



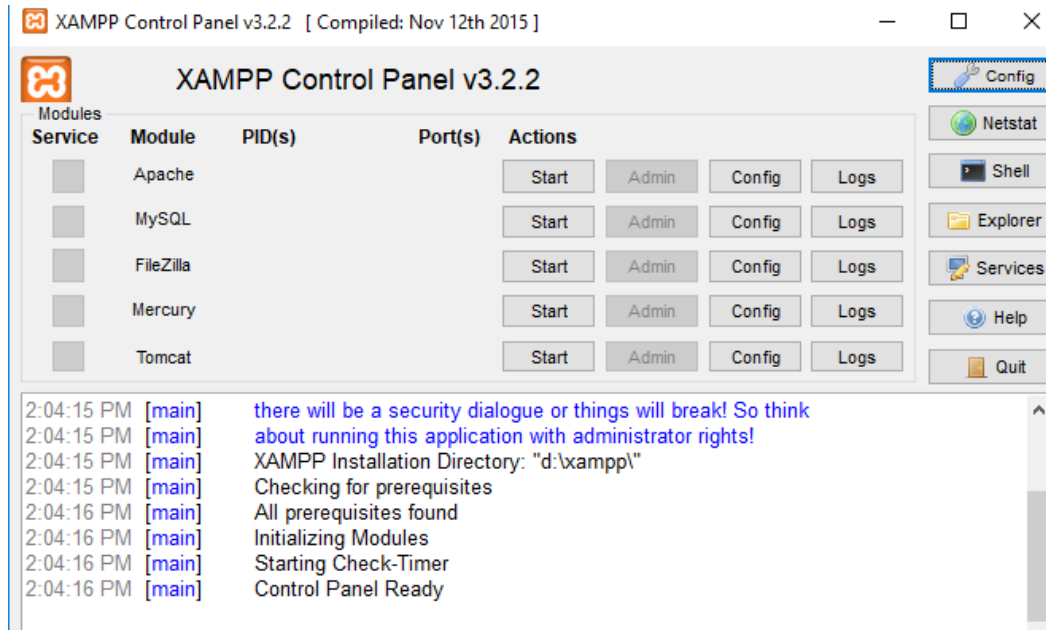
# PHP &MY SQL DATABASE

# MYSQL DATABASE FOR PHP

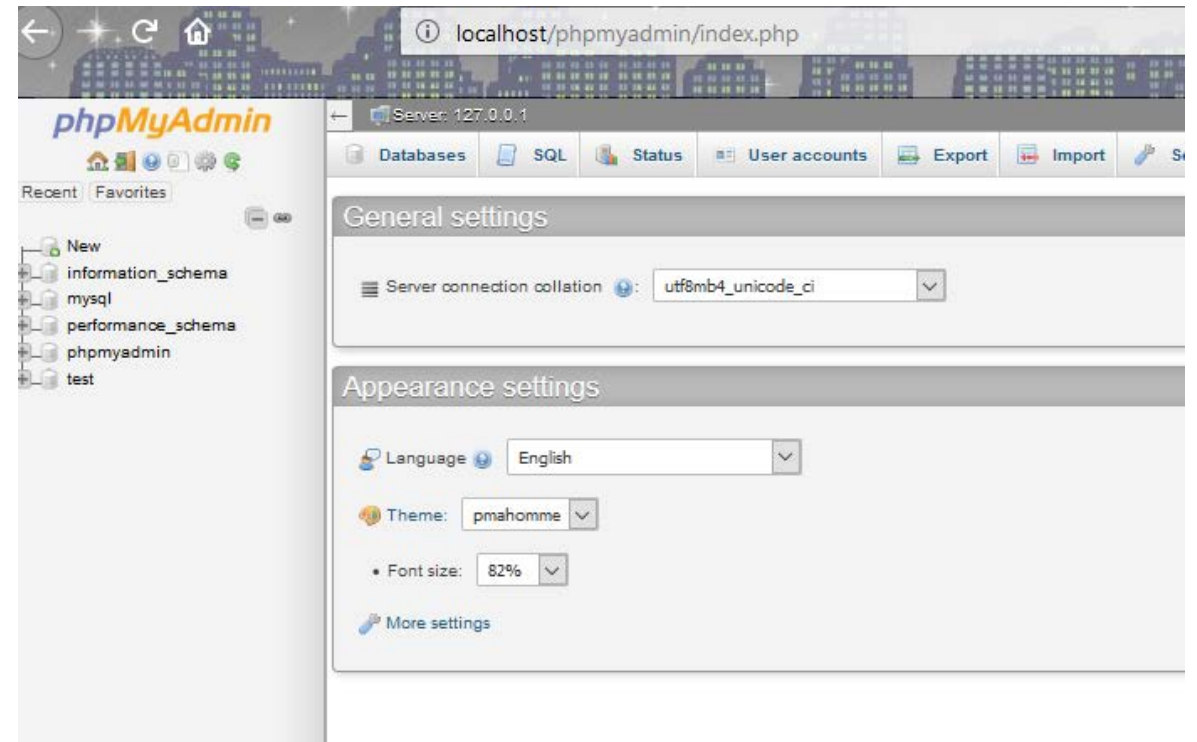
- We will do some basic stuffs for knowing how to create a database and use it inside a website.
- As we mentioned above about the connection between database and PHP.
- MySQL is a database system used on the web that runs on the server(XAMPP). Ideal for both large and small applications.
- The way we create the database is through **PHPmyadmin**.
- If we have XAMPP installed, we will also have myadmin installed on our computer.

# MYSQL DATABASE FOR PHP

Start the Apache and MySQL



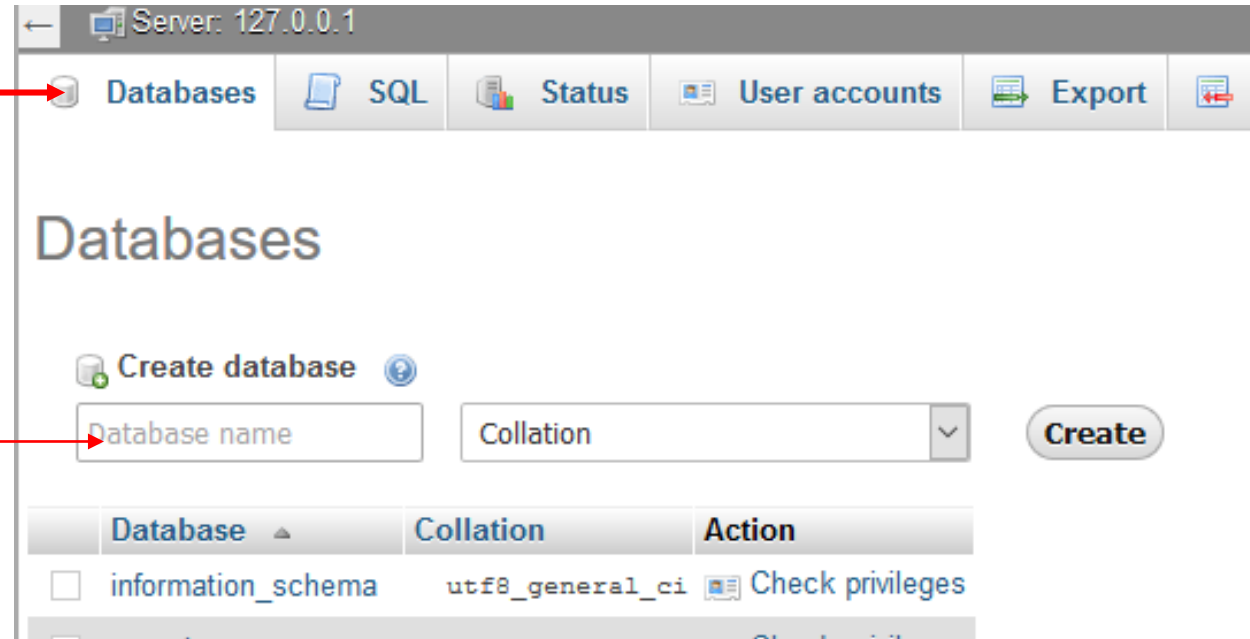
Open Chrome and type in the URL bar:  
**localhost/phpMyAdmin** then you will see the display like below:



