



جامعة أم القرى
UMM AL-QURA UNIVERSITY

Database Project: Library

CS3132

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OUR TASKS

SHİMAA LAFİ AL-ZUBAİDİ

SARAH ABDULLAH AL-AMMARI

customers.

Select.

*Create a procedure and Call
the Procedure.*

Books table.

Select.

*Create index and
function.*

ARYAM AQİL AL-ZUBAİDİ

**ZAINAB MOHAMMED AL-
ZUBAİDİ**

Transaction.

Select.

Trigger and test trigger.

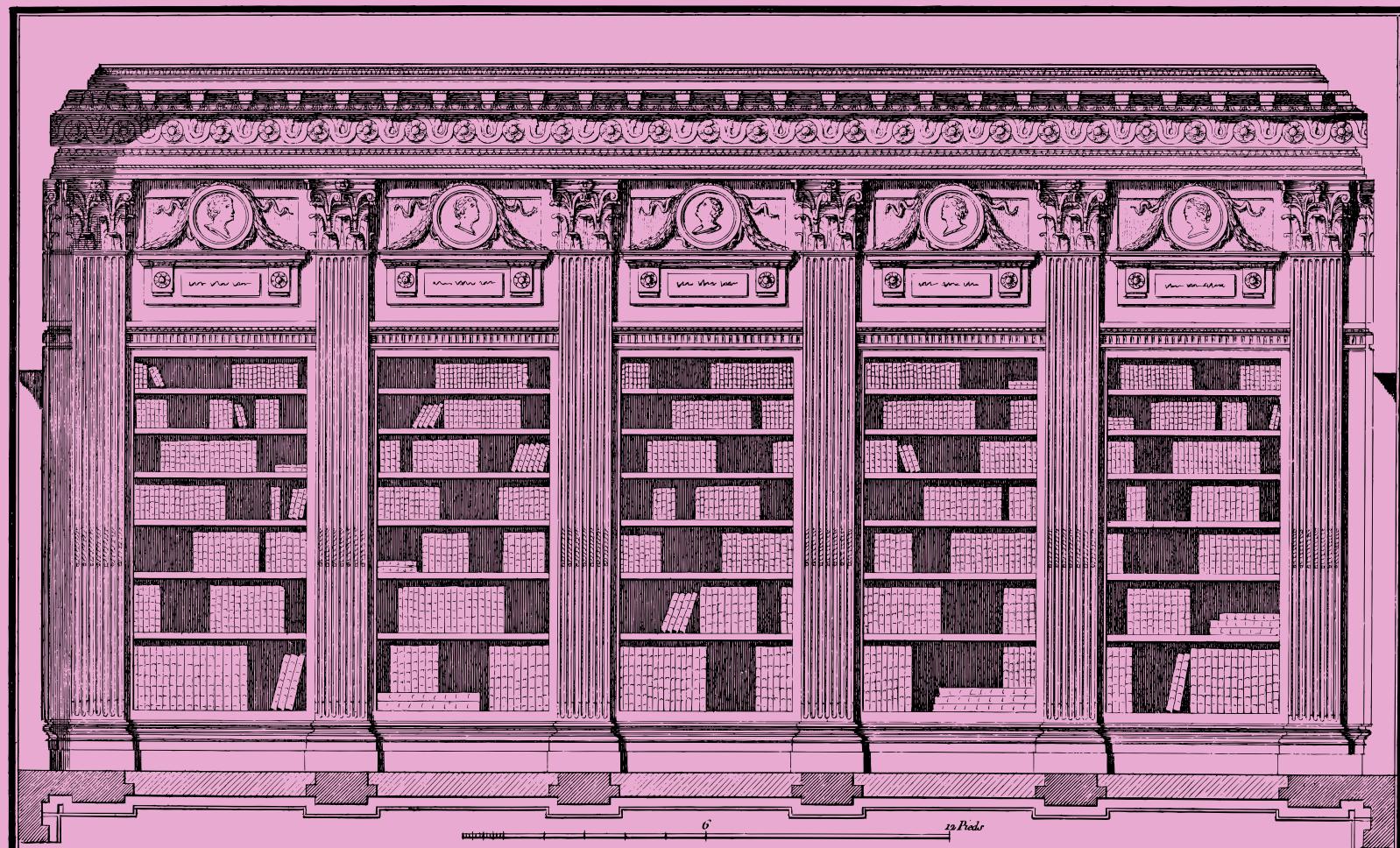
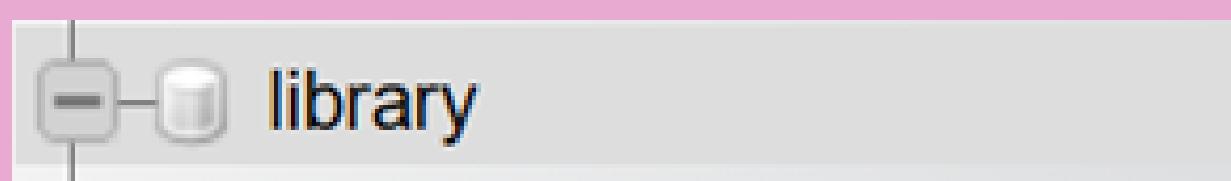
Clients.

Select.

*Create and use
transaction.*

Introduction

In the digital age, e-libraries have become a necessity to meet the needs of readers and book lovers. This database aims to provide a simple and efficient management system for an e-library, focusing on reducing the number of tables while maintaining basic functionality. The system includes three main tables: Books to store book information, Customers to store customer information, and Transactions to track purchases or borrowings.



First Table Name: Books

MySQL returned an empty result set (i.e. zero rows). (Query took 0.0110 seconds.)

