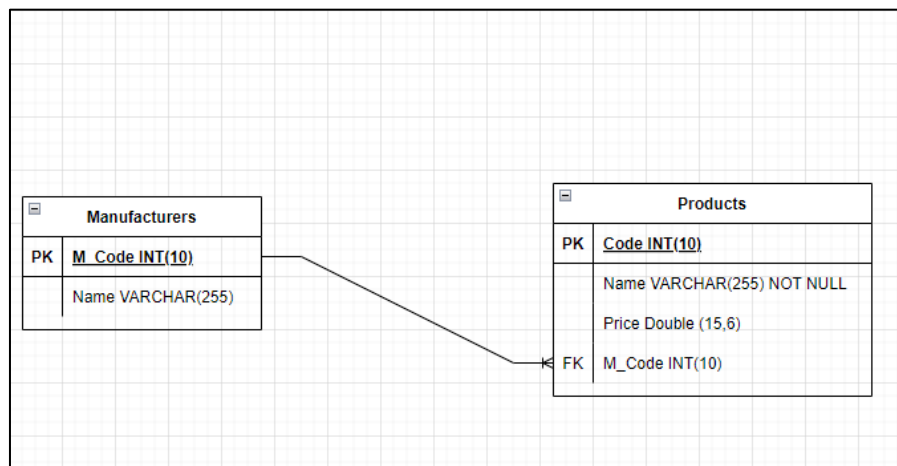


Week-2

Lab Task-2 (DDL and DML Operations) Solution



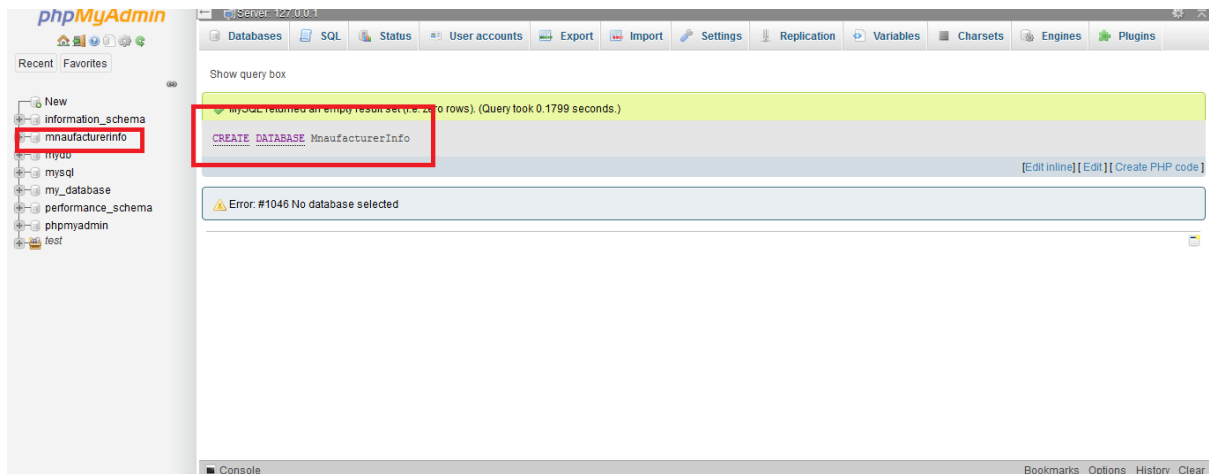
1. Let's assume there is a database called "ManufacturerInfo" which stores information about the manufactured products and their manufacturers details for a store. Your task will be to create the following tables:

"Manufacturers" containing attributes: Manufacturer's code and name.

