

Work with database
SQLite

First I created the new user in the database

The screenshot shows the SQLiteStudio interface. In the top-left, the 'Tables' section of the 'database' database is visible, containing four tables: cart, categories, products, and users. A red arrow points from the text 'Create new user' to the 'users' table. In the bottom-right, a status bar shows the message 'Query finished in 0.023 second(s). Rows affected: 1'.

The screenshot shows the SQLiteStudio interface. The 'users' table now has four rows. A red arrow points from the text 'New user' to the fourth row, which represents the newly created user 'Tetiana Pylypenko'. The status bar at the bottom indicates 'Query finished in 0.025 second(s). Rows affected: 1'.

The screenshot shows a web browser at the URL 127.0.0.1:5000/loginForm. The login form has fields for 'Email' (test@gmail.com) and 'Password' (a redacted password). Below the form are buttons for 'Надіслати' (Send) and 'Register here'. A red arrow points from the text 'Sing in with creating data' to the 'Email' field.

The screenshot shows a web browser at the URL 127.0.0.1:5000/account/profile/edit. The page is titled 'Edit profile' and contains fields for 'Email' (test@gmail.com), 'First Name' (Tetiana), 'Last Name' (Pylypenko), 'Address 1' (Gagaryna), 'Zip Code' (61000), 'City' (Kharkiv), 'State' (Kharkiv), 'Country' (Ukraine), and 'Phone Number' (0980000000). A red arrow points from the text 'User data' to the 'First Name' field.

Create a new category "Toys"

The screenshot shows the SQLiteStudio interface. In the top-left pane, the 'Tables' section of the 'database0 (SQLite 3)' database is visible, containing 'cart', 'categories', 'products', and 'users'. In the main query window, the following SQL code is entered:

```
1 INSERT INTO categories (categoryId, name)
2 VALUES 5, 'Toys'
```

A red arrow points from the text 'Create new category' to the 'name' column in the SQL code. The status bar at the bottom right shows the message: 'Активізація Windows' (Windows Activation) and 'Перейдіть до розділу "Настройки", щоб активувати Windows.' (Go to the 'Settings' section to activate Windows.).

"Toys" category on the database

The screenshot shows the SQLiteStudio interface. The 'Tables' section of the 'database (SQLite 3)' database is visible, containing 'categories'. In the main query window, the following SQL code is entered:

```
1 SELECT *
2 FROM categories
```

The results grid shows the following data:

categoryId	name
1	Men
2	Women
3	TVs
4	Computers
5	Toys

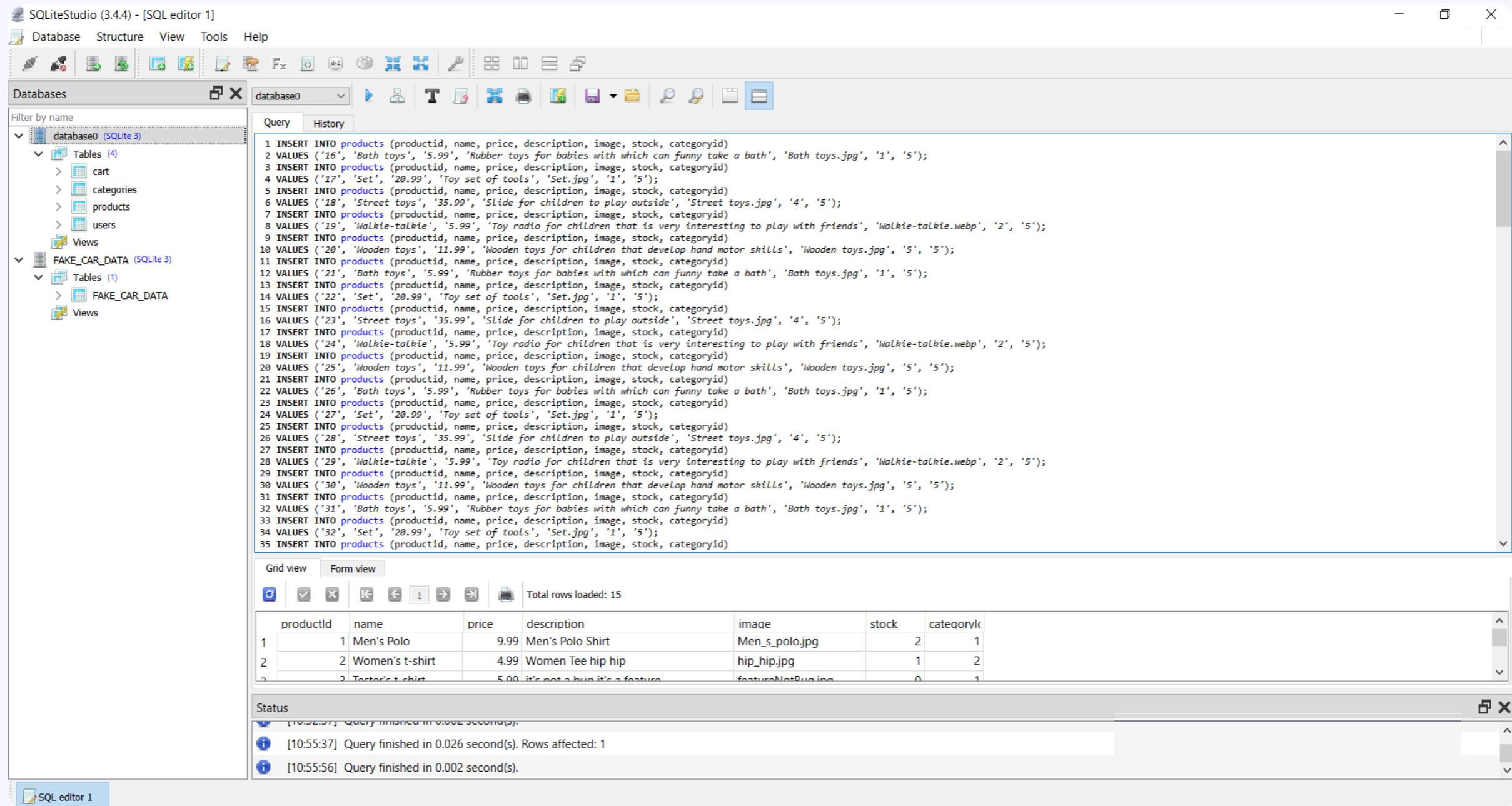
A red arrow points from the text 'New category' to the 'Toys' entry in the grid. The status bar at the bottom right shows the message: '[15:10:59] Query finished in 0.000 second(s.)'.