# HOW TO CREATE A DATABASE

Click on Databases in top Menu

Create DB name  
Note: don't use big letters and dashes.  
Use small letters and underscore



The screenshot shows the MySQL Databases management interface. At the top, there's a navigation bar with tabs: Databases, SQL, Status, User accounts, Export, and Import. Below this, the 'Databases' section is active. It features a 'Create database' button with a question mark icon. Below the button, there's a form with two input fields: 'Database name' and 'Collation'. The 'Database name' field is highlighted with a red arrow from the instruction 'Create DB name'. To the right of the 'Collation' field is a 'Create' button. Below the form, there's a table listing existing databases. The table has three columns: 'Database', 'Collation', and 'Action'. The first row shows 'information\_schema' with collation 'utf8\_general\_ci' and an action 'Check privileges'.

Database	Collation	Action
<input type="checkbox"/> information_schema	utf8_general_ci	Check privileges

# HOW TO CREATE A DATABASE

Create your DB name and you will see your DB is listed on the left side  
Your screen will look like below.

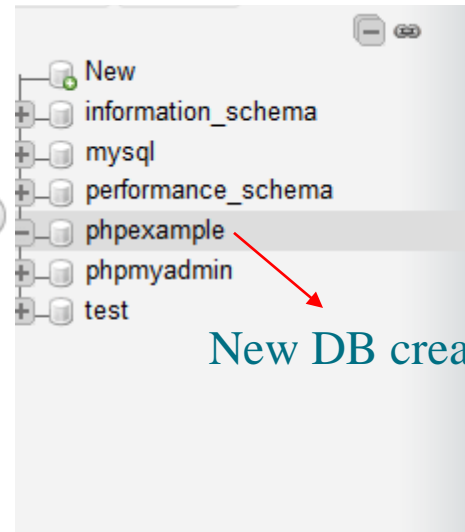
## Databases

Create database

phpexample

Collation

Create



No tables found in database.

Create table

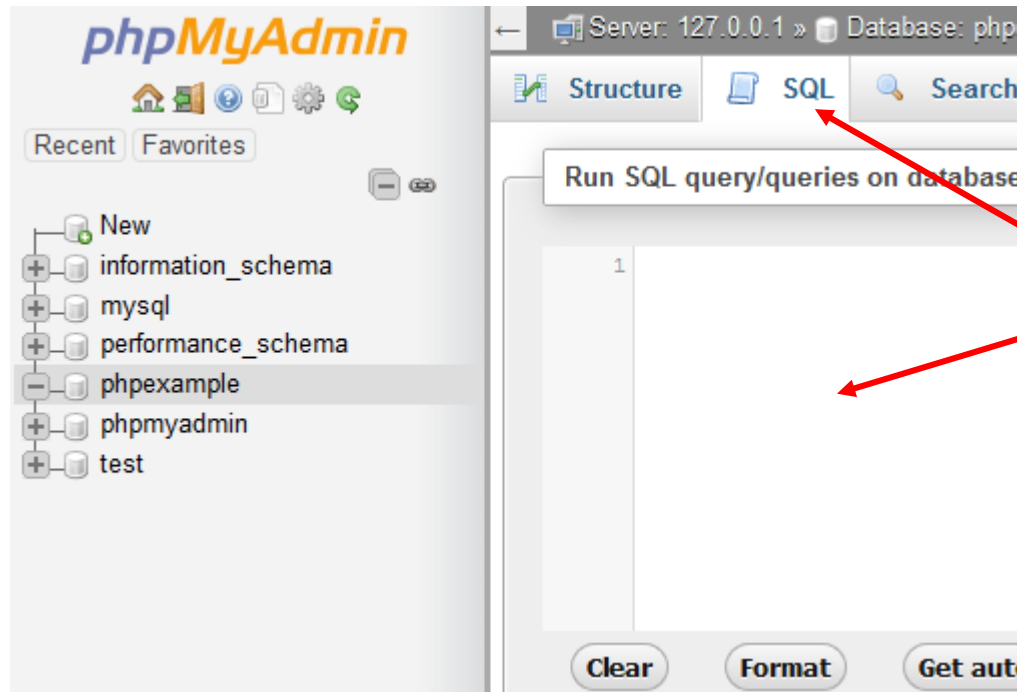
Name:

Number of columns: 4

# HOW TO CREATE **table** IN DATABASE

The way databases work is that we need to create tables and each table will store the information regarding one certain thing.

For example: it would store the name, ID number, username, password or even user's posts



We will create the table in the blank space coding field in the SQL tab.

# HOW TO CREATE **table** IN DATABASE

We should write what we need to have in a column

The 1<sup>st</sup> column we call it id with the data type as integer (10) shows how many numbers that can be inside the id.

not null means it can not be empty, we need data inside this column.

**PRIMARY KEY:** no other rows can have the same number, make sure that nobody has the same number as the other, etc,...

**AUTO\_INCREMENT:** each time a new users have been joined it will increase the ID by 1, keep counting upwards.

Structure SQL Search More

Run SQL query/queries on database phpexample: ?

create the table name

```
1 CREATE TABLE Users (  
2 id int(10) not null PRIMARY KEY  
  AUTO_INCREMENT,  
3 firstname varchar(30) not null,  
4 lastname varchar(30) not null,  
5 email VARCHAR(50));
```

