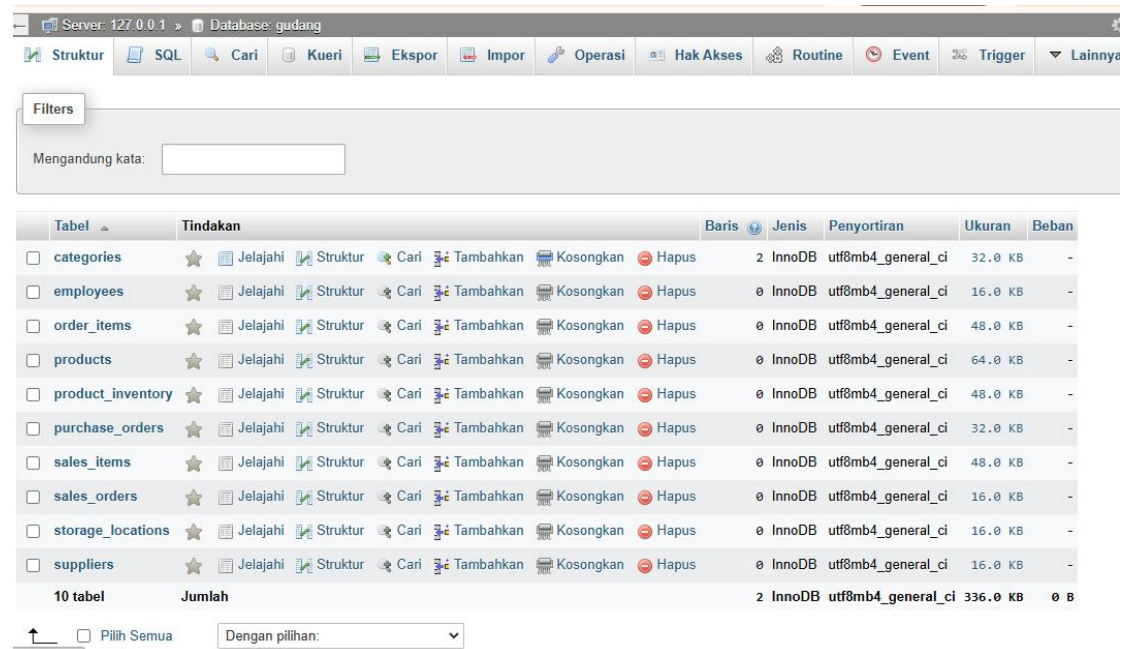


Nama : Muhammad Agrea Bhilal
NIM : 22.01.53.0051

Web Service

1. Membuat Database Gudang yang memiliki 10 tabel

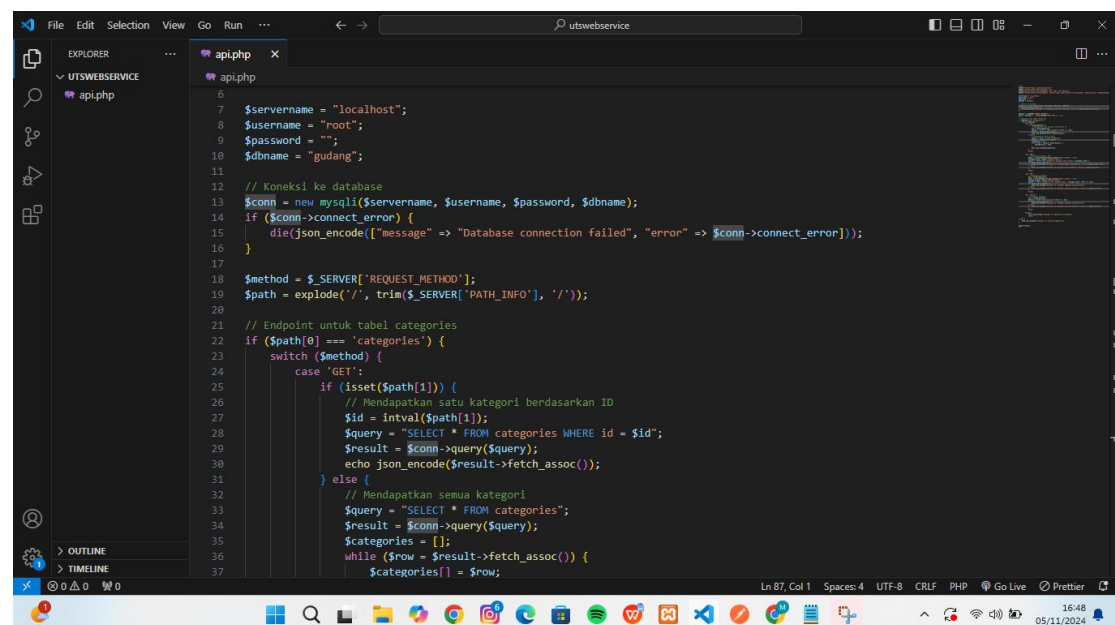


The screenshot shows the phpMyAdmin interface for a database named 'gudang' on a server at 127.0.0.1. The interface includes a top menu bar with options like Struktur, SQL, Cari, Kueri, Ekspor, Impor, Operasi, Hak Akses, Routine, Event, Trigger, and Lainnya. Below the menu is a 'Filters' section with a search box. The main area displays a table of database information with columns: Tabel, Tindakan, Baris, Jenis, Penyortiran, Ukuran, and Beban. The table lists 10 tables: categories, employees, order_items, products, product_inventory, purchase_orders, sales_items, sales_orders, storage_locations, and suppliers. Each table has a star icon for 'Tindakan' and a list of actions: Jelajahi, Struktur, Cari, Tambahkan, Kosongkan, and Hapus. The 'Baris' column shows the number of rows for each table, and the 'Ukuran' column shows the size in KB. The 'Beban' column shows the storage engine and character set for each table.

Tabel	Tindakan	Baris	Jenis	Penyortiran	Ukuran	Beban
categories	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	2	InnoDB	utf8mb4_general_ci	32.0 KB	-
employees	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_general_ci	16.0 KB	-
order_items	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_general_ci	48.0 KB	-
products	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_general_ci	64.0 KB	-
product_inventory	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_general_ci	48.0 KB	-
purchase_orders	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_general_ci	32.0 KB	-
sales_items	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_general_ci	48.0 KB	-
sales_orders	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_general_ci	16.0 KB	-
storage_locations	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_general_ci	16.0 KB	-
suppliers	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_general_ci	16.0 KB	-
10 tabel	Jumlah	2	InnoDB	utf8mb4_general_ci	336.0 KB	0 B