CREATE TABLE Books (BookID INT PRIMARY KEY AUTO_INCREMENT, Title VARCHAR(100), Genre VARCHAR(50), Price DECIMAL(10, 2));

[Edit inline] [Edit] [Create PHP code]

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 BookID	int(11)			No	None		AUTO_INCREMENT	Change Drop More
<input type="checkbox"/>	2 Title	varchar(100)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	3 Genre	varchar(50)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	4 Price	decimal(10,2)			Yes	NULL			Change Drop More

Check all With selected: Browse Change Drop Primary Unique Index Spatial More

SELECT * FROM `books`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

BookID	Title	Genre	Price
--------	-------	-------	-------

Query results operations

Create view

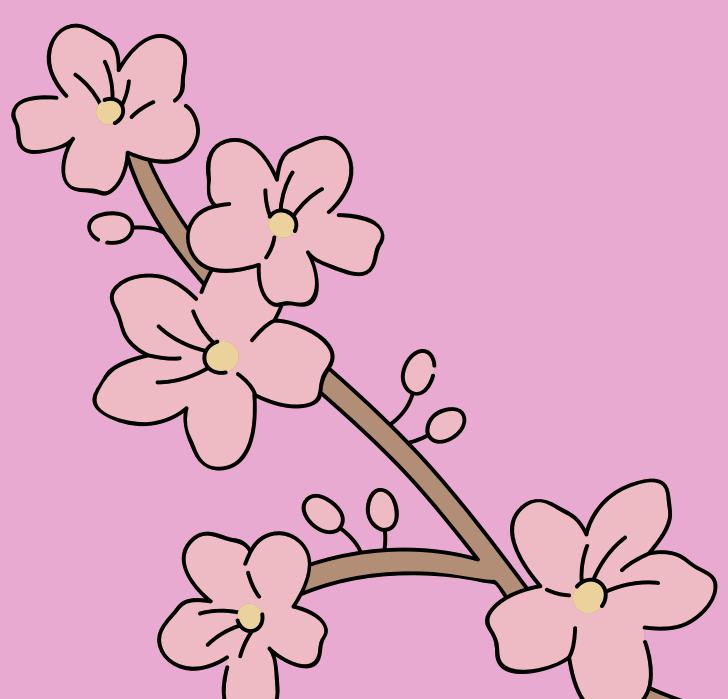
Inserting data:

```
1
2 INSERT INTO Books (BookID,Title, Genre, Price) VALUES
3 ('1','1984', '19.99', (رواية دينترسا),
4 ('2','9.99', (روكريا', 'خيال علمي', ,
5 ('3','14.99', (رواية دينترسا', 'مرآة العيونات');
```

BookID
Title
Genre
Price

	BookID	Title	Genre	Price
<input type="checkbox"/>	1	1984	رواية دينترسا	19.99
<input type="checkbox"/>	2	روكريا	خيال علمي	9.99
<input type="checkbox"/>	3	رواية دينترسا	مرآة العيونات	14.99

Check all With selected: Edit Copy Delete More Export



Select the table and select where:

✓ Showing rows 0 - 1 (2 total, Query took 0.0005 seconds.)

```
SELECT * FROM Books WHERE Genre = 'رواية درامية';
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 ▾ Filter rows: Search this table Sort by key: None ▾

Extra options

← T →	BookID	Title	Genre	Price
<input type="checkbox"/>	Edit	Copy	Delete	1 1984 رواية درامية 19.99
<input type="checkbox"/>	Edit	Copy	Delete	3 رواية درامية مزرعة الجنونات 14.99

✓ Showing rows 0 - 1 (2 total, Query took 0.0004 seconds.)

```
SELECT * FROM Books WHERE Price < 15.00;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 ▾ Filter rows: Search this table Sort by key:

Extra options

← T →	BookID	Title	Genre	Price
<input type="checkbox"/>	Edit	Copy	Delete	2 مذكرات حفل طلاق 9.99
<input type="checkbox"/>	Edit	Copy	Delete	3 رواية درامية مزرعة الجنونات 14.99

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0006 seconds.)

```
SELECT * FROM Books WHERE Genre = 'حفل طلاق' AND Price > 10.00;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

BookID Title Genre Price

Query results operations

 Create view



Create index and function:

Your SQL query has been executed successfully.

```
ALTER TABLE `Books` ADD INDEX(`Genre`);
```

[Edit inline] [Edit] [Create PHP code]

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	BookID	int(11)			No	None		AUTO_INCREMENT	Change Drop More
2	Title	varchar(100)	utf8mb4_general_ci		Yes	NULL			Change Drop More
3	Genre	varchar(50)	utf8mb4_general_ci		Yes	NULL			Change Drop More
4	Price	decimal(10,2)			Yes	NULL			Change Drop More

Check all With selected: Browse Change Drop Primary Unique Index Spatial Fulltext

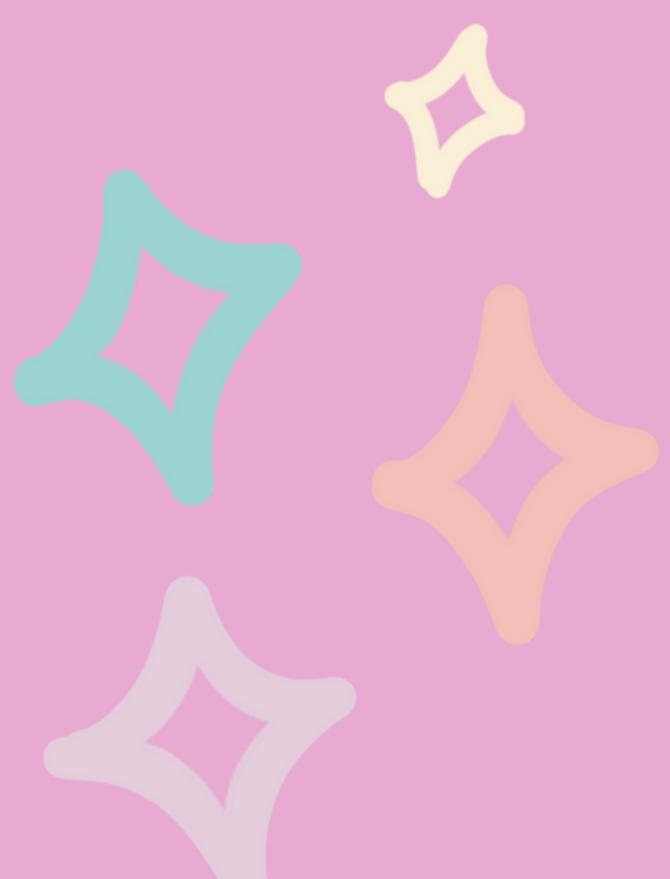
Print Propose table structure Move columns Normalize

Add column(s) after Price Go

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Rename Drop	PRIMARY	BTREE	Yes	No	BookID	3	A	No	
Edit Rename Drop	Genre	BTREE	No	No	Genre	3	A	Yes	

```
1 DELIMITER //
2
3 CREATE FUNCTION TotalPriceByGenre(targetGenre VARCHAR(50))
4 RETURNS DECIMAL(10, 2)
5 BEGIN
6     DECLARE total DECIMAL(10, 2);
7
8     SELECT SUM(Price) INTO total
9     FROM Books
10    WHERE Genre = targetGenre;
11
12    RETURN total;
13 END //
14
15 DELIMITER ;
```





MySQL returned an empty result set (i.e. zero rows). (Query took 0.0095 seconds.)