Clear Format Get auto-saved query

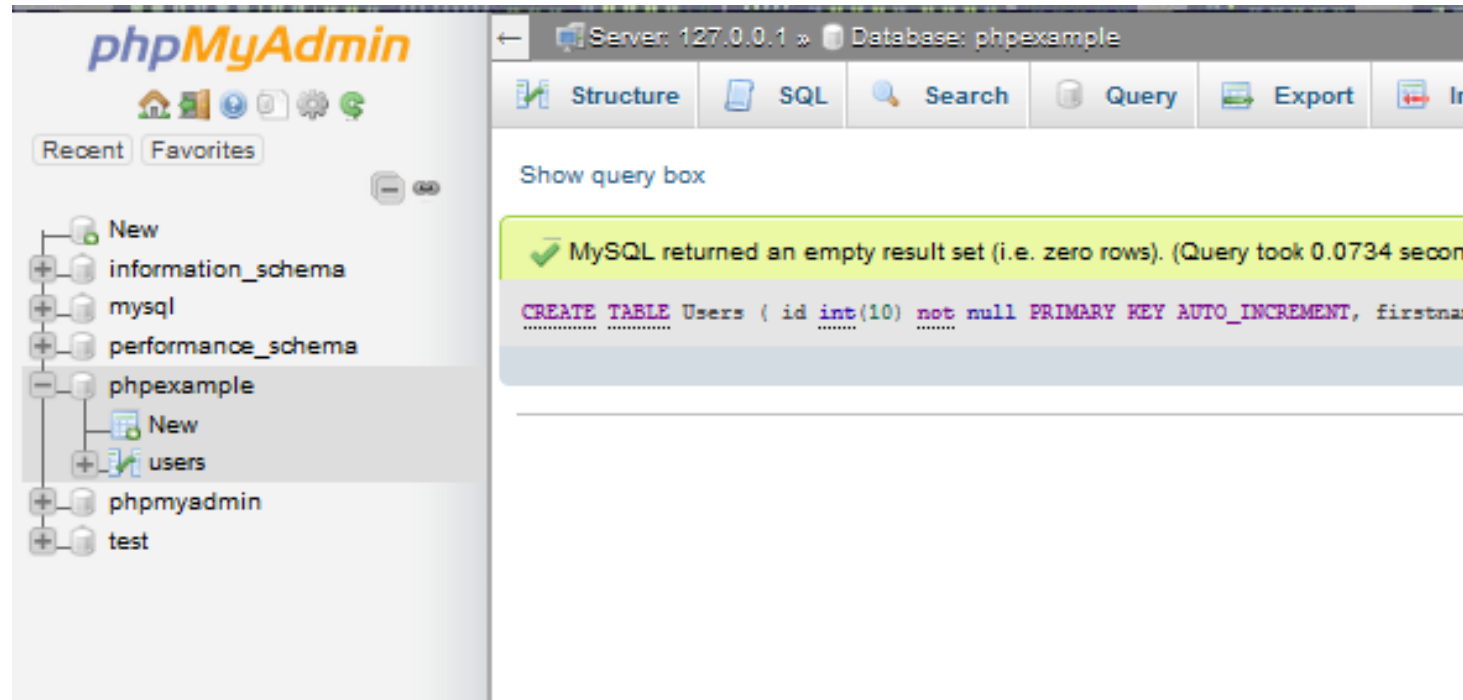
☐ Bind parameters ?

Name/email should be displayed as character so we use varchar (30) means maximum of character in the field is 30.

Finish the code and click Go

Go

# HOW TO create TABLE IN DATABASE

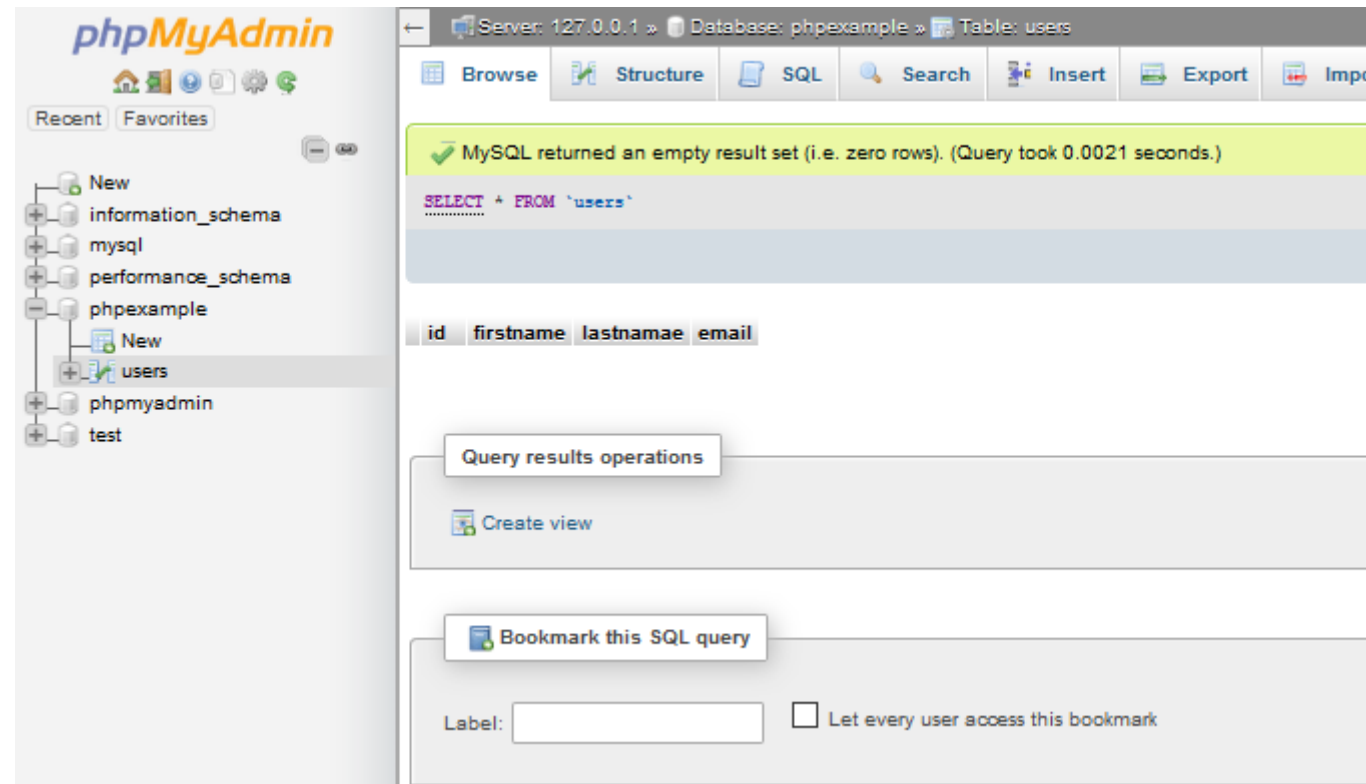


The output would look like this: the sql return with empty result means we have no errors.

On the left panel you could see the table has been created.



