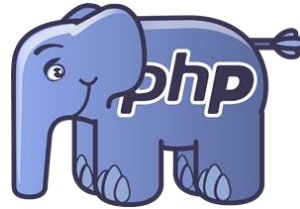


# Pemrograman PHP

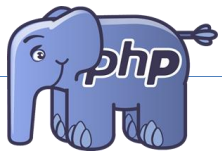


## Pesantren PeTIK II YBM PLN

Jl. KH. Bisri Syansuri RT/01 RW/05, Plosogeneng,  
Kec. Jombang, Kabupaten Jombang, Jawa Timur



# Pertemuan Ke-12





# Materi

1. Pengantar Pemrograman PHP
2. Variabel dan Tipe Data
3. Array dan Struktur Data
4. PHP Form Processing
5. PHP Control Structure
6. PHP Function
7. Implementasi Template Web
9. PHP Object Oriented Programming
10. PHP Object Oriented Programming 2
11. PHP Database Connection
12. CRUD Database Operation 1
13. CRUD Database Operation 2
14. PHP Operasi file
15. Manajemen Session User



# 12. CRUD Database Operation





# CRUD Database Operation

- Modul program yang didalamnya terdapat operasi manipulasi database seperti operasi **C**reate data (insert), **R**ead data (view), **U**ppdate data (edit), dan hapus data (**D**eleete)
- Biasanya operasi CRUD dikenakan pada table referensi dalam sebuah database aplikasi
- Modul program menggunakan pustaka program database untuk menjalankan Perintah query (SQL) ke sistem database



# CRUD Database Operation

## CRUD Database

| ID | First   | Last       | Email        | Phone        | Location           | Hobby       | Actions                                  |
|----|---------|------------|--------------|--------------|--------------------|-------------|--|
| 35 | Jane    | Smith      | js@gmail.com | 503-555-5555 | Portland, Oregon   | Photography | <a href="#">Edit</a> <a href="#">Del</a> |
| 36 | Tristan | Rodriguez  | tr@gmail.com | 201-555-5555 | New York, New York |             | <a href="#">Edit</a> <a href="#">Del</a> |
| 37 | Andrea  | Jones      | aj@gmail.com | 503-555-5555 | Portland, Oregon   | Programming | <a href="#">Edit</a> <a href="#">Del</a> |
| 38 | Elliott | Richardson | er@gmail.com |              | Boise, Idaho       |             | <a href="#">Edit</a> <a href="#">Del</a> |
| 39 | June    | Bug        | jb@gmail.com |              |                    | Cooking     | <a href="#">Edit</a> <a href="#">Del</a> |

[Download CSV](#)
[Add Item](#)