```
CREATE FUNCTION TotalPriceByGenre(targetGenre VARCHAR(50)) RETURNS DECIMAL(10, 2) BEGIN DECLARE total DECIMAL(10, 2); SELECT SUM(Pri
```

```
INTO total FROM Books WHERE Genre = targetGenre; RETURN total; END;
```

[Edit inline] [Edit] [Create PHP code]

```
SELECT TotalPriceByGenre('رمان رمانتیک') AS TotalPrice;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all

Number of rows:

25 ▾

Filter rows:

Search this table

Extra options

TotalPrice

34.98



Second Table Name:Reviews

Database: libraries < 127.0.0.1 الخادم: 127.0.0.1

العمود (الأحددة) إبطال إضافة SQL بناء

اسم الجدول: Reviews

استعراض SQL

CREATE TABLE `libraries`.`reviews` (`review_id` INT NOT NULL , `user_id` INT NOT NULL , `book_id` INT NOT NULL , `review_text` TEXT NOT NULL , `rating` INT NOT NULL , `review_date` DATE NOT NULL , PRIMARY KEY (`review_id`)) ;ENGINE = InnoDB

:Storage Engine InnoDB

:PARTITION definition

(Expression or column list) :Partition by الأقسام:

حفظ SQL

Database: libraries < 127.0.0.1 الخادم: 127.0.0.1

العمود (الأحددة) إبطال إضافة SQL بناء

اسم الجدول: Reviews

خاتمي فهرست الخواص التجميع الفراضي التحول/القيمة النوع الاسم

MARY None INT review_id Pick from Central Columns

--- None INT user_id Pick from Central Columns

--- None INT book_id Pick from Central Columns

--- None TEXT review_text Pick from Central Columns

--- None INT rating Pick from Central Columns

--- None DATE review_date Pick from Central Columns

!Run SQL query/queries on table libraries.reviews

SELECT * FROM `reviews` WHERE

localhost/phpmyadmin/index.php?route=/database/sql&db=libraries Database: libraries < 127.0.0.1 الخادم: 127.0.0.1

ابطأ صندوق الاستعلام

MySQL قدم برمجاع نتيجة فارغة. (استغرق الاستعلام 0.0007 ثانية.)

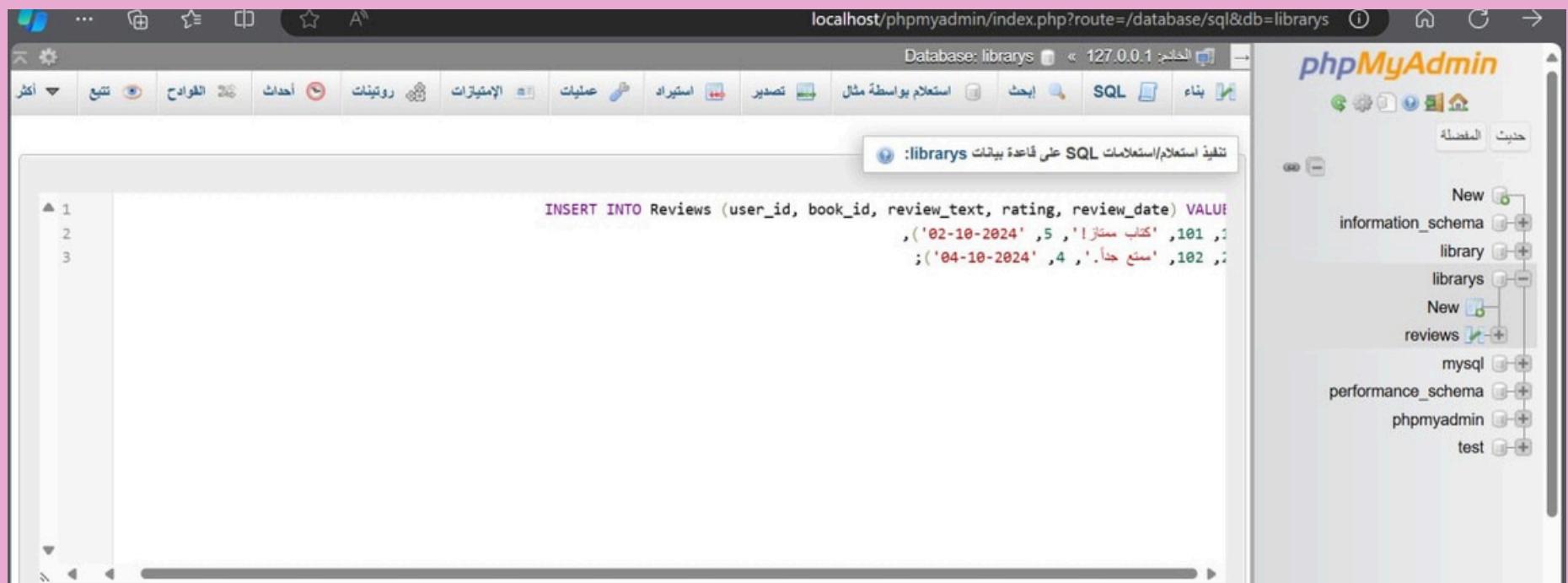
CREATE TABLE Reviews (review_id INT PRIMARY KEY AUTO_INCREMENT, user_id INT, book_id INT, review_text TEXT, rating INT, review_date DATE);