"Toys" category on the website

The screenshot shows a web browser window with the URL '127.0.0.1:5000'. The top navigation bar includes 'Hello, Tetiana' and a 'CART 3' button. Below the navigation bar, the text 'Shop by Category:' is followed by a horizontal menu with links: 'Men', 'Women', 'TVs', 'Computers', and 'Toys'. A red arrow points from the text 'New category' to the 'Toys' link. The main content area displays a grid of items:

Items	Men's Polo	Women's t-shirt	Tester's t-shirt	Men's Blank t-shirt	Men's Blank t-shirt 2	Agile t-shirt	Tester's t-shirt
	\$ 9.99	\$ 4.99	\$ 5.99	\$ 9.99	\$ 10.99	\$ 14.99	\$ 7.99
	Men's t-shirt 3	Women's t-shirt 2	Tester's t-shirt 3	Tester's t-shirt 4	Computer	TV	Computer 2

Then I added 100 products to the “Toys” category



SQLiteStudio (3.4.4) - [SQL editor 1]

Database Structure View Tools Help

Databases

Filter by name

Query History

1 INSERT INTO products (productid, name, price, description, image, stock, categoryid)

2 VALUES ('16', 'Bath toys', '5.99', 'Rubber toys for babies with which can funny take a bath', 'Bath toys.jpg', '1', '5');

3 INSERT INTO products (productid, name, price, description, image, stock, categoryid)

4 VALUES ('17', 'Set', '20.99', 'Toy set of tools', 'Set.jpg', '1', '5');

5 INSERT INTO products (productid, name, price, description, image, stock, categoryid)

6 VALUES ('18', 'Street toys', '35.99', 'Slide for children to play outside', 'Street toys.jpg', '4', '5');

7 INSERT INTO products (productid, name, price, description, image, stock, categoryid)

8 VALUES ('19', 'Walkie-talkie', '5.99', 'Toy radio for children that is very interesting to play with friends', 'Walkie-talkie.webp', '2', '5');

9 INSERT INTO products (productid, name, price, description, image, stock, categoryid)

10 VALUES ('20', 'Wooden toys', '11.99', 'Wooden toys for children that develop hand motor skills', 'Wooden toys.jpg', '5', '5');

11 INSERT INTO products (productid, name, price, description, image, stock, categoryid)

12 VALUES ('21', 'Bath toys', '5.99', 'Rubber toys for babies with which can funny take a bath', 'Bath toys.jpg', '1', '5');

13 INSERT INTO products (productid, name, price, description, image, stock, categoryid)

14 VALUES ('22', 'Set', '20.99', 'Toy set of tools', 'Set.jpg', '1', '5');

15 INSERT INTO products (productid, name, price, description, image, stock, categoryid)

16 VALUES ('23', 'Street toys', '35.99', 'Slide for children to play outside', 'Street toys.jpg', '4', '5');

17 INSERT INTO products (productid, name, price, description, image, stock, categoryid)

18 VALUES ('24', 'Walkie-talkie', '5.99', 'Toy radio for children that is very interesting to play with friends', 'Walkie-talkie.webp', '2', '5');

19 INSERT INTO products (productid, name, price, description, image, stock, categoryid)

20 VALUES ('25', 'Wooden toys', '11.99', 'Wooden toys for children that develop hand motor skills', 'Wooden toys.jpg', '5', '5');

21 INSERT INTO products (productid, name, price, description, image, stock, categoryid)

22 VALUES ('26', 'Bath toys', '5.99', 'Rubber toys for babies with which can funny take a bath', 'Bath toys.jpg', '1', '5');

23 INSERT INTO products (productid, name, price, description, image, stock, categoryid)

24 VALUES ('27', 'Set', '20.99', 'Toy set of tools', 'Set.jpg', '1', '5');

25 INSERT INTO products (productid, name, price, description, image, stock, categoryid)

26 VALUES ('28', 'Street toys', '35.99', 'Slide for children to play outside', 'Street toys.jpg', '4', '5');

27 INSERT INTO products (productid, name, price, description, image, stock, categoryid)

28 VALUES ('29', 'Walkie-talkie', '5.99', 'Toy radio for children that is very interesting to play with friends', 'Walkie-talkie.webp', '2', '5');

29 INSERT INTO products (productid, name, price, description, image, stock, categoryid)

30 VALUES ('30', 'Wooden toys', '11.99', 'Wooden toys for children that develop hand motor skills', 'Wooden toys.jpg', '5', '5');

31 INSERT INTO products (productid, name, price, description, image, stock, categoryid)

32 VALUES ('31', 'Bath toys', '5.99', 'Rubber toys for babies with which can funny take a bath', 'Bath toys.jpg', '1', '5');

33 INSERT INTO products (productid, name, price, description, image, stock, categoryid)

34 VALUES ('32', 'Set', '20.99', 'Toy set of tools', 'Set.jpg', '1', '5');

35 INSERT INTO products (productid, name, price, description, image, stock, categoryid)

Grid view Form view

Total rows loaded: 15

productid	name	price	description	image	stock	categoryid
1	1 Men's Polo	9.99	Men's Polo Shirt	Men_s_polo.jpg	2	1
2	2 Women's t-shirt	4.99	Women Tee hip hip	hip_hip.jpg	1	2
3	3 Doctor's t-shirt	5.00	it's not a hug it's a feature	featureNotHug.jpg	0	1

Status

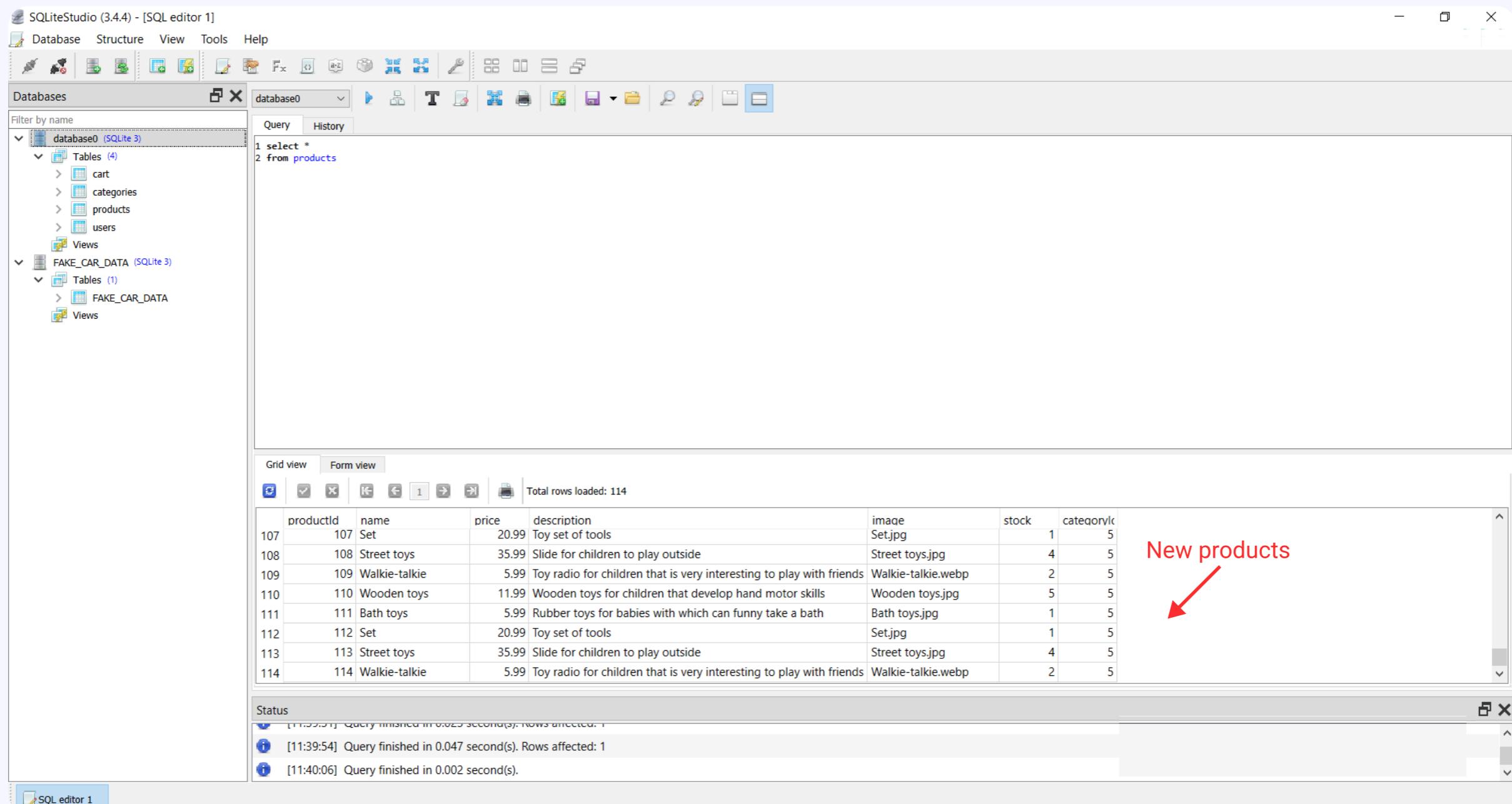
[10:52:57] Query finished in 0.002 second(s).