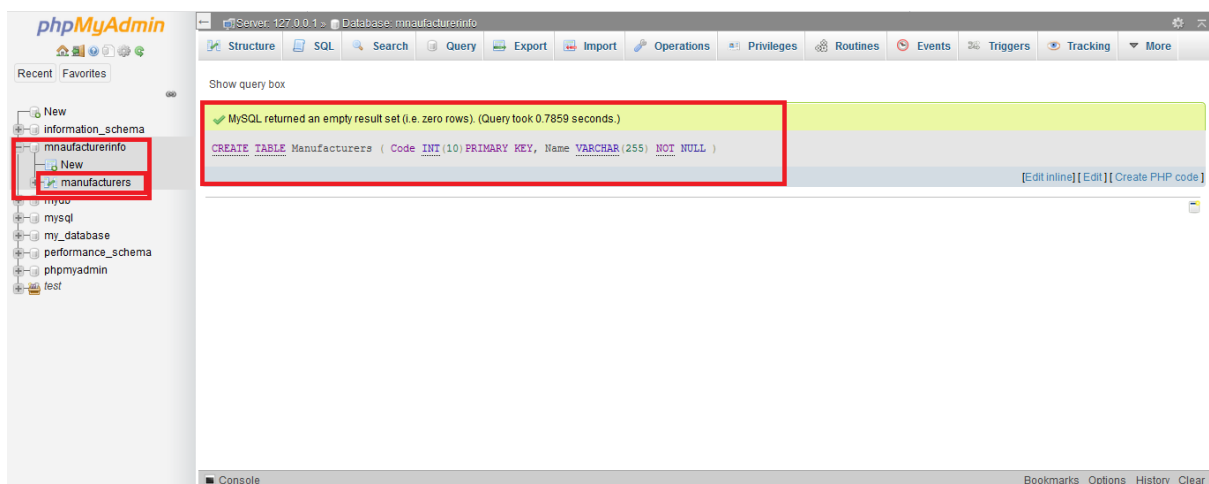
"Products" containing attributes: Product's code, Name, price and manufacturer's code (manufacturer's code will be referred here as a foreign key constraint).

Remember to specify the constraints while defining the tables accordingly and include "NOT NULL" and/or, Unique Key(UK) constraints for the fields/attributes of both the table where appropriate.

Ans:



Database “ManufacturerInfo” created.



“Manufacturers” table created.



“Products” table created.

2. Populate the tables with the records provided here.

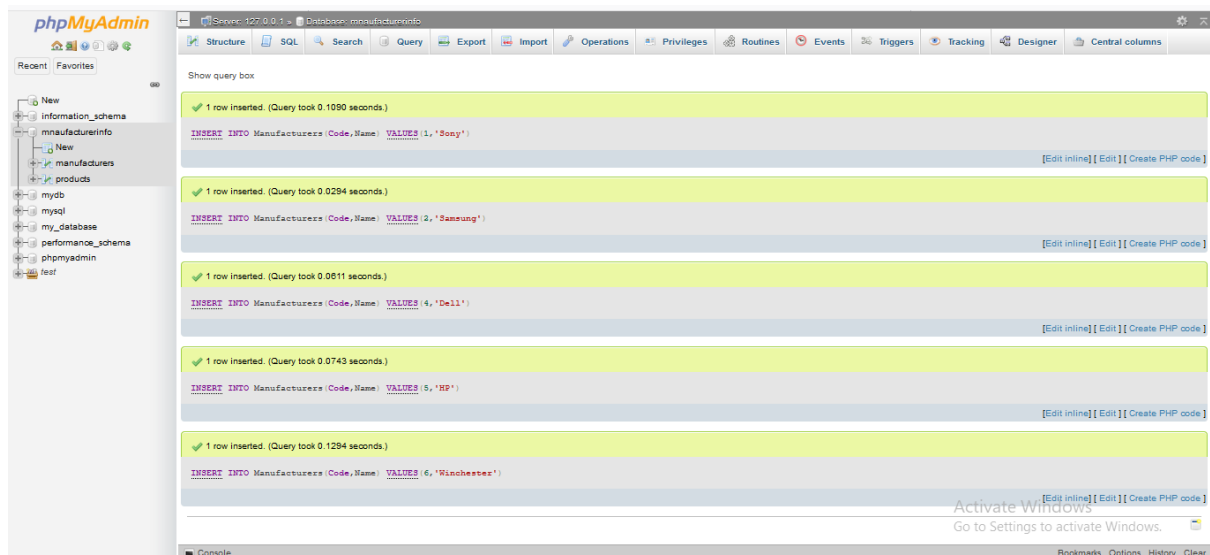
Manufacturer's details: (Code, Name)