[تحرير مختصر] [تعديل] [إلغاء] [شنون كود]

phpMyAdmin

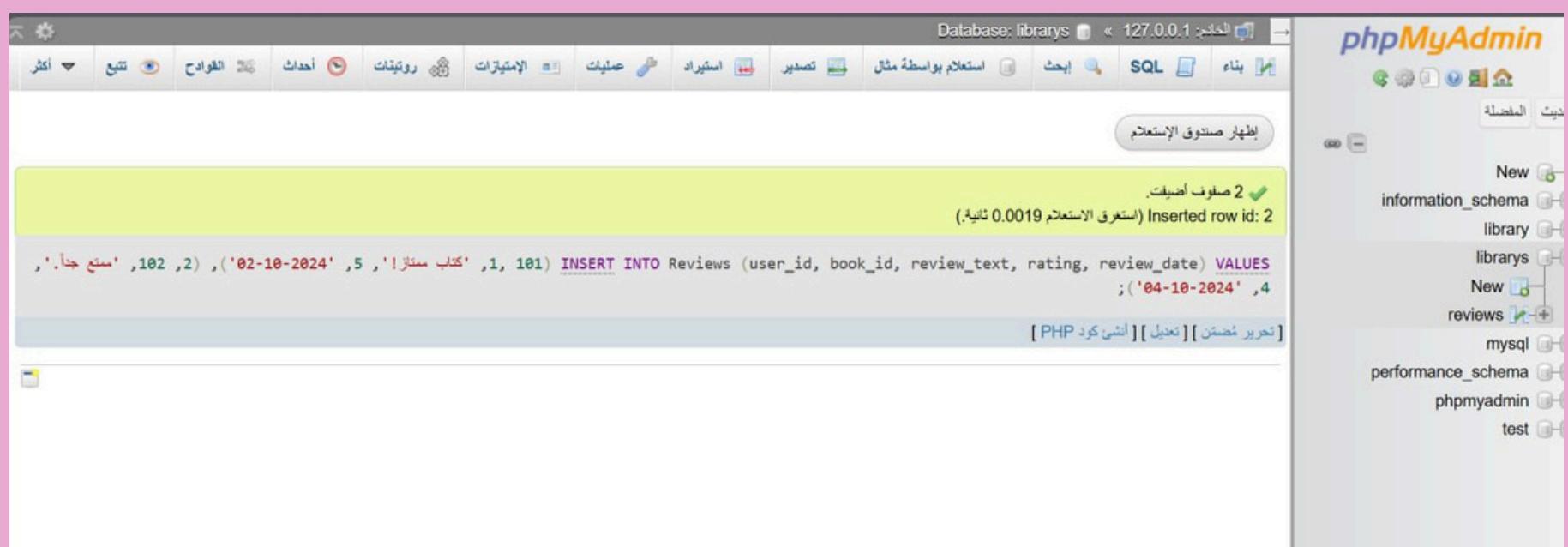
information_schema library libraries New reviews mysql performance_schema phpmyadmin test

Inserting data:



The screenshot shows the phpMyAdmin interface for the 'library' database. In the SQL tab, the following query is entered:

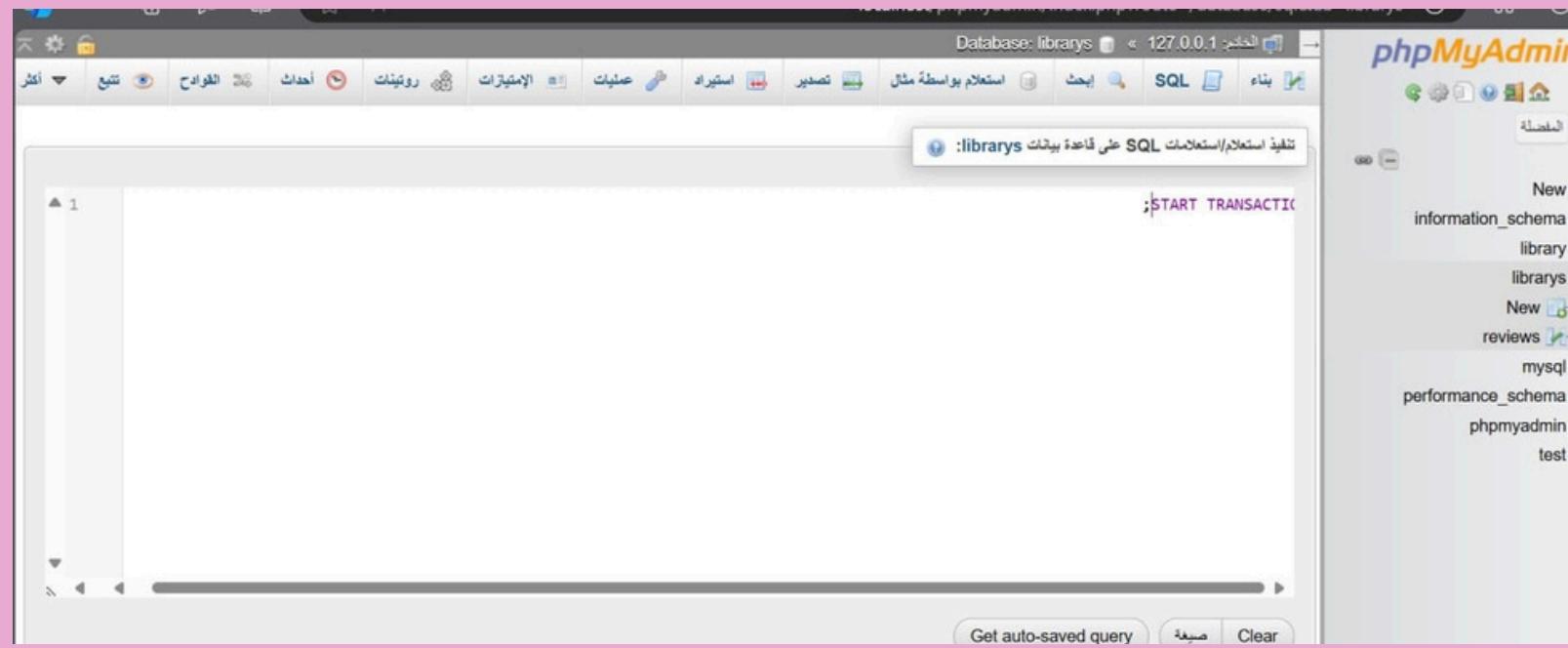
```
INSERT INTO Reviews (user_id, book_id, review_text, rating, review_date) VALUES
    ('1', '101', 'كتاب ممتاز!', 5, '02-10-2024'),
    ('2', '102', 'مسمى جنآ.', 4, '04-10-2024');
```



The screenshot shows the phpMyAdmin interface after the data has been inserted. A success message is displayed: "2 صلوب أضفت. (استغرق الاستعلام 0.0019 ثانية)." The SQL query shown is identical to the one in the previous screenshot.