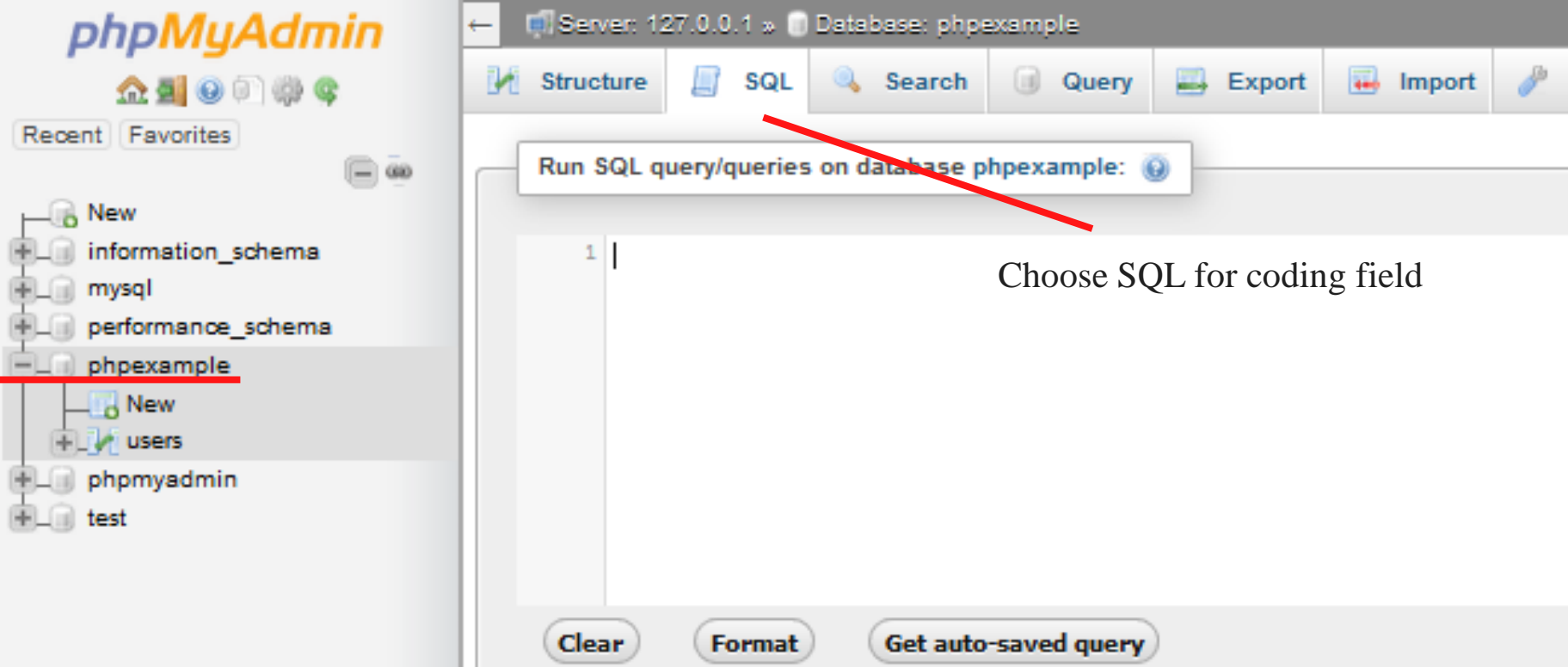
# HOW TO create TABLE IN DATABASE



Click on the users table, we could see nothing in the picture above which means you have no data.

# HOW TO **insert** DATA INTO DATABASE

As we already created the table with id, first name, last name, email columns previously. We are going to insert data in those columns.



The screenshot shows the phpMyAdmin web interface. On the left sidebar, the 'phpexample' database is selected and highlighted with a red line. A red arrow points from the 'SQL' tab in the top navigation bar to the 'Run SQL query/queries on database phpexample:' text box. Another red arrow points from the text 'Choose SQL for coding field' to the same text box. The main area shows a text input field for SQL queries with a '1' in the first line. At the bottom, there are buttons for 'Clear', 'Format', and 'Get auto-saved query'.

Click to  
phpexample DB

Choose SQL for coding field

# HOW TO **insert** DATA INTO DATABASE



Run SQL query/queries on database phpexample: ?

```
1  
2 INSERT INTO users (firstname, lastnaeae, email) VALUES ('Kauko','Kolehmainen','kauko@gmail.com');|
```

We will insert the data of the table we just created or any table that you have in your DB

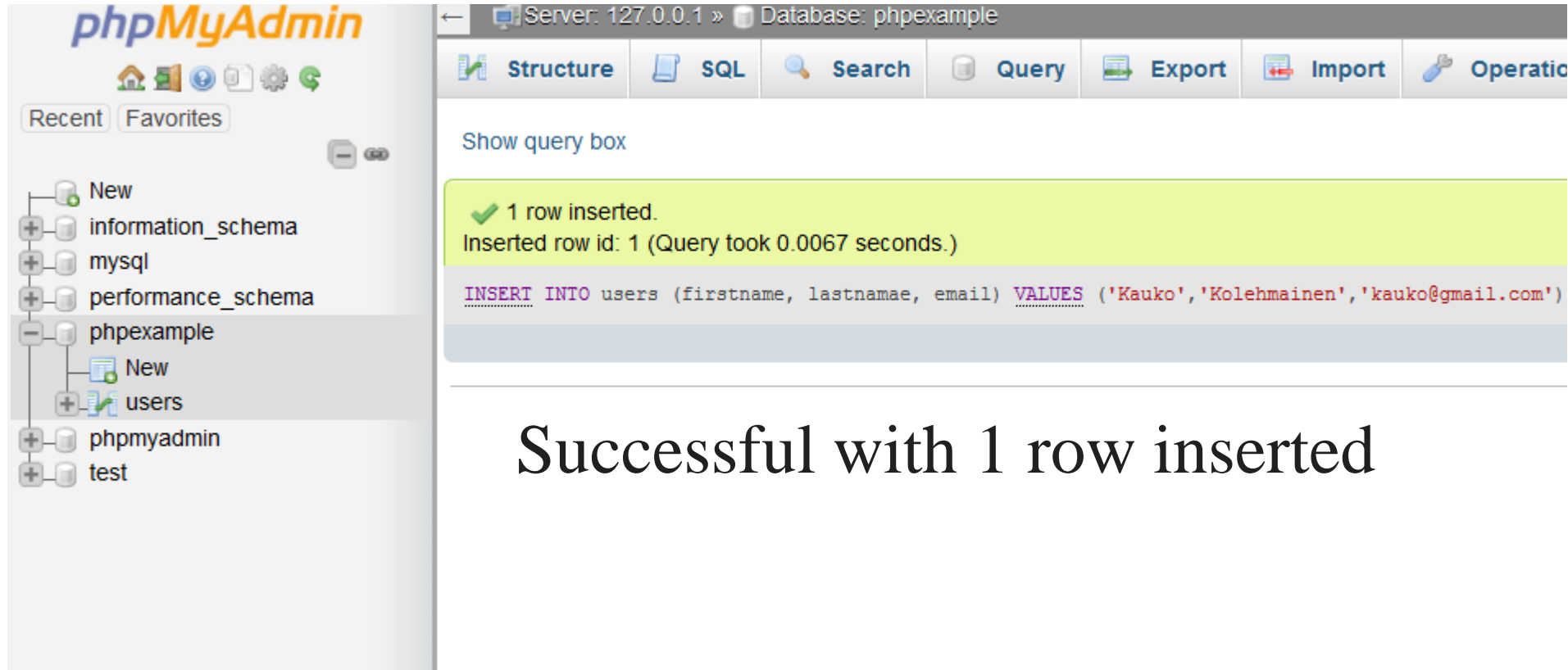
Tell the DB which parts of the table that we will insert the data into.  
So why there is no id listed?  
Id is auto incremented, it actually automatic so we dont need to insert data, it does all by itself

We will type in the values that we want into the rows respectively with a single quote at each element.