# Create Read Update Delete



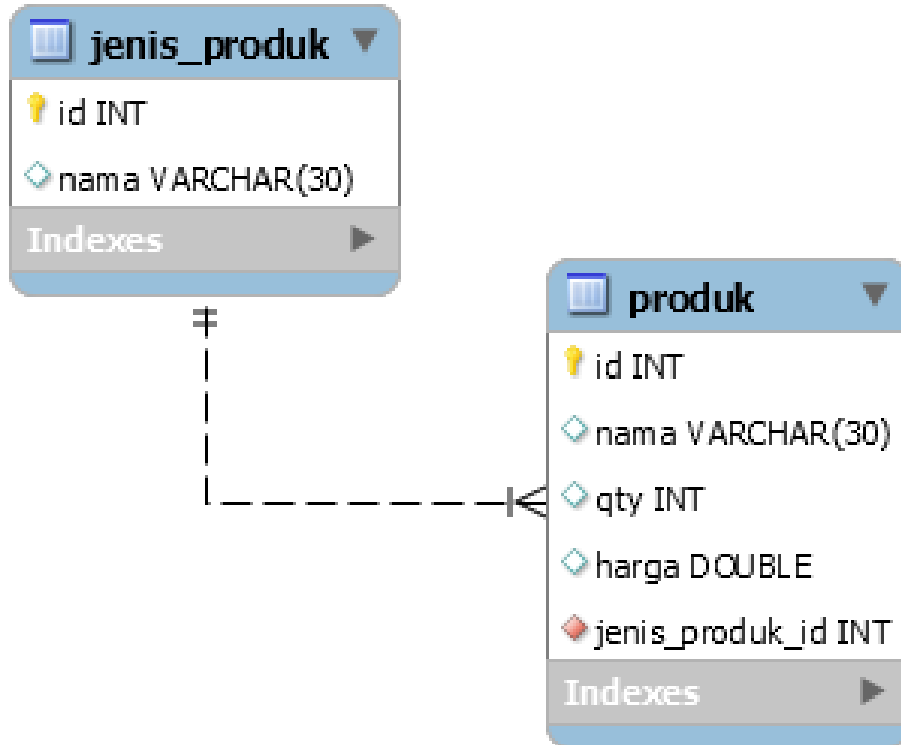


# CRUD Database Operation 1

- Desain database - ERD
- Implementasi database - SQL
- Buat koneksi database - PDO
- Buat class yang mewakili Table database – Model
- Tampilkan data dari table – READ
- Buat Form dan process tambah data - CREATE



# Desain Table Database





# Implementasi desain database

```
mysql> CREATE DATABASE dbshop;  
mysql> use dbshop;
```

```
mysql> CREATE TABLE jenis_produk(  
-> id integer auto_increment primary  
-> nama varchar(30)  
-> );
```

```
mysql> CREATE TABLE produk(  
-> id integer auto_increment primary key,  
-> nama varchar(30) not null,  
-> qty integer default 0,  
-> harga double default 0,  
-> jenis_produk_id integer,  
-> FOREIGN KEY (jenis_produk_id) REFERENCES jenis_produk(id)  
-> );
```



# Implementasi desain database

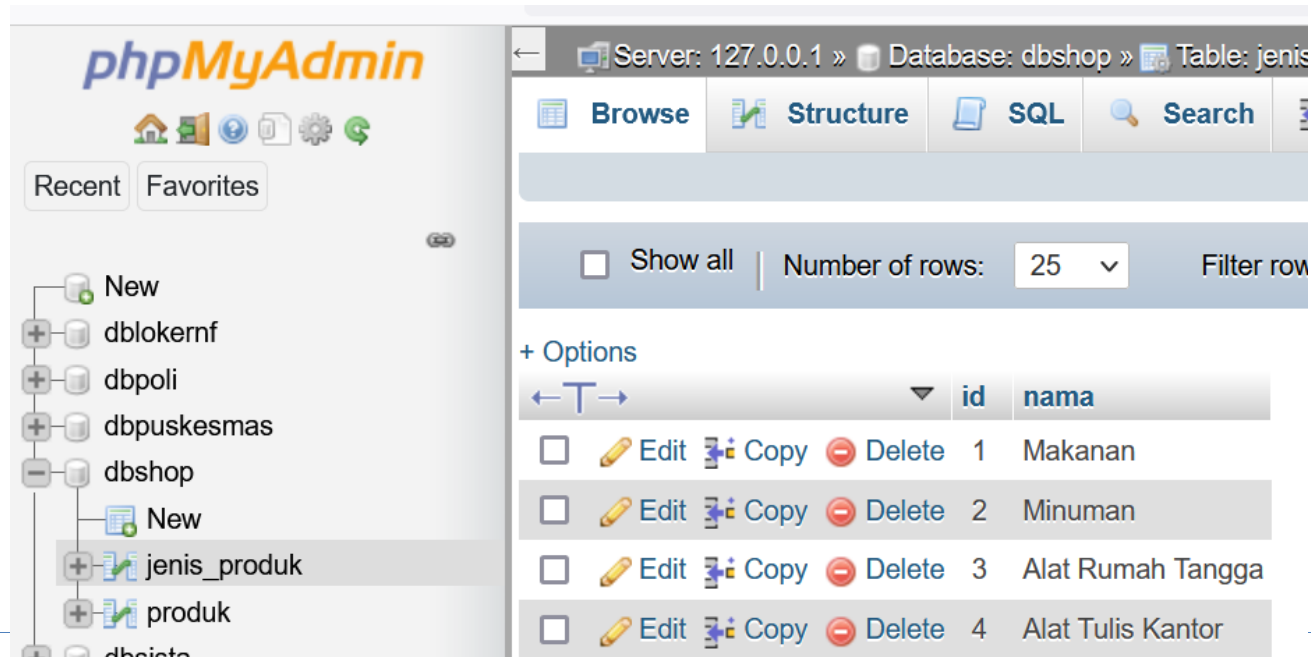
```
MariaDB [dbbarang]> INSERT INTO jenis(nama) VALUES ('Elektronik'),('Furniture');  
Query OK, 2 rows affected (0.039 sec)  
Records: 2 Duplicates: 0 Warnings: 0
```

```
MariaDB [dbbarang]> INSERT INTO produk(kode,nama,kondisi,harga,stok,idjenis,foto) VALUES  
-> ('KL111','Kulkas 2 Pintu','Baru',7000000,4,1,'kulkas.jpg'),  
-> ('KL112','Kulkas 1 Pintu','Second',2000000,2,1,'kulkas2.jpg'),  
-> ('MJ111','Meja Belajar','Baru',3000000,5,2,'meja_belajar.jpg'),  
-> ('MJ112','Meja Makan','Baru',4000000,2,2,'meja_makan.jpg');  
Query OK, 4 rows affected (0.005 sec)  
Records: 4 Duplicates: 0 Warnings: 0
```