[10:55:37] Query finished in 0.026 second(s). Rows affected: 1

[10:55:56] Query finished in 0.002 second(s).

SQL editor 1

Total 114 products in the database



SQLiteStudio (3.4.4) - [SQL editor 1]

Database Structure View Tools Help

Databases

Filter by name

Query History

1 select *

2 from products

Grid view Form view

Total rows loaded: 114

productid	name	price	description	image	stock	categoryid
107	107 Set	20.99	Toy set of tools	Set.jpg	1	5
108	108 Street toys	35.99	Slide for children to play outside	Street toys.jpg	4	5
109	109 Walkie-talkie	5.99	Toy radio for children that is very interesting to play with friends	Walkie-talkie.webp	2	5
110	110 Wooden toys	11.99	Wooden toys for children that develop hand motor skills	Wooden toys.jpg	5	5
111	111 Bath toys	5.99	Rubber toys for babies with which can funny take a bath	Bath toys.jpg	1	5
112	112 Set	20.99	Toy set of tools	Set.jpg	1	5
113	113 Street toys	35.99	Slide for children to play outside	Street toys.jpg	4	5
114	114 Walkie-talkie	5.99	Toy radio for children that is very interesting to play with friends	Walkie-talkie.webp	2	5

Status

[11:39:57] Query finished in 0.025 second(s). Rows affected: 1

[11:39:54] Query finished in 0.047 second(s). Rows affected: 1

[11:40:06] Query finished in 0.002 second(s).

New products

SQL editor 1

All products that have been added to the database are displayed on the website

Showing all products of Category Toys:

[CART 3](#) [Hello, Tetiana](#)

Baby toys	Bath toys	Set	Street toys	Walkie-talkie	Wooden toys	Bath toys
						
\$ 10.99	\$ 5.99	\$ 20.99	\$ 35.99	\$ 5.99	\$ 11.99	\$ 5.99
Set	Street toys	Walkie-talkie	Wooden toys	Bath toys	Set	Street toys
						
\$ 20.99	\$ 35.99	\$ 5.99	\$ 11.99	\$ 5.99	\$ 20.99	\$ 35.99
Walkie-talkie	Wooden toys	Bath toys	Set	Street toys	Walkie-talkie	Wooden toys
						

Created another category "Tester"

SQLiteStudio (3.4.4) - [SQL editor 2]

Database Structure View Tools Help

Databases

Filter by name

database (SQLite 3)

- Tables (4)
 - cart
 - categories
 - Columns (2)
 - categoryId
 - name
 - Indexes
 - Triggers
 - products
 - Columns (7)
 - productId
 - name
 - price
 - description
 - image
 - stock
 - categoryId
 - Indexes
 - Triggers
 - users
 - Views
- FAKE_CAR_DATA (SQLite 3)

Query History

```
1 INSERT INTO categories (categoryId, name)
2 VALUES ('6', 'Tester')
```

Grid view Form view

categoryId	name
1	Men
2	Women
3	TVs
4	Computers
5	Toys

Status

[15:27:05] Error while executing SQL query on database 'database': table 'categories' has no column named 'categoryName'

[15:27:28] Query finished in 0.001 second(s).

[15:27:27] Query finished in 0.002 second(s).

SQL editor 1 categories (database) SQL editor 2

SQLiteStudio (3.4.4) - [SQL editor 2]

Database Structure View Tools Help

Databases

Filter by name

database (SQLite 3)

- Tables (4)
 - cart
 - categories
 - Columns (2)
 - categoryId
 - name
 - Indexes
 - Triggers
 - products
 - Columns (7)
 - productId
 - name
 - price
 - description
 - image
 - stock
 - categoryId
 - Indexes
 - Triggers
 - users
 - Views
- FAKE_CAR_DATA (SQLite 3)

Query History

```
1 SELECT *
2 FROM categories
```

Grid view Form view

categoryId	name
1	Men
2	Women
3	TVs
4	Computers
5	Toys
6	Tester

Status

[15:28:47] Query finished in 0.024 second(s). Rows affected: 1

[15:29:05] Query finished in 0.001 second(s).

SQL editor 1 categories (database) SQL editor 2

"Tester" category on the website

127.0.0.1:5000

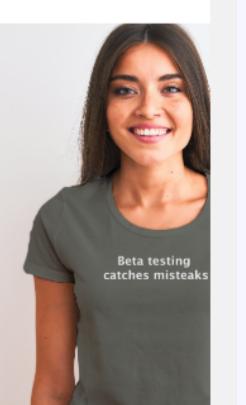
Hello, Tetiana CART 3

Shop by Category:

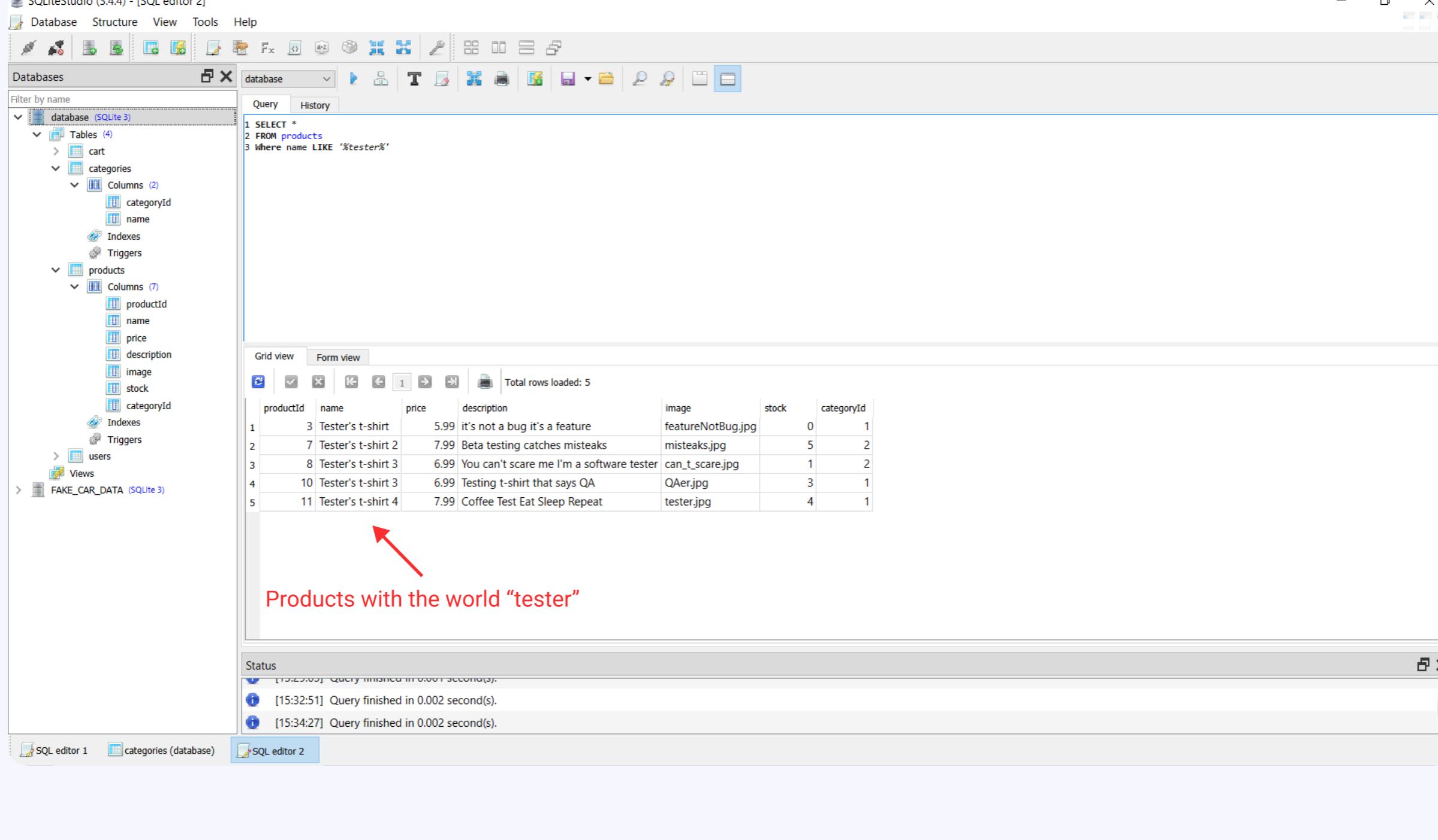
Men Women TVs Computers Toys Tester

Items

New category

Men's Polo	Women's t-shirt	Tester's t-shirt	Men's Blank t-shirt	Men's Blank t-shirt 2	Agile t-shirt	Tester's t-shirt
						
\$ 9.99	\$ 4.99	\$ 5.99	\$ 9.99	\$ 10.99	\$ 14.99	\$ 7.99
Tester's t-shirt 3	Women's t-shirt 2	Tester's t-shirt 3	Tester's t-shirt 4	Computer	TV	Computer 2
						

I needed to find products with the word "tester" in the name



SQLiteStudio (3.4.4) - [SQL editor 2]

Database Structure View Tools Help

Databases

Filter by name

database (SQLITE 3)

Tables (4)

- cart
- categories
 - Columns (2)
 - Indexes
 - Triggers
- products
 - Columns (7)
 - Indexes
 - Triggers
- users
- Views

FAKE_CAR_DATA (SQLITE 3)

Query History

Query

```
1. SELECT *
2. FROM products
3. WHERE name LIKE '%tester%'
```

Grid view Form view

Total rows loaded: 5

productId	name	price	description	image	stock	categoryId
1	3 Tester's t-shirt	5.99	it's not a bug it's a feature	featureNotBug.jpg	0	1
2	7 Tester's t-shirt 2	7.99	Beta testing catches mistakes	misteaks.jpg	5	2
3	8 Tester's t-shirt 3	6.99	You can't scare me I'm a software tester	can_t_scare.jpg	1	2
4	10 Tester's t-shirt 3	6.99	Testing t-shirt that says QA	QAer.jpg	3	1
5	11 Tester's t-shirt 4	7.99	Coffee Test Eat Sleep Repeat	tester.jpg	4	1

Status

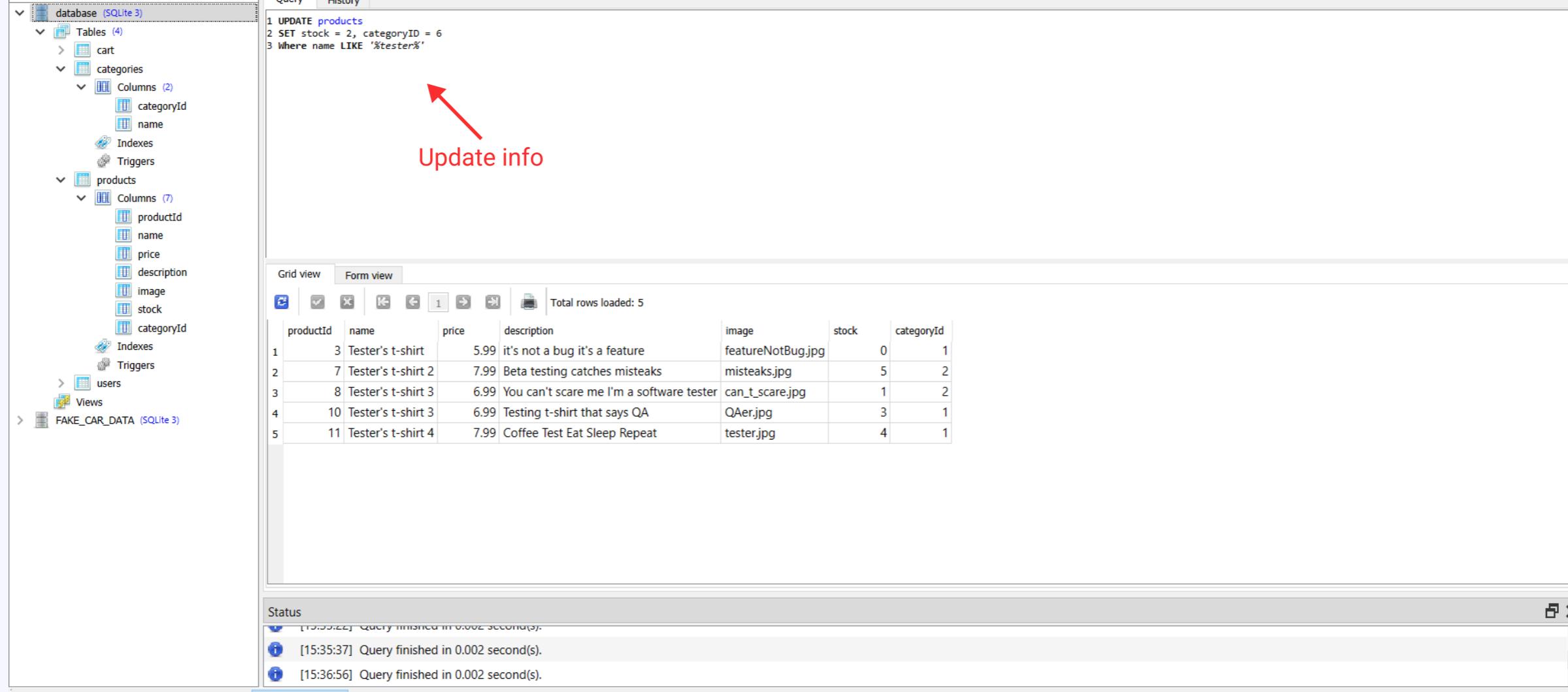
[15:32:05] Query finished in 0.001 second(s).