Go

Click go after code filled

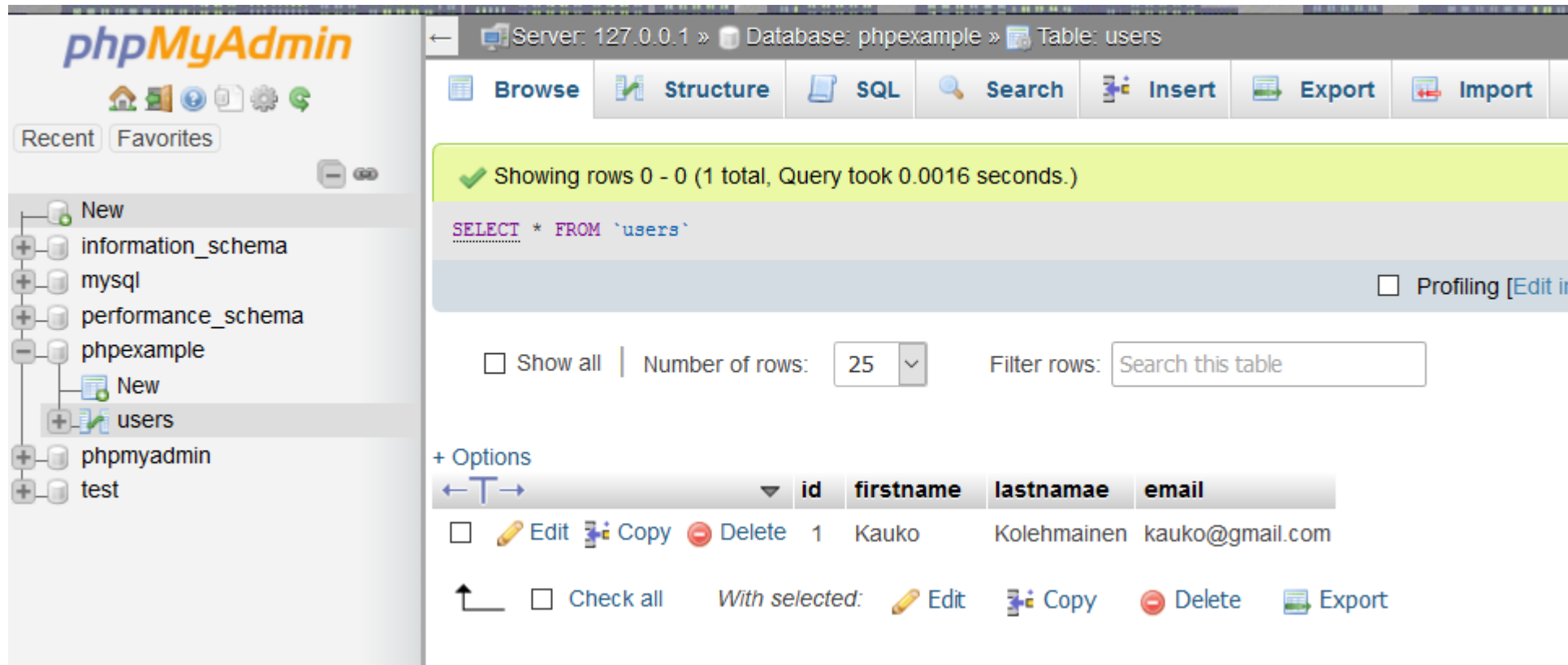
# HOW TO insert DATA INTO DATABASE



The screenshot displays the phpMyAdmin web interface. On the left sidebar, the database 'phpexample' is selected, and the 'users' table is highlighted. The main panel shows the 'SQL' tab active. A green message box indicates '1 row inserted. Inserted row id: 1 (Query took 0.0067 seconds.)'. Below this, the SQL query is shown: `INSERT INTO users (firstname, lastnae, email) VALUES ('Kauko', 'Kolehmainen', 'kauko@gmail.com')`. The top navigation bar includes links for Structure, SQL, Search, Query, Export, Import, and Operations.

Successful with 1 row inserted

# HOW TO insert DATA INTO DATABASE



The screenshot shows the phpMyAdmin interface. On the left, the database structure is visible, with 'phpexample' selected and 'users' highlighted. The main panel shows the 'users' table structure and a single row of data. The table has columns: id, firstname, lastname, and email. The row contains the values: 1, Kauko, Kolehmainen, and kauko@gmail.com.

	id	firstname	lastname	email
<input type="checkbox"/>	1	Kauko	Kolehmainen	kauko@gmail.com

Choose users on the left side you would see the similar screen above and we are already done with insert data into table

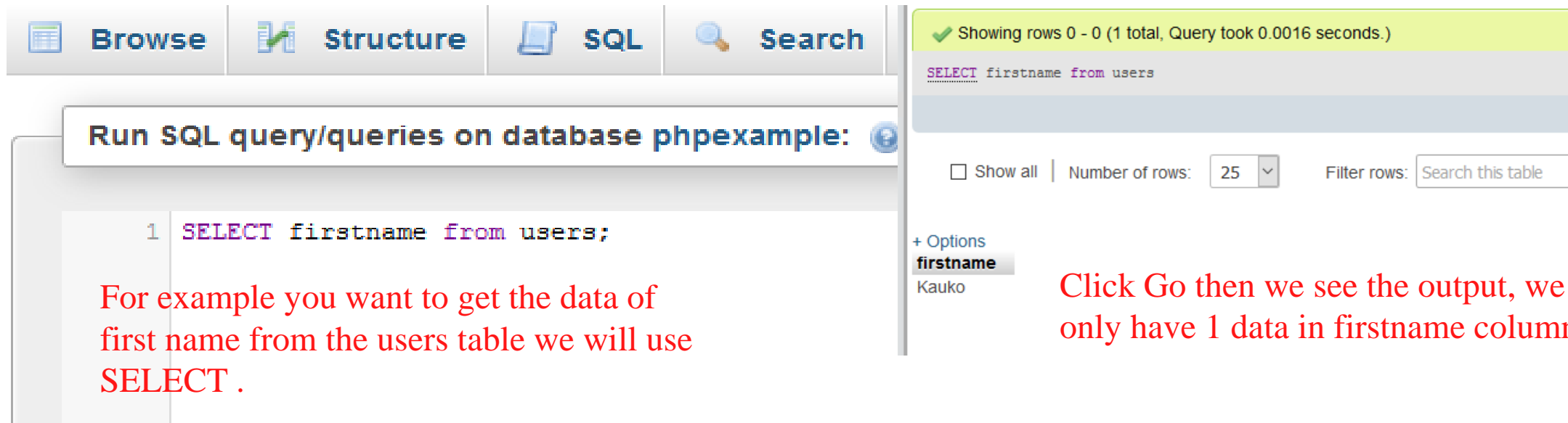
# HOW TO **select** DATA FROM DATABASE

The screenshot shows the phpMyAdmin web interface. On the left sidebar, the database 'phpexample' is highlighted with a red line. A red arrow points from the 'SQL' tab in the top navigation bar to the 'Run SQL query/queries on database phpexample:' text box. Another red arrow points from the text 'Choose SQL for coding field' to the same text box. The main area shows a text input field for SQL queries with a cursor at the start. Below the input field are buttons for 'Clear', 'Format', and 'Get auto-saved query'.

Click to  
phpexample DB

Choose SQL for coding field

# HOW TO **select** DATA FROM DATABASE



The screenshot shows a database management interface with tabs for Browse, Structure, SQL, and Search. A text box prompts the user to "Run SQL query/queries on database phpexample:". Below this, a SQL query is entered: `1 SELECT firstname from users;`. To the right, the query execution results are displayed, showing a single row with the value "Kauko" under the column "firstname".