- 1, Sony
- 2, Samsung
- 4, Dell
- 5, HP
- 6, Winchester

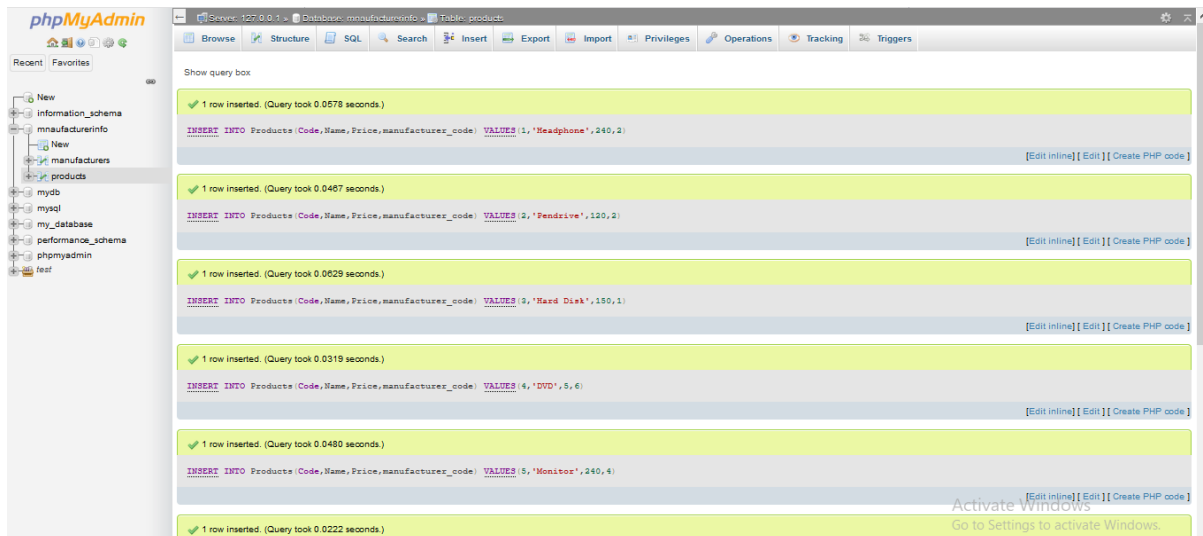
Product's details: (Code, Name, Price, Manufacturer)

- 1,'Headphone',240,2
- 2,'Pendrive',120,2
- 3,'Hard Disk',150,1
- 4,'DVD',5,6
- 5,'Monitor',240,4
- 6,'Tablet',180,5
- 7,'CD drive',90,6
- 8,'Printer',270,5
- 9,'DVD burner',180,6

Ans:



Manufacturers table populated.