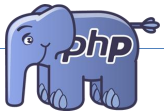
# Populasi data

- Gunakan aplikasi phpMyAdmin untuk memudahkan kerja anda



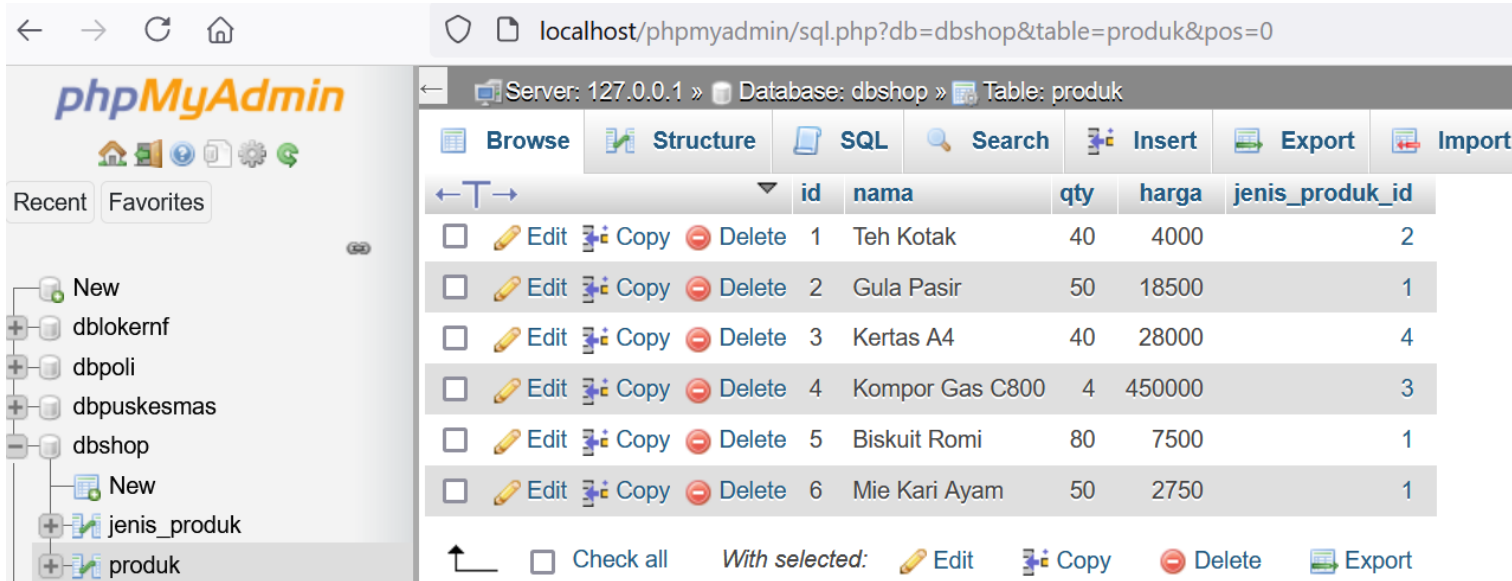
The screenshot displays the phpMyAdmin web interface. On the left, a sidebar shows a tree view of databases and tables, with 'dbshop' expanded to show 'jenis\_produk' and 'produk'. The main panel shows the 'Browse' view for the 'jenis' table in the 'dbshop' database on server '127.0.0.1'. It includes a table with 4 rows and 2 columns: 'id' and 'nama'. The table data is as follows:

| id | nama              |
|----|-------------------|
| 1  | Makanan           |
| 2  | Minuman           |
| 3  | Alat Rumah Tangga |
| 4  | Alat Tulis Kantor |