Run SQL query/queries on database phpexample:

```
1 SELECT firstname from users;
```

Showing rows 0 - 0 (1 total, Query took 0.0016 seconds.)

`SELECT` `firstname` `from` `users`

☐ Show all | Number of rows: 25 | Filter rows: Search this table

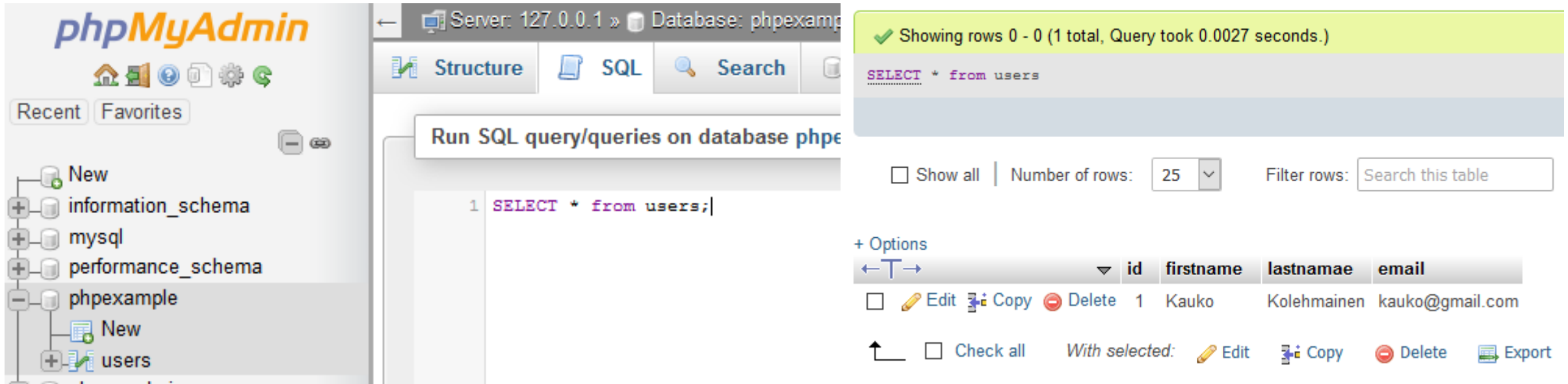
+ Options  
**firstname**  
Kauko

For example you want to get the data of first name from the users table we will use **SELECT** .

Click Go then we see the output, we do only have 1 data in firstname column

You can try with the other columns such as lastname, email.

# HOW TO **select** DATA FROM DATABASE



The screenshot shows the phpMyAdmin interface. On the left, the database structure is visible, including 'information\_schema', 'mysql', 'performance\_schema', and 'phpexample'. The 'phpexample' database is selected, and the 'users' table is highlighted. The main panel shows the 'SQL' tab with the query 'SELECT \* from users;'. A message at the top indicates 'Showing rows 0 - 0 (1 total, Query took 0.0027 seconds.)'. Below the query, there are options to 'Show all' or 'Number of rows' (set to 25) and a 'Filter rows' search box. The query results are displayed in a table with columns 'id', 'firstname', 'lastnae', and 'email'. The first row shows '1', 'Kauko', 'Kolehmainen', and 'kauko@gmail.com'. Below the table, there are options to 'Check all', 'With selected', 'Edit', 'Copy', 'Delete', and 'Export'.

Server: 127.0.0.1 » Database: phpexample

Structure SQL Search

Run SQL query/queries on database phpexample

```
1 SELECT * from users;
```

Showing rows 0 - 0 (1 total, Query took 0.0027 seconds.)

SELECT \* from users

☐ Show all | Number of rows: 25 | Filter rows: Search this table

+ Options

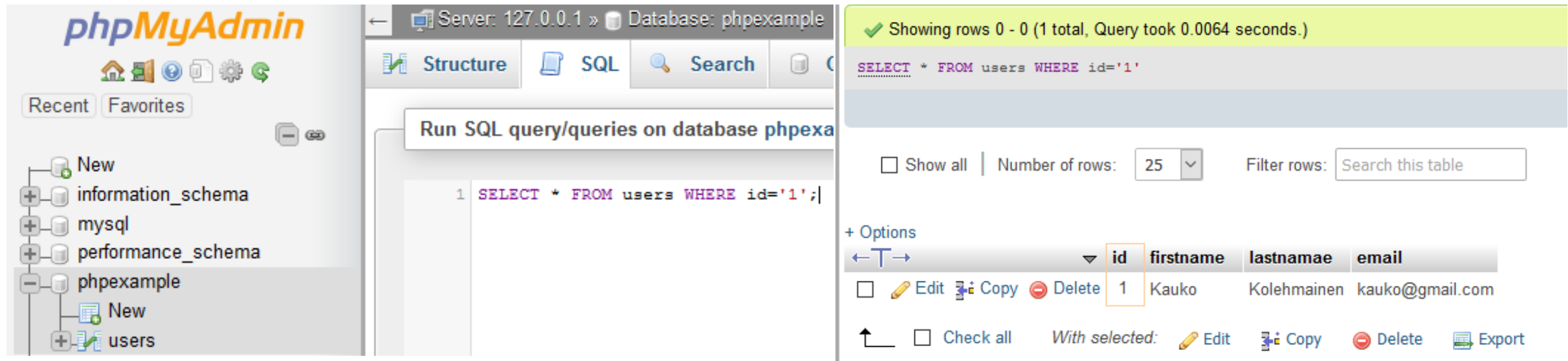
	id	firstname	lastnae	email
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	Kauko	Kolehmainen	kauko@gmail.com

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

We can go back and do another example with SELECT.  
With \* from the users table you get the whole table at the output  
(everything in the table show off)