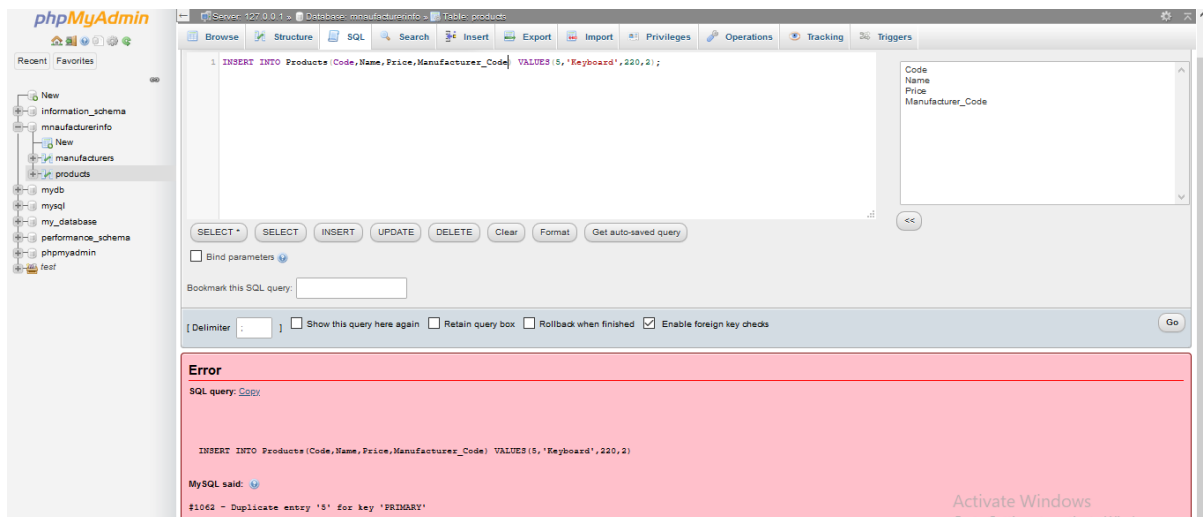


Products table populated.

3. Try to insert the following record to the table “Products”. Also, put your opinion against this successful/unsuccessful transaction.

5	keyboard	220	2
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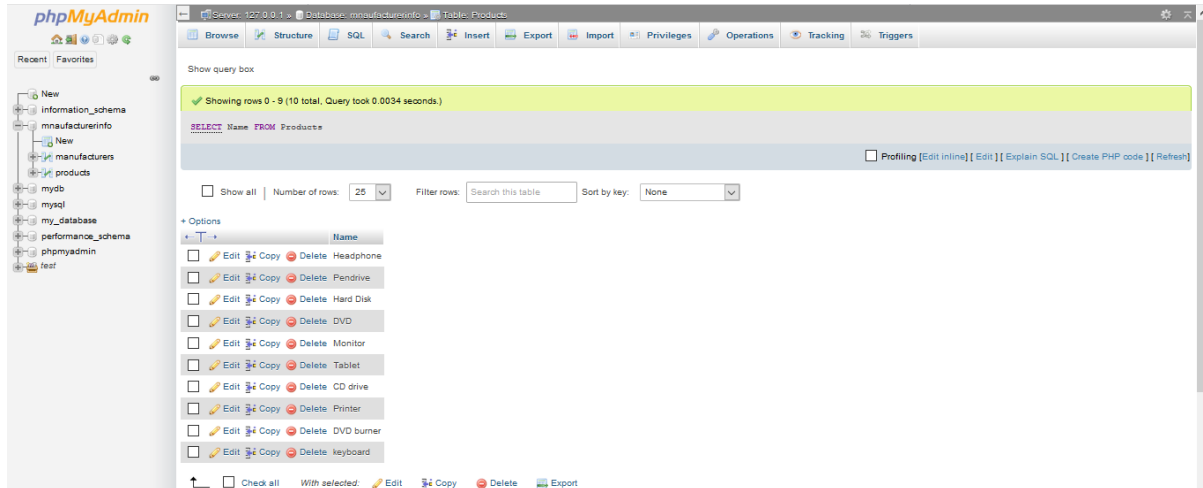
Ans:



The transaction is unsuccessful because duplication of primary key occurred and value “5” already exists in the table for another record.