# Populasi data

- Gunakan aplikasi phpMyAdmin untuk memudahkan kerja anda



localhost/phpmyadmin/sql.php?db=dbshop&table=produk&pos=0

Server: 127.0.0.1 » Database: dbshop » Table: produk

Browse Structure SQL Search Insert Export Import

|                          |      |      |        | id | nama            | qty | harga  | jenis_produk_id |
|--------------------------|------|------|--------|----|-----------------|-----|--------|-----------------|
| <input type="checkbox"/> | Edit | Copy | Delete | 1  | Teh Kotak       | 40  | 4000   | 2               |
| <input type="checkbox"/> | Edit | Copy | Delete | 2  | Gula Pasir      | 50  | 18500  | 1               |
| <input type="checkbox"/> | Edit | Copy | Delete | 3  | Kertas A4       | 40  | 28000  | 4               |
| <input type="checkbox"/> | Edit | Copy | Delete | 4  | Kompas Gas C800 | 4   | 450000 | 3               |
| <input type="checkbox"/> | Edit | Copy | Delete | 5  | Biskuit Romi    | 80  | 7500   | 1               |
| <input type="checkbox"/> | Edit | Copy | Delete | 6  | Mie Kari Ayam   | 50  | 2750   | 1               |

Check all With selected: Edit Copy Delete Export

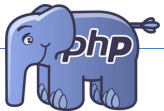




# Database Connection : dbkoneksi.php

dbkoneksi.php

```
1 <?php
2 $dbhost="localhost";
3 $dbname="dbshop";
4 $dbuser="root";
5 $dbpass="";
6
7 $dsn="mysql:host=$dbhost;dbname=$dbname";
8
9 try {
10     $dbh = new PDO($dsn, $dbuser, $dbpass);
11     $dbh->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
12     $dbh->setAttribute(PDO::ATTR_DEFAULT_FETCH_MODE, PDO::FETCH_OBJ);
13 } catch (PDOException $e) {
14     echo 'Connection failed: ' . $e->getMessage();
15 }
16 ?>
```

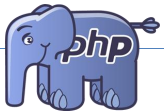




# Class Produk :: class\_produk.php

class\_produk.php

```
1  <?php
2  class Produk{
3      private $dbh;
4      public function __construct($dbh){
5          $this->dbh = $dbh;
6      }
7      public function getAllProduk(){
8          $sql="SELECT * FROM produk";
9          $rs = $this->dbh->query($sql);
10         return $rs;
11     }
12     public function getAllJenisProduk(){
13         $sql="SELECT * FROM jenis_produk";
14         $rs = $this->dbh->query($sql);
15         return $rs;
16     }
17 }
```

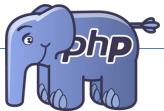




# View : list\_produk.php (1)

list\_produk.php

```
1 <?php
2     require_once 'dbkoneksi.php';
3     require_once 'class_produk.php';
4
5     $objproduk = new Produk($dbh);
6     $rsproduk = $objproduk->getAllProduk();
7     ?>
8     <h3>Daftar Produk</h3>
9     <table border="1" width="100%">
10 <thead>
11     <tr><th>No</th><th>Nama Produk</th><th>Qty</th>
12     <th>Harga</th><th>Action</th></tr>
13 </thead>
```





## View : list\_produk.php (2)

```
14 <tbody>
15 <?php
16     $nomor =1;
17     foreach($rsproduk as $row){
18         echo '<tr><td>'.$nomor.'</td>
19         <td>'.$row->nama.'</td>
20         <td>'.$row->qty.'</td>
21         <td>'.$row->harga.'</td>
22         <td align="center">
23         <a href="edit.php?id='.$row->id.'">Edit</a>|
24         <a href="delete.php?id='.$row->id.'">Del</a>
25         </td></tr>';
26         $nomor++;
27     }
28     ?>
29 </tbody>
30 </table>
```