# HOW TO **select** DATA FROM DATABASE

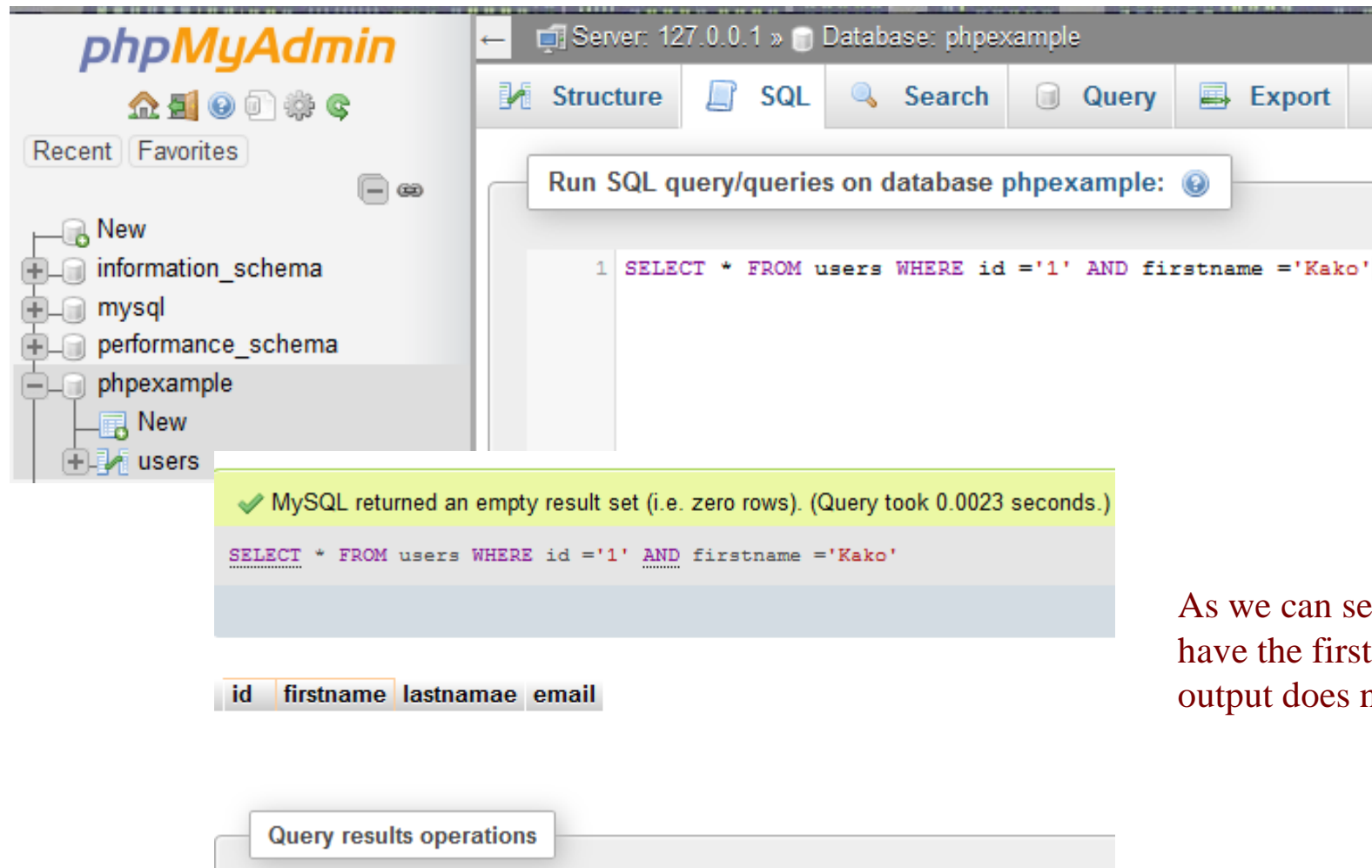


The screenshot displays the phpMyAdmin web interface. On the left, the database navigation tree shows the 'phpexample' database selected, with the 'users' table highlighted. The main panel is in 'SQL' mode, showing a query: `1 SELECT * FROM users WHERE id='1';`. A status bar at the top indicates 'Showing rows 0 - 0 (1 total, Query took 0.0064 seconds.)'. Below the query, a table of results is shown with columns: id, firstname, lastnae, and email. The first row contains the values 1, Kauko, Kolehmainen, and kauko@gmail.com. The 'id' column is highlighted with an orange box.

id	firstname	lastnae	email
1	Kauko	Kolehmainen	kauko@gmail.com

You make the condition for the SELECT which means it will list the whole row whose has the id is 1, we do only have 1 piece of data in here so id is 1. We run the code and of course it shows you the line of users table.

# HOW TO **select** DATA FROM DATABASE



The screenshot shows the phpMyAdmin web interface. On the left, the database 'phpexample' is selected, and the 'users' table is visible. The main panel shows the 'SQL' tab with the following query:

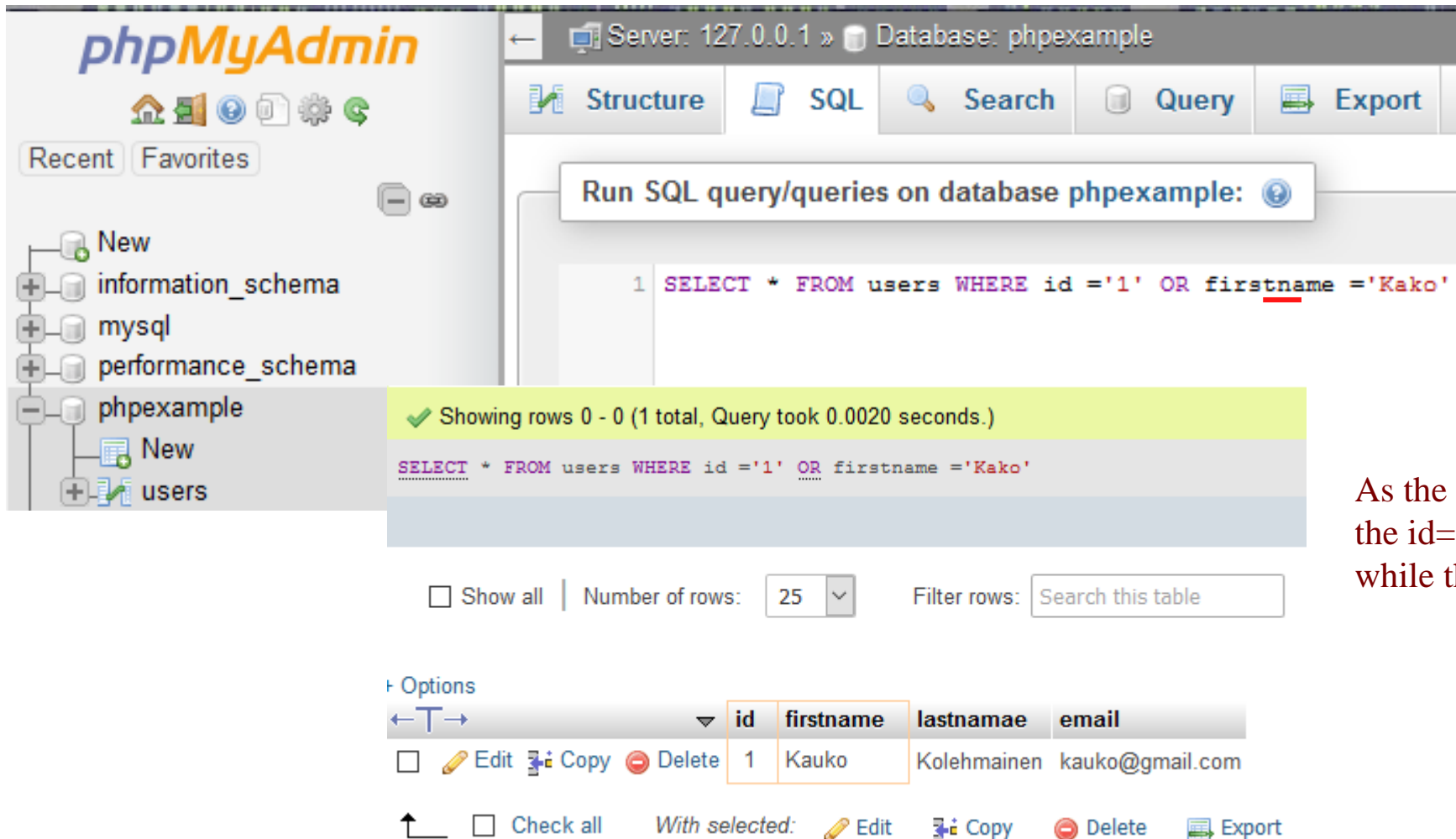
```
1 SELECT * FROM users WHERE id ='1' AND firstname ='Kako'
```

Below the query, a green message box states: "MySQL returned an empty result set (i.e. zero rows). (Query took 0.0023 seconds.)". Below this, the query is repeated: `SELECT * FROM users WHERE id ='1' AND firstname ='Kako'`. At the bottom, a table header is visible with columns: `id`, `firstname`, `lastnaae`, and `email`. The bottom status bar shows "Query results operations".