4. Find the product names in the store.

Ans:

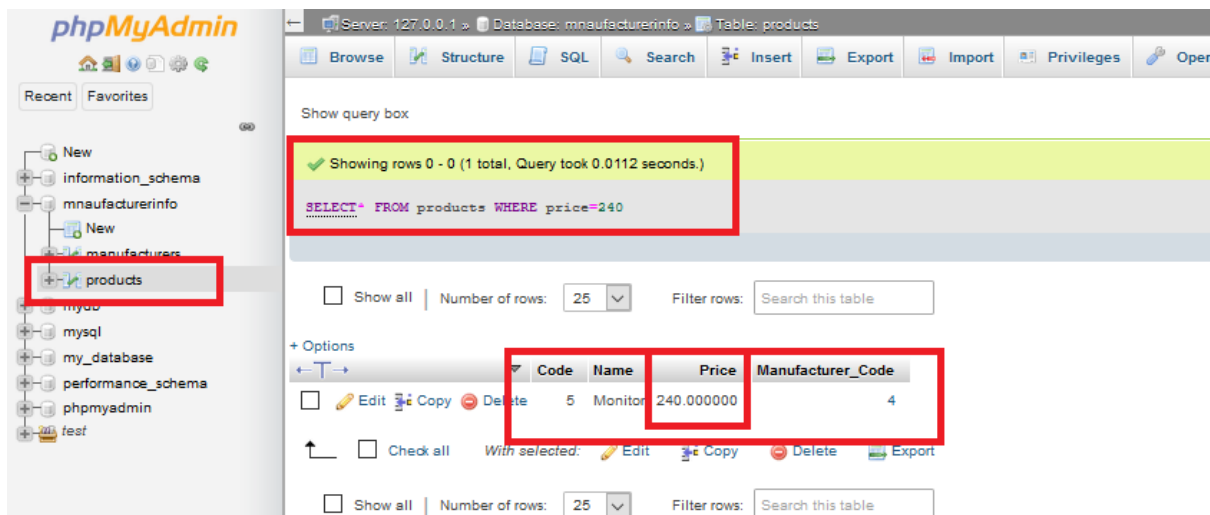


The screenshot shows the phpMyAdmin interface for the 'mnaufactureinfo' database. The 'products' table is selected, and the query 'SELECT Name FROM products' is executed. The results show 10 rows of product names: Headphone, Pendrive, Hard Disk, DVD, Monitor, Tablet, CD drive, Printer, DVD burner, and keyboard.

Name
Headphone
Pendrive
Hard Disk
DVD
Monitor
Tablet
CD drive
Printer
DVD burner
keyboard

5. Find the product details where the price of the product is 240.

Ans:

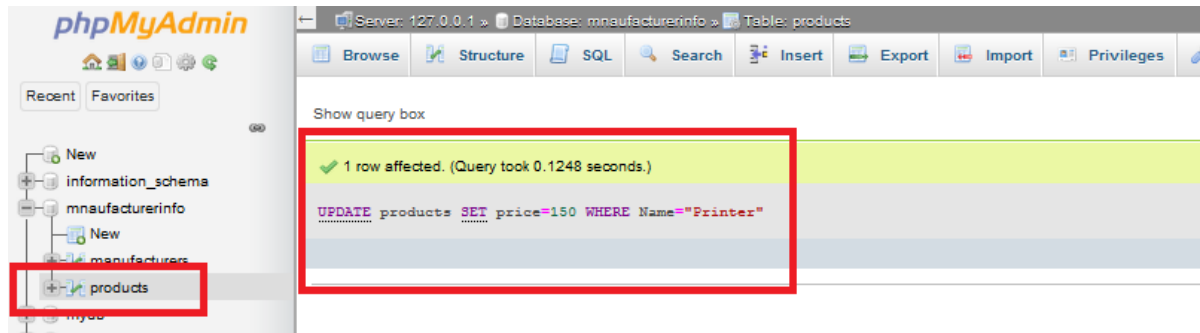


The screenshot shows the phpMyAdmin interface for the 'mnaufactureinfo' database. The 'products' table is selected, and the query 'SELECT* FROM products WHERE price=240' is executed. The results show 1 row of product details: Code 5, Name Monitor, Price 240.000000, and Manufacturer_Code 4.