Create and use transaction:



localhost/phpmyadmin/index.php?route=/database/sql&db=libraries

Database: libraries < 127.0.0.1 الخادم

phpMyAdmin

الملف المفضلة حديث

New information_schema library libraries New reviews mysql performance_schema phpmyadmin test

تغليف استعلام SQL على قاعدة بيانات :libraries

```
INSERT INTO Reviews (user_id, book_id, review_text, rating, review_date);('08-10-2024', 'محظى ممتاز لكن الطباعة سيئة.', 4, 3, 104) VALUES
```

Get auto-saved query صيغة Clear Bind parameters :Bookmark this SQL query



Database: libraries < 127.0.0.1 الخادم

phpMyAdmin

الملف المفضلة حديث

New information_schema library libraries New reviews mysql performance_schema phpmyadmin test

اظهار صنف الاستعلام

1 صف أضيف. (استغرق الاستعلام 0.0039 ثانية.) Inserted row id: 4

```
;('08-10-2024', 'محظى ممتاز لكن الطباعة سيئة.', 4, 3, 104) INSERT INTO Reviews (user_id, book_id, review_text, rating, review_date) VALUES
```

[تحرير مختصر] [تعديل] [إنشاء كود PHP]

استعراض SQL بناء

:Run SQL query/queries on table libraries.reviews

information_schema library libraries reviews mysql performance_schema phpmyadmin test

Get auto-saved query صيغة Clear DELETE UPDATE INSERT SELECT * SELECT



Table: reviews < Database: libraries < 127.0.0.1 الخادم

phpMyAdmin

الملف المفضلة حديث

New information_schema library libraries reviews mysql performance_schema phpmyadmin test

اظهار صنف الاستعلام

قام MySQL ببراجع نتيجة فرز عا... (استغرق الاستعلام 0.0018 ثانية.) ;COMMIT

[تحرير مختصر] [تعديل] [إنشاء كود PHP]



Create the third table Customers

The screenshot shows the phpMyAdmin interface on a Windows desktop. The left sidebar lists databases and tables. The main area shows a SQL query window with the following code:

```
CREATE TABLE Customers ( CustomerID INT PRIMARY KEY AUTO_INCREMENT, Name VARCHAR(100), Email VARCHAR(100) );
```

A green message bar at the top indicates: "MySQL returned an empty result set (i.e. zero rows). (Query took 0.0151 seconds.)". Below the query window are tabs for Structure, SQL, Search, Query, Export, Import, Operations, Privileges, Routines, Events, and More.

The screenshot shows the phpMyAdmin interface on a Windows desktop. The left sidebar lists databases and tables. The main area shows the 'Structure' tab for the 'customers' table. The table structure is defined as follows:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	CustomerID	int(11)		No	None			AUTO_INCREMENT	Change Drop More
2	Name	varchar(100)	utf8mb4_general_ci	Yes	NULL				Change Drop More
3	Email	varchar(100)	utf8mb4_general_ci	Yes	NULL				Change Drop More

Below the table structure, there are sections for Indexes, Partitions, and a console. The bottom navigation bar includes icons for file operations and search.



Inserting Data

Screenshot of the phpMyAdmin interface showing the results of an INSERT query.

Server: 127.0.0.1 | **Database:** library | **Table:** customers

Query Results:

```
✓ 2 rows inserted.  
Inserted row id: 2 (Query took 0.0085 seconds.)
```

```
INSERT INTO Customers (Name, Email) VALUES (' Khalid', 'khalid@example.com'), (' Noor', 'noor@example.com');
```

[\[Edit inline \]](#) [\[Edit \]](#) [\[Create PHP code \]](#)

Console:



Screenshot of the phpMyAdmin interface showing the results of a SELECT query.

Server: 127.0.0.1 | **Database:** library | **Table:** customers

Query Results:

```
✓ Showing rows 0 - 1 (2 total, Query took 0.0004 seconds.)
```

```
SELECT * FROM `customers`
```

Profiling [\[Edit inline \]](#) [\[Edit \]](#) [\[Explain SQL \]](#) [\[Create PHP code \]](#) [\[Refresh \]](#)

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options:

CustomerID	Name	Email
1	Khalid	khalid@example.com
2	Noor	noor@example.com

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

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations:

[Print](#) [Copy to clipboard](#) [Export](#) [Display chart](#) [Create view](#)

Console:



Create a procedure and call the procedure

The screenshot shows the phpMyAdmin interface for a database named 'library'. In the 'Tables' section, the 'customers' table is selected. The 'SQL' tab is active, displaying the following SQL code:

```
1 DELIMITER //
2
3 CREATE PROCEDURE AddCustomer(
4     IN p_Name VARCHAR(100),
5     IN p_Email VARCHAR(100)
6 )
7 BEGIN
8     INSERT INTO Customers (Name, Email) VALUES (p_Name, p_Email);
9 END //
10
11 DELIMITER ;
```

The right panel shows the structure of the 'customers' table with columns: CustomerID, Name, and Email.