# Halaman list\_produk.php

## Daftar Produk

| No | Nama Produk     | Qty | Harga  | Action                                     |
|----|-----------------|-----|--------|--|
| 1  | Teh Kotak       | 40  | 4000   | <a href="#">Edit</a>   <a href="#">Del</a> |
| 2  | Gula Pasir      | 50  | 18500  | <a href="#">Edit</a>   <a href="#">Del</a> |
| 3  | Kertas A4       | 40  | 28000  | <a href="#">Edit</a>   <a href="#">Del</a> |
| 4  | Kompas Gas C800 | 4   | 450000 | <a href="#">Edit</a>   <a href="#">Del</a> |
| 5  | Biskuit Romi    | 80  | 7500   | <a href="#">Edit</a>   <a href="#">Del</a> |
| 6  | Mie Kari Ayam   | 50  | 2750   | <a href="#">Edit</a>   <a href="#">Del</a> |



# Create Form Produk

- Gunakan form builder: <https://bootstrapformbuilder.com/>

Bootstrap Form Builder 4.1.3

+ Add a field

Edit field

Form settings

Editor

</> Code

Title

Select

Unique id and name

idjenis

Help text (instructions)

☒ Display label?

☐ Required field?

☐ Allow multiple selections?

Nama Produk

@

Qty

Apple

Harga

Anchor

Select

Makanan

Submit



# Form Produk form.php

localhost/webku/form.php

## Form Produk

Nama Produk

Qty

Harga

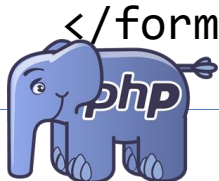
Jenis Produk

| Label         | Field Name        |
|---------------|-------------------|
| Nama Produk   | Nama              |
| Qty           | Qty               |
| Harga         | Harga             |
| Jenis Produk  | idjenis           |
| Button Simpan | proses            |
|               |                   |
| Method Form   | POST              |
| Action        | proses_produk.php |

```
<form method="POST" action="proses_produk">
```

```
  Nama Produk : <input type="text" name="nama" value="" size="20"/>
```

```
</form>
```





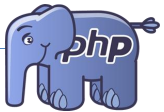
# File proses\_produk.php (1)

proses\_produk.php

```
1 <?php
2 require_once 'dbkoneksi.php';
3 require_once 'class_produk.php';
4
5 $objproduk = new Produk($dbh);
6 $rsproduk = $objproduk->getAllProduk();
7 // tangkap request form
8 $_nama = $_POST['nama'];
9 $_qty = $_POST['qty'];
10 $_harga = $_POST['harga'];
11 $_idjenis = $_POST['idjenis'];
12 $_proses = $_POST['proses'];
13
14 if(!empty($_proses)){
15     // proses form
16 }
17 ?>
```

Tambahkan Fungsi save: class\_produk.php

```
// ...
public function save($data){
    $sql = "INSERT INTO produk VALUES (default,?,?,?,?)";
    $st = $this->dbh->prepare($sql);
    $st->execute($data);
}
```



# File proses\_produk.php (2)

proses\_produk.php

```

1  <?php
2  require_once 'dbkoneksi.php';
3  require_once 'class_produk.php';
4
5  $objproduk = new Produk($dbh);
6  // tangkap request form
7  $_nama = $_POST['nama'];
8  $_qty = $_POST['qty'];
9  $_harga = $_POST['harga'];
10 $_idjenis = $_POST['idjenis'];
11 $_proses = $_POST['proses'];
12
13 if(!empty($_proses)){
14     $data = [$_nama, $_qty, $_harga, $_idjenis];
15     if($_proses == "Simpan"){
16         $objproduk->save($data);
17     }
18 }
19 ?>

```

Tambahkan Fungsi save: class\_produk.php

```

// ...
public function save($data){
    $sql = "INSERT INTO produk VALUES (default,?,?,?,?)";
    $st = $this->dbh->prepare($sql);
    $st->execute($data);
}

```



|   |          |   |      |  |
|---|----------|---|------|--|
| 7 | Kopi XYZ | 1 | 6100 | <a href="#">Edit</a> <a href="#">Del</a> |
|---|----------|---|------|--|