Code	Name	Price	Manufacturer_Code
5	Monitor	240.000000	4

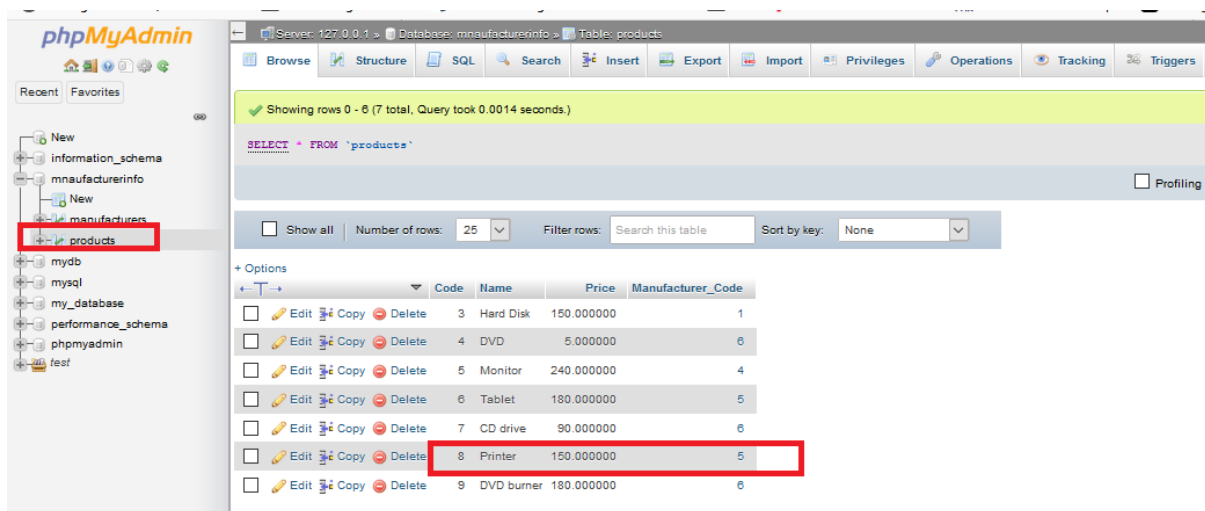
6. Update the price of the printer as 150 in the table.

Ans:



The screenshot shows the phpMyAdmin interface. On the left sidebar, the 'products' table is selected under the 'manufacturers' database. The main panel displays the SQL query: `UPDATE products SET price=150 WHERE Name="Printer"`. A message above the query states: "1 row affected. (Query took 0.1248 seconds.)".

The updated price of printer:

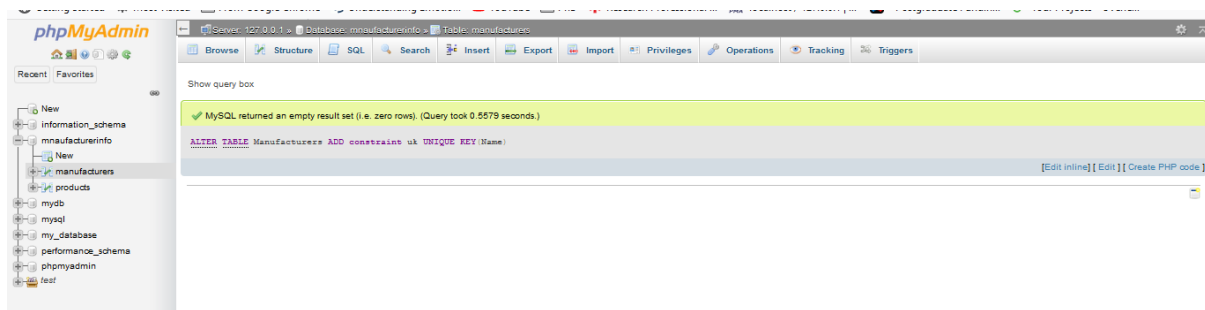


The screenshot shows the phpMyAdmin interface with the 'products' table selected. The main panel displays the SQL query: `SELECT * FROM 'products'`. A message above the query states: "Showing rows 0 - 6 (7 total, Query took 0.0014 seconds.)". Below the query, a table of products is shown. The row for the 'Printer' is highlighted with a red box, showing its price as 150.000000.