We make another condition for the statement this time with AND which means the system will check if it is correct for the id = '1' and firstname = 'Kako'

As we can see we obviously dont have the firstname = 'Kako' so the output does not show any line related.

# HOW TO **select** DATA FROM DATABASE



The screenshot shows the phpMyAdmin interface with the 'phpexample' database selected. The 'SQL' tab is active, and a query has been executed: `SELECT * FROM users WHERE id = '1' OR firstname = 'Kako'`. The result shows one row with the following data:

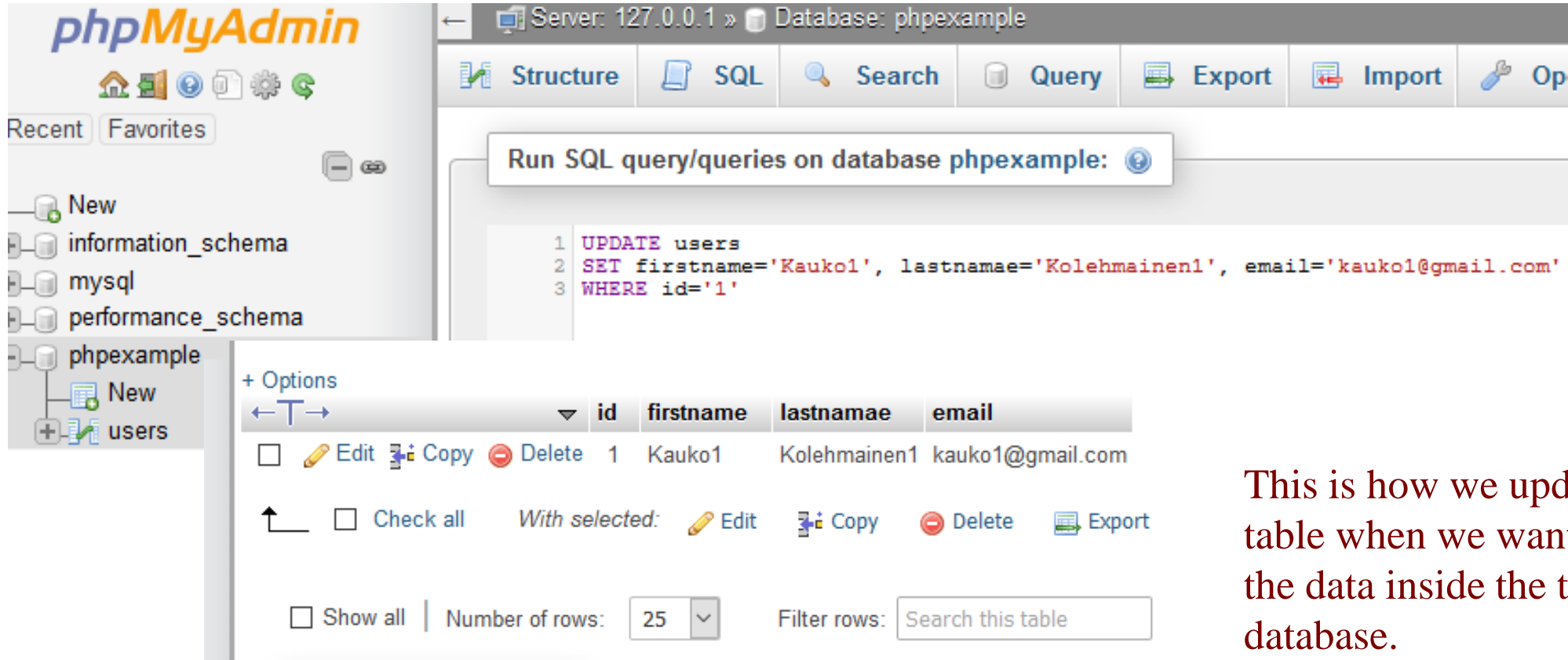
id	firstname	lastnamae	email
1	Kauko	Kolehmainen	kauko@gmail.com

The interface also shows the 'Structure' tab, 'Search' button, and 'Export' button. The 'Run SQL query/queries on database phpexample:' message is displayed above the query input area. The 'Showing rows 0 - 0 (1 total, Query took 0.0020 seconds.)' message is displayed below the query input area. The 'Options' section at the bottom shows the 'id' column selected, and the 'Check all' checkbox is checked.

We make another condition for the statement this time with OR which means the system will check if it is correct for the id = '1' OR firstname = 'Kako'

As the result it shows the line with the id='1' because it is the correct while the other is not.

# HOW TO **update** DATA FROM DATABASE



The screenshot shows the phpMyAdmin interface for a database named 'phpexample'. The left sidebar shows the database structure, including 'information\_schema', 'mysql', 'performance\_schema', and 'phpexample'. The 'phpexample' database is selected, and the 'users' table is visible under 'New'. The main area displays the 'Run SQL query/queries on database phpexample:' prompt. Below this, an SQL query is entered:

```
1 UPDATE users
2 SET firstname='Kauko1', lastnae='Kolehmainen1', email='kauko1@gmail.com'
3 WHERE id='1'
```

Below the query editor, the table structure is shown with columns: id, firstname, lastnae, and email. The table contains one row with the following data:

	id	firstname	lastnae	email
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	Kauko1	Kolehmainen1	kauko1@gmail.com

Below the table, there are options to 'Check all', 'With selected:', 'Edit', 'Copy', 'Delete', and 'Export'. At the bottom, there are options to 'Show all', 'Number of rows: 25', and 'Filter rows: Search this table'.

This is how we update the table when we want to change the data inside the table from database.

# HOW TO delete DATA FROM DATABASE

The image is a composite of three screenshots from the phpMyAdmin interface, illustrating the process of deleting data from a database.

**Left Screenshot:** Shows the phpMyAdmin sidebar. The 'phpexample' database is selected, and the 'users' table is highlighted under the 'New' section.

**Middle Screenshot:** Shows the SQL tab with the following query entered:  
1 `DELETE FROM users`  
2 `WHERE id='1'`

**Right Screenshot:** Shows the query results. A green message box states: "MySQL returned an empty result set (i.e. zero rows). (Query)" Below this, the query `SELECT * FROM `users`` is shown, and the result set is empty.

This is how we delete data from database, in this case we only have 1 line of data so it will be empty at the end when we run the code; otherwise, when we have more data, it does make sense that we place a condition in the SQL query.

# Giving feedback and contribution



IF THERE ARE SOME  
MISTAKES, YOU CAN  
FREELY REPORT IT.



GIVING FEEDBACK.



ANY SUGGESTION ?



THANK YOU FOR  
YOUR TIME!