2. Membuat API.php

API.php memiliki 10 tabel yang dapat menjalankan perintah operasi CRUD

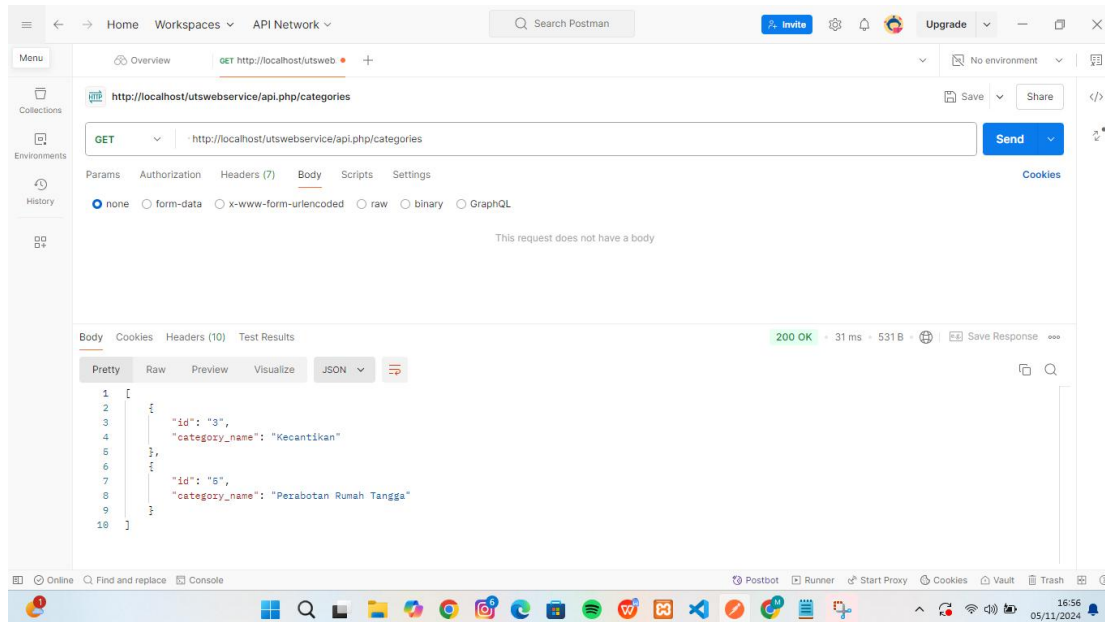


The screenshot shows a code editor with the file 'api.php' open. The code is written in PHP and includes database connection details, a switch statement for handling different HTTP methods (GET, POST, PUT, DELETE), and SQL queries for retrieving data from the 'categories' table. The code is as follows:

```
6
7 $servername = "localhost";
8 $username = "root";
9 $password = "";
10 $dbname = "gudang";
11
12 // Koneksi ke database
13 $conn = new mysqli($servername, $username, $password, $dbname);
14 if ($conn->connect_error) {
15     die(json_encode(["message" => "Database connection failed", "error" => $conn->connect_error]));
16 }
17
18 $method = $_SERVER['REQUEST_METHOD'];
19 $path = explode('/', trim($_SERVER['PATH_INFO'], '/'));
20
21 // Endpoint untuk tabel categories
22 if ($path[0] === 'categories') {
23     switch ($method) {
24         case 'GET':
25             if (isset($path[1])) {
26                 // Mendapatkan satu kategori berdasarkan ID
27                 $id = intval($path[1]);
28                 $query = "SELECT * FROM categories WHERE id = $id";
29                 $result = $conn->query($query);
30                 echo json_encode($result->fetch_assoc());
31             } else {
32                 // Mendapatkan semua kategori
33                 $query = "SELECT * FROM categories";
34                 $result = $conn->query($query);
35                 $categories = [];
36                 while ($row = $result->fetch_assoc()) {
37                     $categories[] = $row;
```

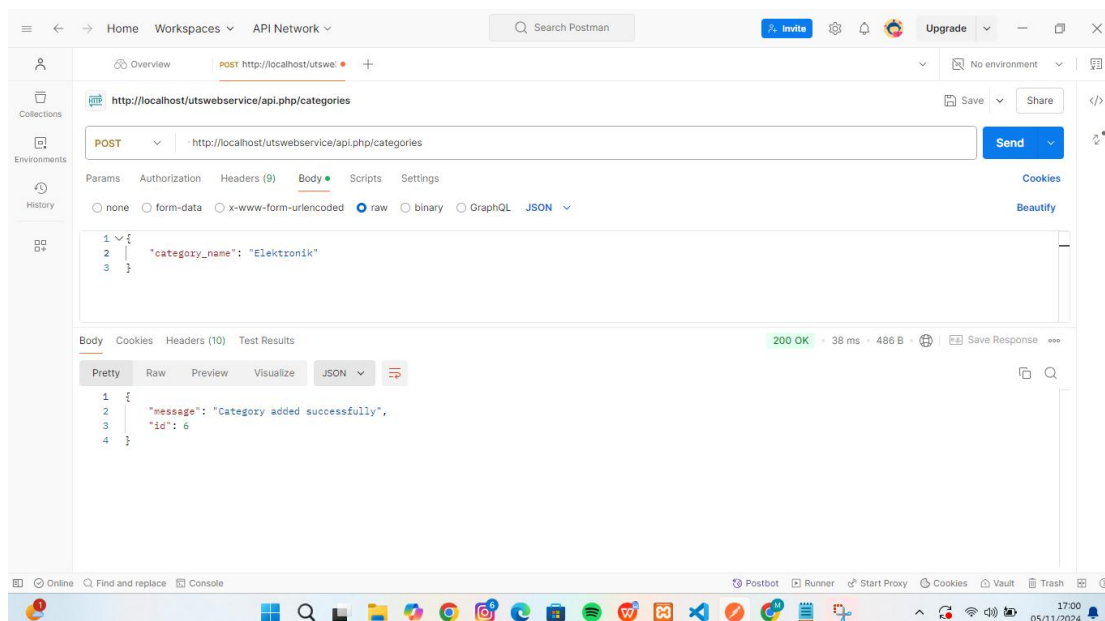
3. Perintah API : GET

Setelah membuat API.php, Kemudian melakukan perintah API dengan metode GET menggunakan software POSTMAN. Metode GET digunakan untuk mengambil data. Jika ID diberikan (misal /categories/1), maka mengambil satu kategori, jika tidak, mengambil semua kategori.