The screenshot shows the phpMyAdmin interface after executing the procedure. The message area indicates: "MySQL returned an empty result set (i.e. zero rows). (Query took 0.0102 seconds.)". The SQL query listed is:

```
CREATE PROCEDURE AddCustomer( IN p_Name VARCHAR(100), IN p_Email VARCHAR(100) ) BEGIN INSERT INTO Customers (Name, Email) VALUES (p_Name, p_Email); END;
```



The screenshot shows the phpMyAdmin interface for a MySQL database named 'library'. The left sidebar lists databases like 'functions-lab', 'indexing_lab', and 'library'. The 'Tables' section under 'library' contains 'books' and 'customers'. The main area shows two successful SQL queries:

```
CALL AddCustomer(' Khalid ', ' khalid@example.com ');
CALL AddCustomer(' Noor ', ' noor@example.com ');
```

Both queries took approximately 0.0024 seconds and returned zero rows.

Select the table and select where

The screenshot shows the phpMyAdmin interface for the 'library' database. The 'Tables' section shows the 'customers' table. A query has been run:

```
SELECT * FROM Customers WHERE Name = ' Khalid ';
```

The results show two rows:

CustomerID	Name	Email
1	Khalid	khalid@example.com
3	Khalid	khalid@example.com

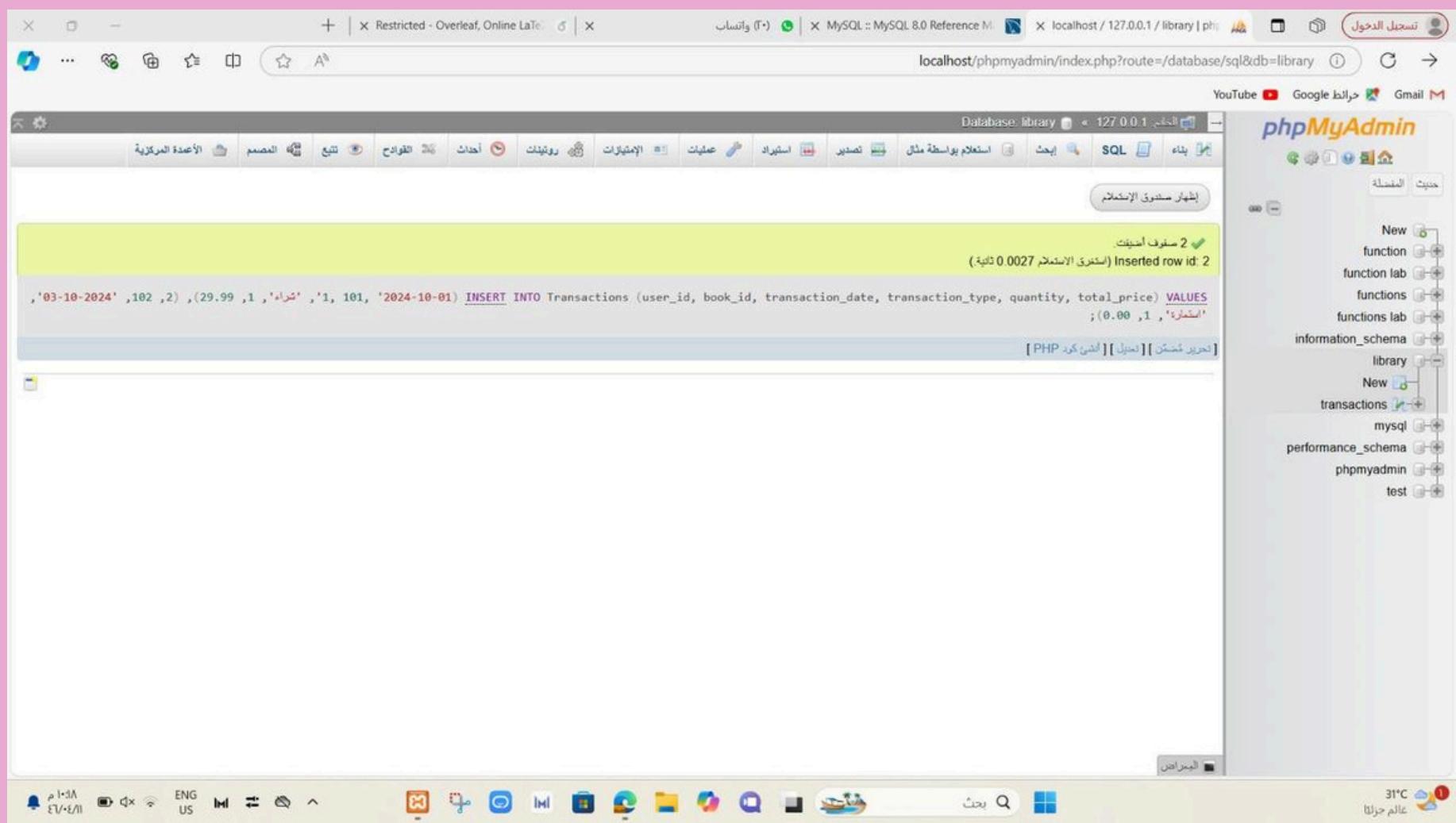
The screenshot shows the phpMyAdmin interface for the 'library' database. The 'Tables' section shows the 'customers' table. A query has been run:

```
SELECT * FROM Customers;
```

The results show four rows:

CustomerID	Name	Email
1	Khalid	khalid@example.com
2	نور	noor@example.com
3	Khalid	khalid@example.com
4	نور	noor@example.com

Four Table name:Transactions



localhost/phpmyadmin/index.php?route=/database/sql&db=library

Database: library < 127.0.0.1 | تسجيل الدخول

phpMyAdmin | حفظ

المراسن

اطهار متصفح المستخدم

2 صفوف أضفت (استغرق الاستعلام 0.0027 ثانية)