[15:32:51] Query finished in 0.002 second(s).

[15:32:27] Query finished in 0.002 second(s).

SQL editor 1 categories (database) SQL editor 2

Then I updated info in these products. Changed number of stock and category



SQLiteStudio (3.4.4) - [SQL editor 2]

Database Structure View Tools Help

Databases

Filter by name

database (SQLITE 3)

Tables (4)

- cart
- categories
 - Columns (2)
 - Indexes
 - Triggers
- products
 - Columns (7)
 - Indexes
 - Triggers
- users
- Views

FAKE_CAR_DATA (SQLITE 3)

Query History

Query

```
1. UPDATE products
2. SET stock = 6, categoryId = 6
3. WHERE name LIKE '%tester%'
```

Grid view Form view

Total rows loaded: 5

productId	name	price	description	image	stock	categoryId
1	3 Tester's t-shirt	5.99	it's not a bug it's a feature	featureNotBug.jpg	0	1
2	7 Tester's t-shirt 2	7.99	Beta testing catches mistakes	misteaks.jpg	5	2
3	8 Tester's t-shirt 3	6.99	You can't scare me I'm a software tester	can_t_scare.jpg	1	2
4	10 Tester's t-shirt 3	6.99	Testing t-shirt that says QA	QAer.jpg	3	1
5	11 Tester's t-shirt 4	7.99	Coffee Test Eat Sleep Repeat	tester.jpg	4	1

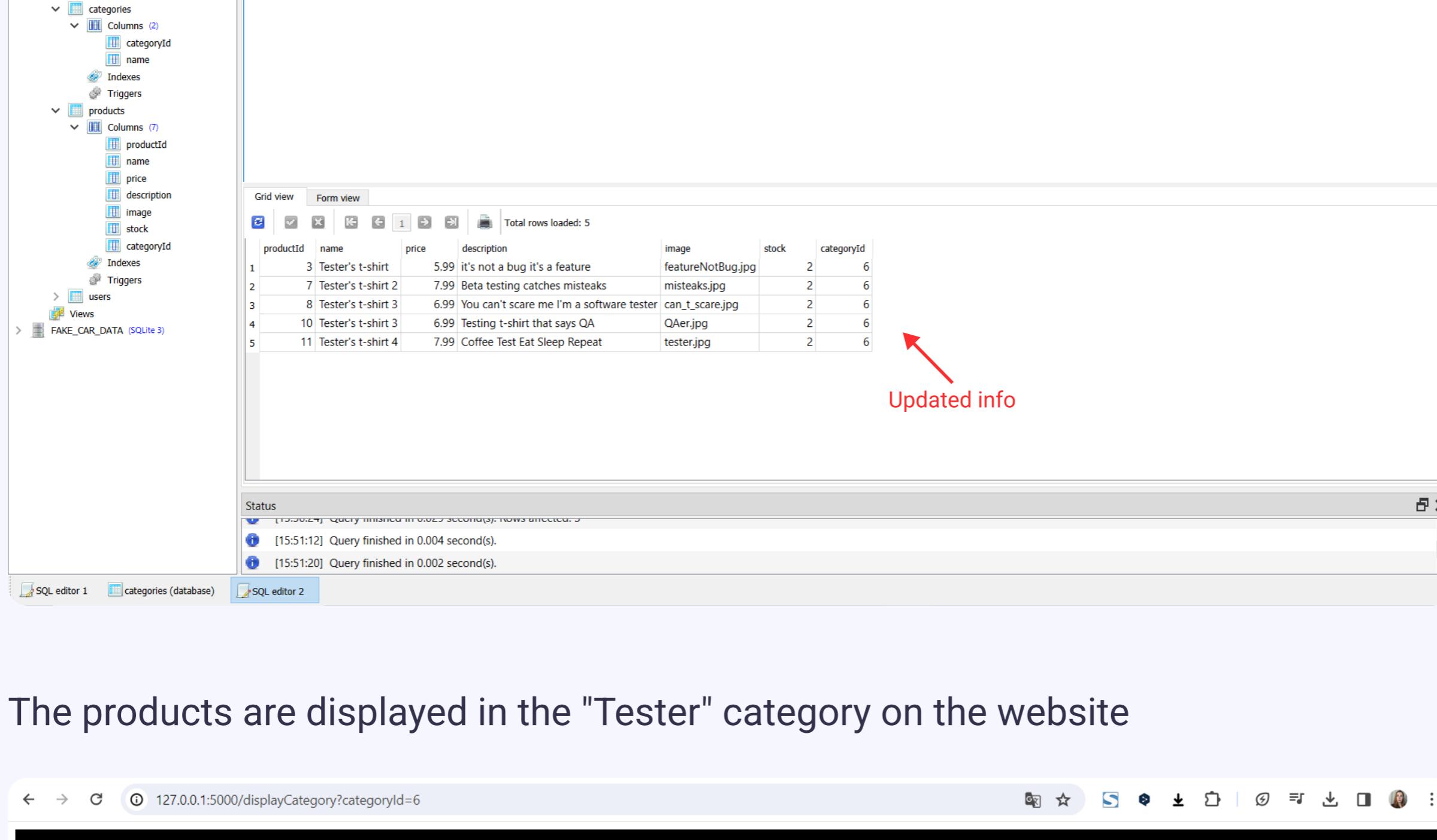
Status

[15:35:24] Query finished in 0.002 second(s).

[15:35:37] Query finished in 0.002 second(s).

[15:36:56] Query finished in 0.002 second(s).