	Code	Name	Price	Manufacturer_Code
<input type="checkbox"/>	3	Hard Disk	150.000000	1
<input type="checkbox"/>	4	DVD	5.000000	6
<input type="checkbox"/>	5	Monitor	240.000000	4
<input type="checkbox"/>	6	Tablet	180.000000	5
<input type="checkbox"/>	7	CD drive	90.000000	6
<input type="checkbox"/>	8	Printer	150.000000	5
<input type="checkbox"/>	9	DVD burner	180.000000	6

7. Define manufacturer's name as a unique key constraint.

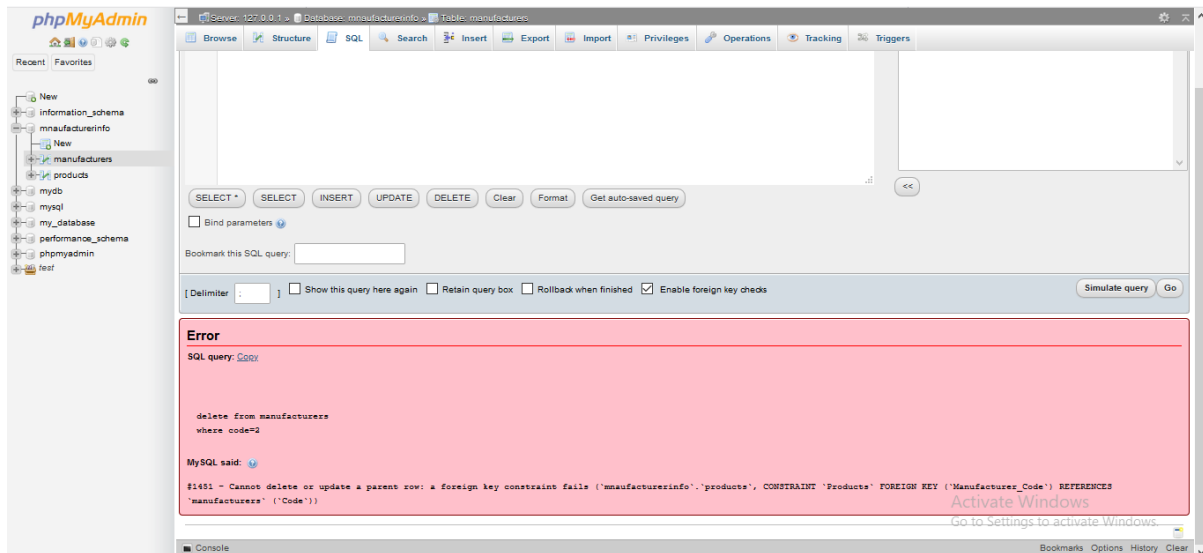
Ans:



The screenshot shows the phpMyAdmin interface with the 'manufacturers' table selected. The main panel displays the SQL query: `ALTER TABLE Manufacturers ADD constraint uk UNIQUE KEY (Name)`. A message above the query states: "MySQL returned an empty result set (i.e. zero rows). (Query took 0.5579 seconds.)".

8. Delete the manufacturers details where the manufacturer's code is 2. Put your observation on the outcome of the transaction.

Ans:



Here, manufacturer's code in the table manufacturers (parent table) was referred as a foreign key in the table "products" (child table) while defining them, means "code" attribute has become a referential attribute for the child table.