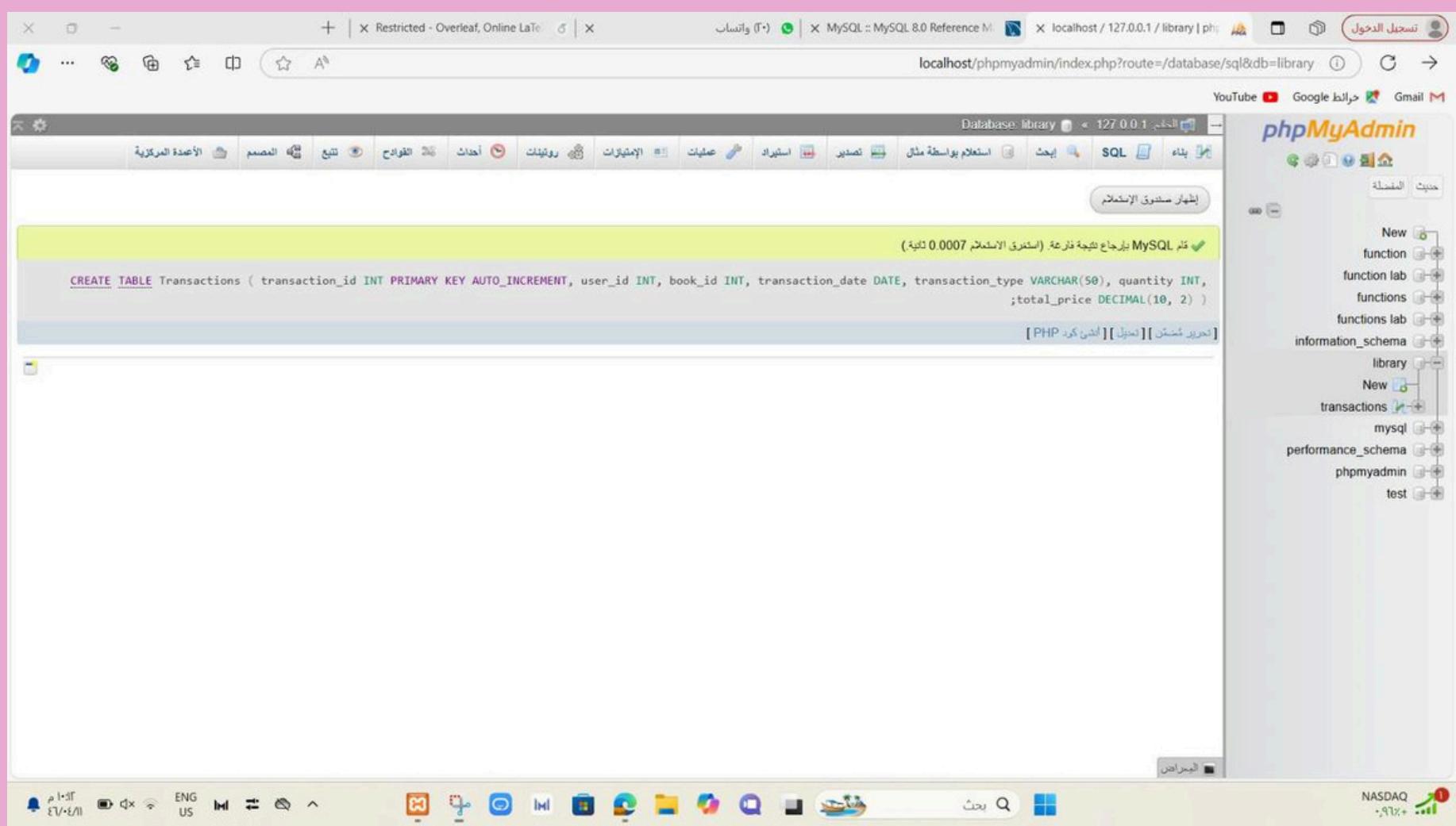
'03-10-2024', 102, 2, 'شراء', 1, 101, '2024-10-01') INSERT INTO Transactions (user_id, book_id, transaction_date, transaction_type, quantity, total_price) VALUES ; (0.00, 'اشتراك', 1, 101, '2024-10-01')

[PHP] [تحرير متصفح] [تعديل] [إثنين كود]

New function function lab functions functions lab information_schema library New transactions mysql performance_schema phpmyadmin test

31°C عالم حرزا

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localhost/phpmyadmin/index.php?route=/database/sql&db=library

Database: library < 127.0.0.1 | تسجيل الدخول

phpMyAdmin | حفظ

المراسن

اطهار متصفح المستخدم

تم MySQL ب بتاريخ نشرة (استغرق الاستعلام 0.0007 ثانية)

CREATE TABLE Transactions (transaction_id INT PRIMARY KEY AUTO_INCREMENT, user_id INT, book_id INT, transaction_date DATE, transaction_type VARCHAR(50), quantity INT, total_price DECIMAL(10, 2))

[PHP] [تحرير متصفح] [تعديل] [إثنين كود]

New function function lab functions functions lab information_schema library New transactions mysql performance_schema phpmyadmin test

NASDAQ

Restricted - Overleaf, Online LaTeX Editor | واتساب | MySQL :: MySQL 8.0 Reference Manual | localhost / 127.0.0.1 / library | phpMyAdmin | YouTube | Google | Gmail | تسجيل الدخول



Inserting Data

The screenshot shows the phpMyAdmin interface for a MySQL database named 'library'. In the left sidebar, under the 'transactions' table, there is a 'Columns' section. A 'New' button is highlighted. The SQL query window contains the following code:

```
CREATE TABLE Transactions (
    transaction_id INT PRIMARY KEY AUTO_INCREMENT,
    user_id INT,
    book_id INT,
    transaction_date DATE,
    transaction_type VARCHAR(50),
    quantity INT,
    total_price DECIMAL(10, 2)
);
```

The right panel displays the table structure with columns: transaction_id, user_id, book_id, transaction_date, transaction_type, quantity, and total_price.

The screenshot shows the phpMyAdmin interface for the same MySQL database. The SQL query window contains the following code:

```
INSERT INTO Transactions (user_id, book_id, transaction_date, transaction_type, quantity, total_price) VALUES
(1, 101, '2024-10-01', '29.99', 1, 'شراء'),
(2, 102, '2024-10-03', '0.00', 1, 'إيجار');
```

The right panel shows the table structure again. An error message is displayed in the 'Error' section:

SQL query: Copy

The screenshot shows the phpMyAdmin interface for the MySQL database. The left sidebar shows the 'Structure' tab for the 'transactions' table is selected. The table structure is displayed in a grid:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	transaction_id	int(11)			No	None		AUTO_INCREMENT	Change Drop More
2	user_id	int(11)			Yes	NULL			Change Drop More
3	book_id	int(11)			Yes	NULL			Change Drop More
4	transaction_date	date			Yes	NULL			Change Drop More
5	transaction_type	varchar(50)	utf8mb4_general_ci		Yes	NULL			Change Drop More
6	quantity	int(11)			Yes	NULL			Change Drop More
7	total_price	decimal(10,2)			Yes	NULL			Change Drop More

Below the table structure, there are sections for 'Indexes', 'Partitions', and a 'Console' for running queries.