SQL editor 1 categories (database) SQL editor 2



SQLiteStudio (3.4.4) - [SQL editor 2]

Database Structure View Tools Help

Databases

Filter by name

database (SQLITE 3)

Tables (4)

- cart
- categories
 - Columns (2)
 - Indexes
 - Triggers
- products
 - Columns (7)
 - Indexes
 - Triggers
- users
- Views

FAKE_CAR_DATA (SQLITE 3)

Query History

Query

```
1. SELECT *
2. FROM products
3. WHERE name LIKE '%tester%'
```

Grid view Form view

Total rows loaded: 5

productId	name	price	description	image	stock	categoryId
1	3 Tester's t-shirt	5.99	it's not a bug it's a feature	featureNotBug.jpg	2	6
2	7 Tester's t-shirt 2	7.99	Beta testing catches mistakes	misteaks.jpg	2	6
3	8 Tester's t-shirt 3	6.99	You can't scare me I'm a software tester	can_t_scare.jpg	2	6
4	10 Tester's t-shirt 3	6.99	Testing t-shirt that says QA	QAer.jpg	2	6
5	11 Tester's t-shirt 4	7.99	Coffee Test Eat Sleep Repeat	tester.jpg	2	6

Status

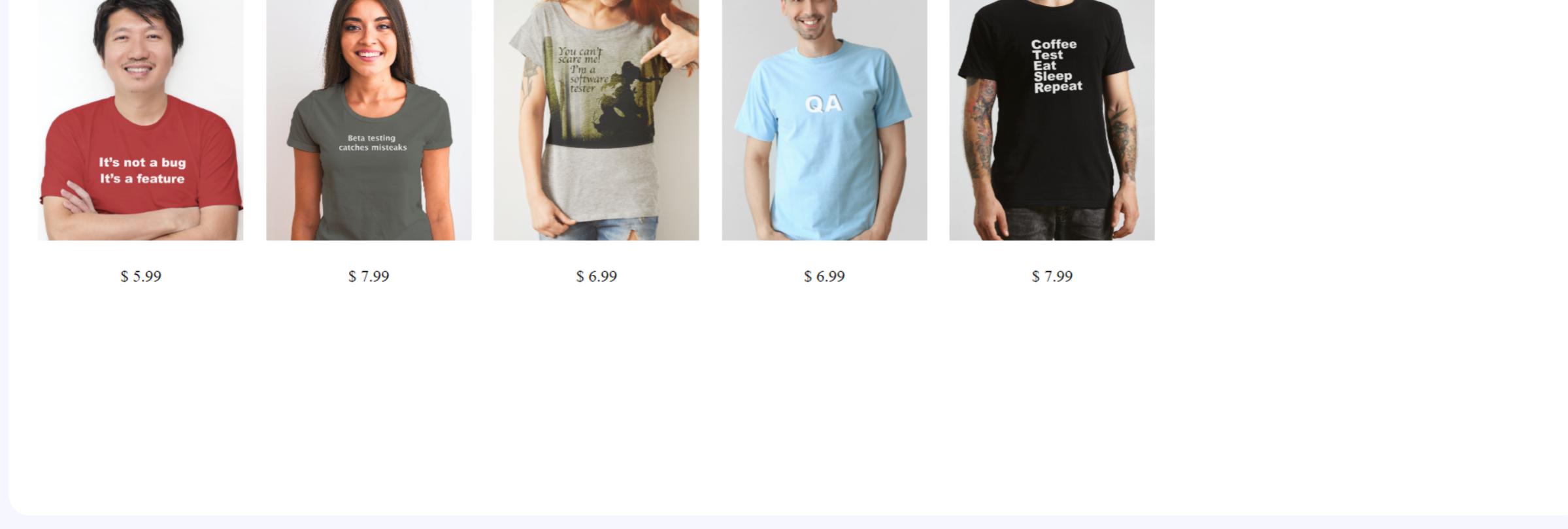
[15:50:49] Query finished in 0.002 second(s).

[15:51:12] Query finished in 0.004 second(s).

[15:51:20] Query finished in 0.002 second(s).

SQL editor 1 categories (database) SQL editor 2

The products are displayed in the "Tester" category on the website



127.0.0.1:5000/displayCategory?categoryId=6

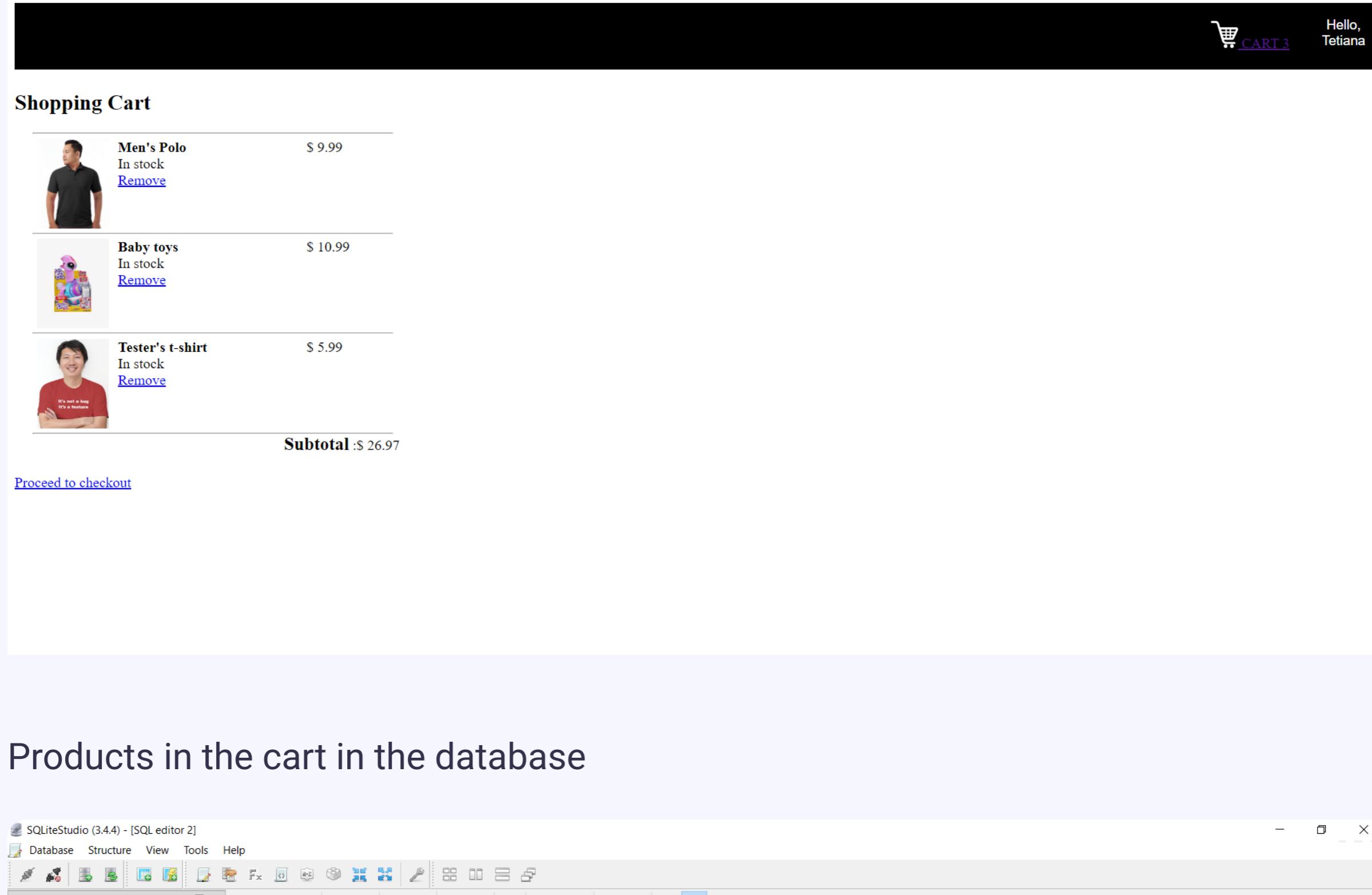
Sign In

CART 0

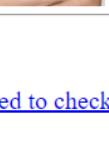
Showing all products of Category Tester:

Tester's t-shirt	Tester's t-shirt 2	Tester's t-shirt 3	Tester's t-shirt 3	Tester's t-shirt 4
				
\$ 5.99	\$ 7.99	\$ 6.99	\$ 6.99	\$ 7.99

Then I added some products in the site to the cart



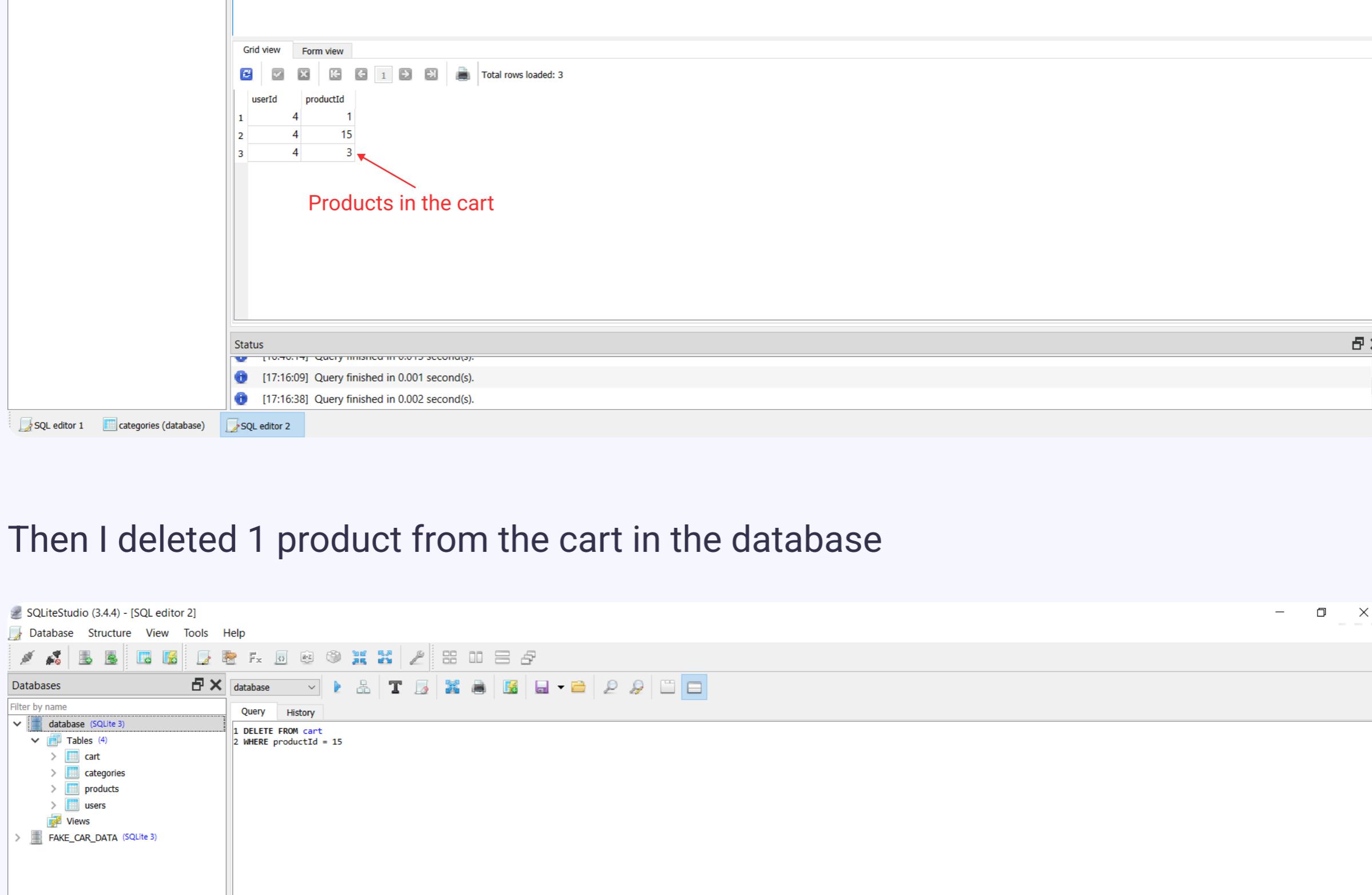
Shopping Cart

	Men's Polo In stock Remove	\$ 9.99
	Baby toys In stock Remove	\$ 10.99
	Tester's t-shirt In stock Remove	\$ 5.99

Subtotal: \$ 26.97

[Proceed to checkout](#)

Products in the cart in the database



SQLiteStudio (3.4.4) - [SQL editor 2]

Database Structure View Tools Help

Databases

Tables (4)

cart

categories

products

users

Views

FAKE_CAR_DATA (SQLite 3)