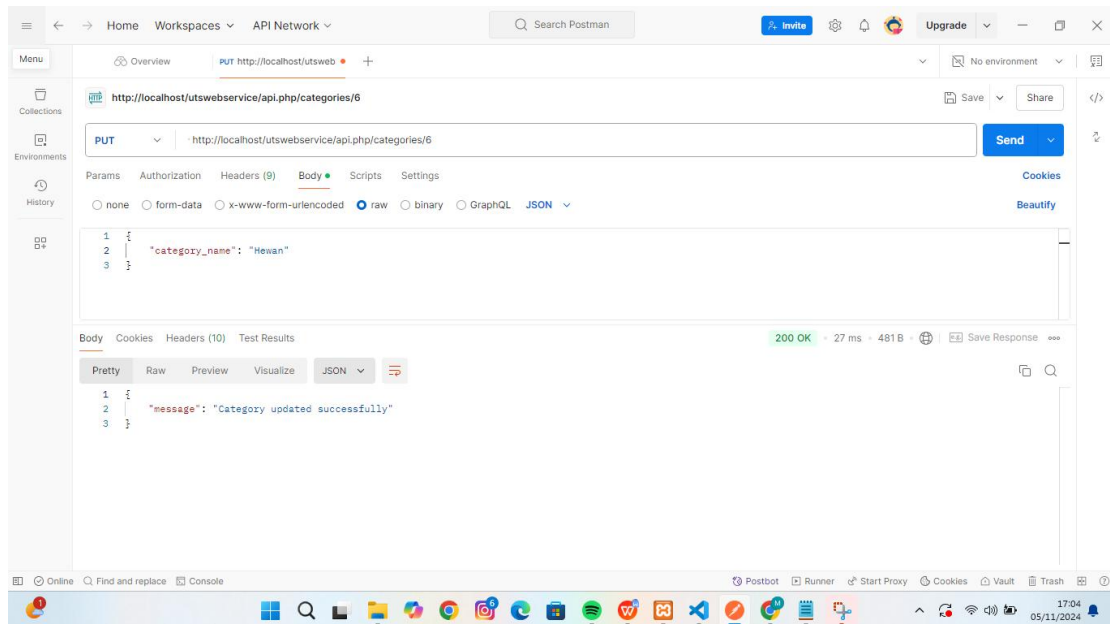
4. Perintah API : POST

Metode POST digunakan untuk menambahkan data baru

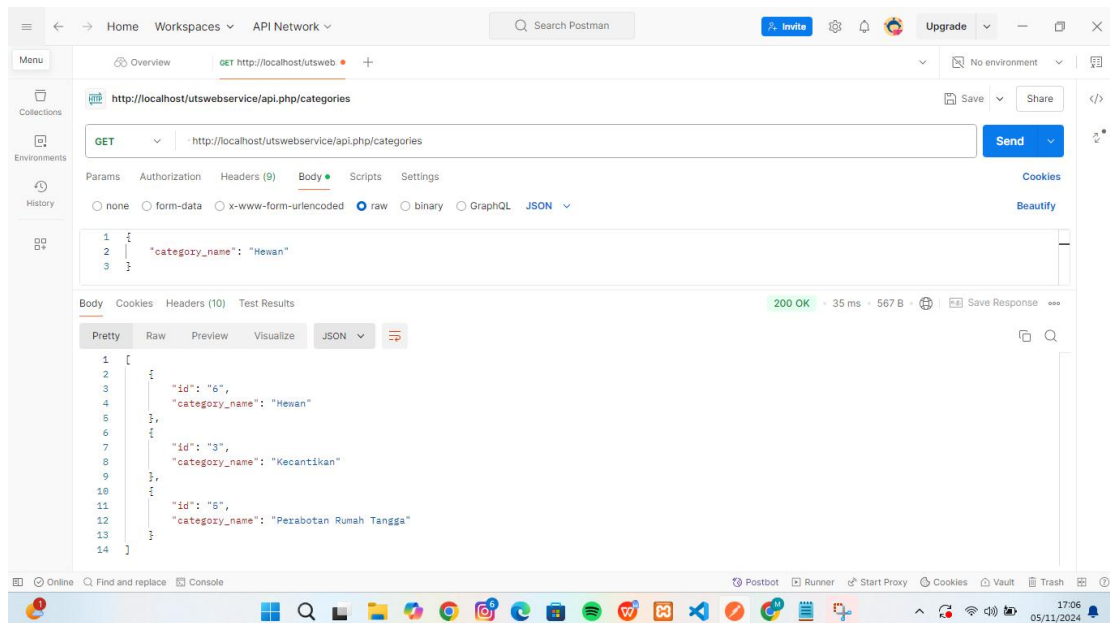


5. Perintah API : PUT

Metode PUT digunakan untuk memperbarui / mengubah data yang sudah ada berdasarkan ID.



Sesudah diganti maka ID yang tadinya Elektronik menjadi Hewan. Seperti berikut :



6. Perintah API : Delete

Metode Delete digunakan untuk menghapus data yang sudah ada berdasarkan ID.

Sebelum di Delete :

```
1  [
2    {
3      "id": "6",
4      "category_name": "Hewan"
5    },
6    {
7      "id": "3",
8      "category_name": "Kecantikan"
9    },
10   {
11     "id": "5",
12     "category_name": "Perabotan Rumah Tangga"
13   }
14 ]
```

Sesudah di Delete

The screenshot shows the Postman interface for a DELETE request. The URL is `http://localhost/utswebservice/api.php/categories/3`. The request method is set to **DELETE**. The response status is **200 OK** with a response time of 9 ms and a size of 481 B. The response body is:

```
1  {
2    "message": "Category deleted successfully"
3  }
```

Maka categories dengan ID 3 menjadi hilang

```
Body Cookies Headers (10) Test Results
Pretty Raw Preview Visualize JSON
1  [
2    {
3      "id": "6",
4      "category_name": "Hewan"
5    },
6    {
7      "id": "5",
8      "category_name": "Perabotan Rumah Tangga"
9    }
10 ]
```