Select the table and select where:

This screenshot shows the phpMyAdmin interface for the 'Transactions' table. The left sidebar shows the database structure with 'library' selected. The main area displays the results of the query 'SELECT * FROM Transactions;'. The results table has columns: transaction_id, user_id, book_id, transaction_date, transaction_type, quantity, and total_price. Two rows are shown: one for a purchase (transaction_id 1) and one for a return (transaction_id 2). The 'transaction_type' column contains Arabic text: شراء (purchase) and استئجار (rental).

	transaction_id	user_id	book_id	transaction_date	transaction_type	quantity	total_price
	1	1	101	2024-10-01	شراء	1	29.99
	2	2	102	2024-10-03	استئجار	1	0.00

This screenshot shows the MyAdmin interface for the 'Transactions' table. The left sidebar shows the database structure with 'library' selected. The main area displays the results of the query 'SELECT * FROM Transactions WHERE book_id = 101;'. The results table shows a single row where the 'book_id' column is highlighted. The row details a purchase (transaction_id 1) of book_id 101 on 2024-10-01.

	transaction_id	user_id	book_id	transaction_date	transaction_type	quantity	total_price
	1	1	101	2024-10-01	شراء	1	29.99



Create a trigger and test trigger :

Screenshot of phpMyAdmin showing the SQL query interface for creating a trigger.

The SQL query entered is:

```
1 DELIMITER //
2
3 CREATE TRIGGER before_Transactions_update_
4 BEFORE UPDATE ON Transactions
5 FOR EACH ROW
6 BEGIN
7     IF NEW.total_price < 0 THEN
8         SIGNAL SQLSTATE '45000'
9         SET MESSAGE_TEXT = 'number price cannot be negative';
10    END IF;
11 END //
12
13 DELIMITER ;
```

The right panel shows the structure of the Transactions table:

transaction_id	user_id	book_id	transaction_date	transaction_type	quantity	total_price
----------------	---------	---------	------------------	------------------	----------	-------------

Below the query interface, the status bar indicates: MySQL returned an empty result set (i.e. zero rows). (Query took 0.0364 seconds.)

Screenshot of phpMyAdmin showing the SQL query interface for creating a trigger.

The SQL query entered is:

```
CREATE TRIGGER before_Transactions_update_
BEFORE UPDATE ON Transactions FOR EACH ROW BEGIN
IF NEW.total_price < 0 THEN
SIGNAL SQLSTATE '45000'
SET MESSAGE_TEXT = 'number
price cannot be negative';
END IF;
END;
```

The status bar indicates: MySQL returned an empty result set (i.e. zero rows). (Query took 0.0364 seconds.)



localhost/phpmyadmin/index.php?route=/table/sql&db=library&table=Transactions

YouTube Google Gmail

phpMyAdmin

Server: 127.0.0.1 > Database: library > Table: Transactions

Browse Structure SQL Search Insert Export Import Privileges Operations Triggers

Run SQL query/queries on table library.Transactions:

```
1 UPDATE Transactions
2 SET total_price = -15
3 WHERE book_id = '101';
```

transaction_id user_id book_id transaction_date transaction_type quantity total_price

SELECT * SELECT INSERT UPDATE DELETE Clear Format Get auto-saved query

Bind parameters

Delimiter : Show this query here again Retain query box Rollback when finished Enable foreign key checks Simulate query Go

Hide query box

MySQL returned an empty result set (i.e. zero rows) (Query took 0.0364 seconds.)

Test trigger:

MySQL

Browse Structure SQL Search Insert Export Import Privileges Operations Triggers

SELECT * SELECT INSERT UPDATE DELETE Clear Format Get auto-saved query

Bind parameters

Delimiter : Show this query here again Retain query box Rollback when finished Enable foreign key checks Simulate query Go

Error

SQL query: Copy

```
UPDATE Transactions
SET total_price = -15
WHERE book_id = '101';
```

MySQL said: #1644 - number price cannot be negative

Console



Create a trigger and test trigger :

The screenshot shows the phpMyAdmin interface for a MySQL database named 'library'. The current table is 'transactions'. In the 'Triggers' tab, a new trigger is being created with the name 'prevent_negative_quantity'. The SQL code in the query editor is:

```
1 DELIMITER //
2 CREATE TRIGGER prevent_negative_quantity
3 BEFORE UPDATE ON Transactions
4 FOR EACH ROW
5 BEGIN
6     IF NEW.quantity < 0 THEN
7         SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = 'Quantity cannot be negative.';
8     END IF;
9 END //
10 DELIMITER ;
```

The right panel displays the table structure for 'transactions' with columns: transaction_id, user_id, book_id, transaction_date, transaction_type, quantity, and total_price.

The screenshot shows the phpMyAdmin interface for a MySQL database named 'library'. The current table is 'transactions'. In the 'Triggers' tab, a new trigger is being created with the name 'prevent_negative_quantity'. The SQL code in the query editor is:

```
CREATE TRIGGER prevent_negative_quantity BEFORE UPDATE ON Transactions FOR EACH ROW BEGIN IF NEW.quantity < 0 THEN SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = 'Quantity cannot be negative.'; END IF; END;
```

The message bar at the top indicates: "MySQL returned an empty result set (i.e. zero rows). (Query took 0.0619 seconds.)".



Test trigger:

The screenshot shows the phpMyAdmin interface for a database named 'library'. The 'Triggers' tab is selected for the 'transactions' table. A SQL query is entered in the main query editor:

```
1 UPDATE Transactions
2 SET quantity = -1
3 WHERE transaction_id = 1;
```

The error message displayed is:

Error
SQL query: Copy
MySQL said: #1644 - Quantity cannot be negative.

This screenshot is identical to the one above, showing the same SQL query and the same MySQL error message: #1644 - Quantity cannot be negative.



The end....

thanks

**have a
nice day.**