Query History

```
1 SELECT *
2 FROM cart
3 WHERE user_id = 4
```

Grid view Form view

user_id	product_id
1	4
2	4
3	15

Total rows loaded: 3

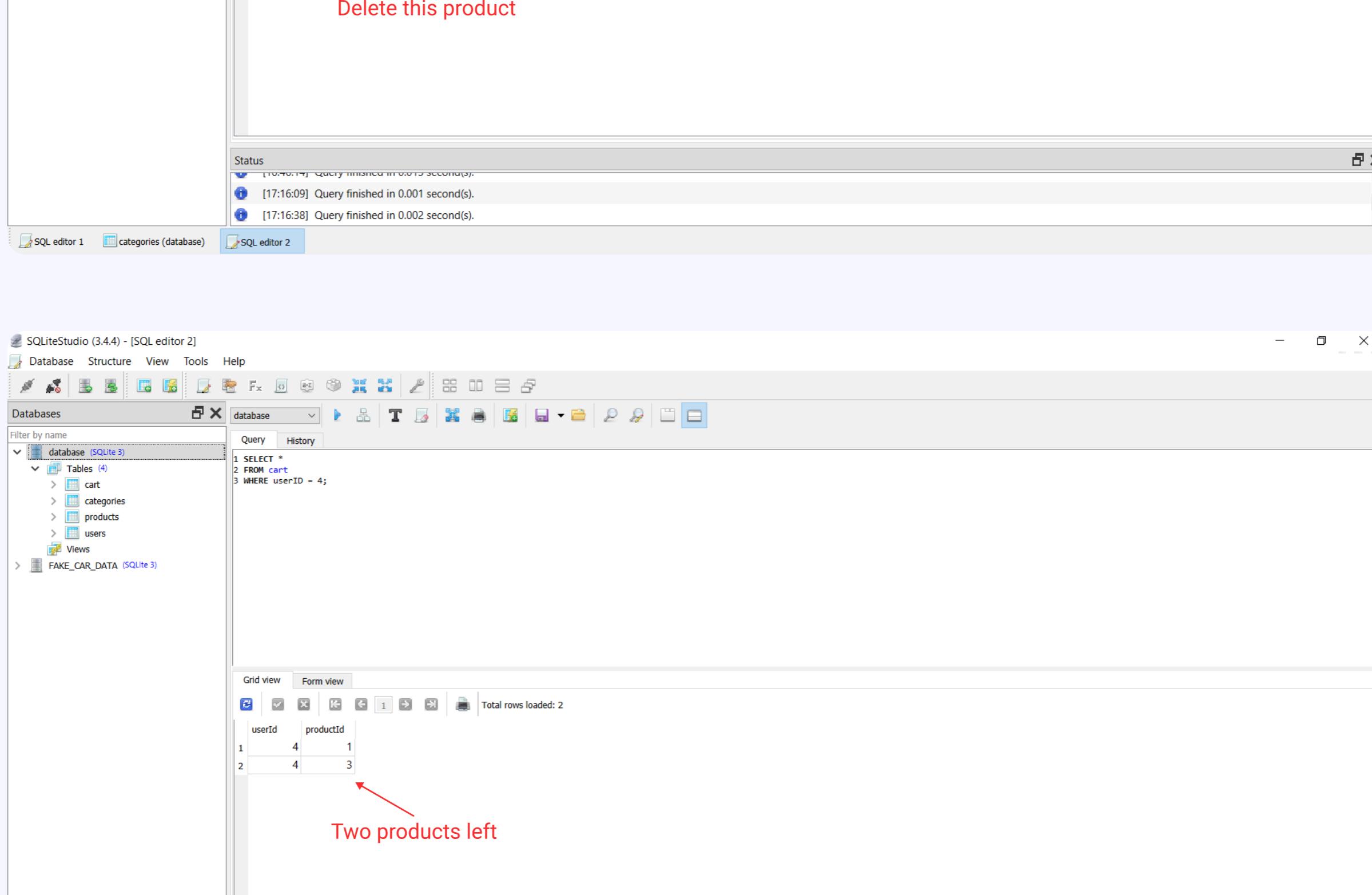
Status

[17:16:09] Query finished in 0.001 second(s).

[17:16:09] Query finished in 0.001 second(s).

[17:16:38] Query finished in 0.002 second(s).

Then I deleted 1 product from the cart in the database



SQLiteStudio (3.4.4) - [SQL editor 2]

Database Structure View Tools Help

Databases

Tables (4)

cart

categories

products

users

Views

FAKE_CAR_DATA (SQLite 3)

Query History

```
1 DELETE FROM cart
2 WHERE product_id = 15
```

Grid view Form view

user_id	product_id
1	4
2	4
3	3

Total rows loaded: 3

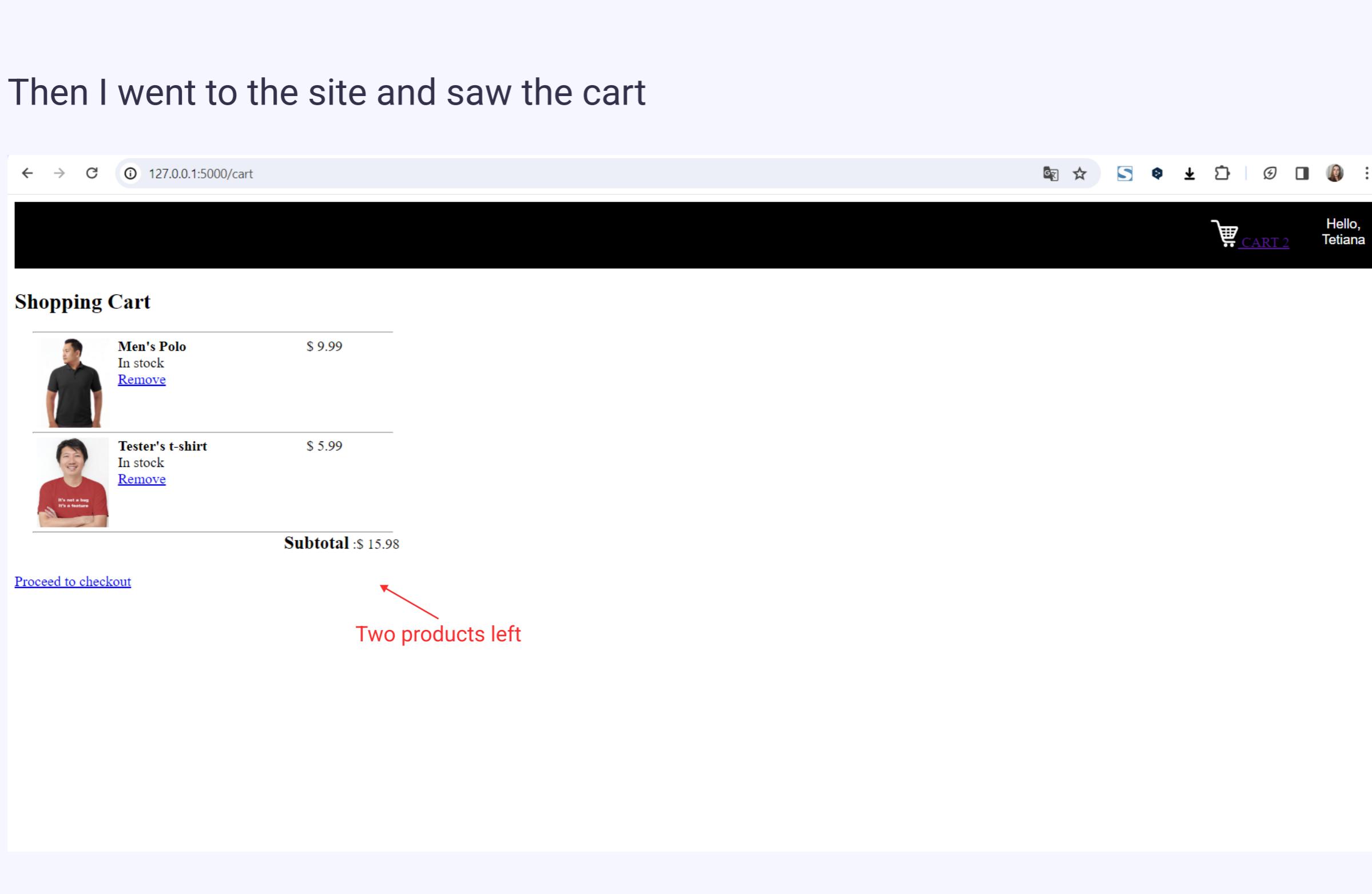
Status

[17:16:09] Query finished in 0.001 second(s).

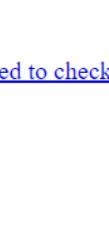
[17:16:09] Query finished in 0.001 second(s).

[17:16:38] Query finished in 0.002 second(s).

Then I went to the site and saw the cart



Shopping Cart

	Men's Polo In stock Remove	\$ 9.99
	Tester's t-shirt In stock Remove	\$ 5.99

Subtotal: \$ 15.98

[Proceed to checkout](#)

Two products left

Thank you!