

Instructions:

- This assignment is designed to test your knowledge of MySQL database concepts in the context of a stock management system for an e-commerce platform.
- Write SQL queries for each task and provide explanations where necessary.
- Submit your assignment as a single SQL script file.

Task 1: Create a Database Create a new MySQL database named `ecommerce_stock_db`.

Ans:-

```
create database ecommerce_stock_db
```

Task 2: Create Tables Inside the `ecommerce_stock_db`, create the following tables:

Ans:-

- `customers` table with the following columns:
 - `customer_id` (Primary Key, Auto Increment)
 - `first_name`
 - `last_name`
 - `email`
 - `Phone`
 - `Address`

Creating customers table :-

```
create table customers (  
customer_id int(10) not null auto_increment,  
  
first_name varchar(11) default null,  
  
last_name varchar(11) default null,  
  
email varchar(60) default null,  
  
Phone varchar(20) default null,
```

```
address varchar(100) default null,  
  
primary key (customer_id)  
);
```

```
desc customers;
```

The screenshot shows the phpMyAdmin interface for the 'e-commerce_stock_db' database. The 'Table: customers' structure is displayed. The table has the following fields:

Field	Type	Null	Key	Default	Extra
customer_id	int(10)	NO	PRI	NULL	auto_increment
first_name	varchar(11)	YES		NULL	
last_name	varchar(11)	YES		NULL	
email	varchar(60)	YES		NULL	
Phone	varchar(20)	YES		NULL	
address	varchar(100)	YES		NULL	

The interface also shows a successful query execution message for 'desc customers;' and options to print, copy to clipboard, or create a view from the query results.

- **items** table with the following columns:
 - item_id (Primary Key, Auto Increment)
 - item_name
 - description
 - price
 - stock_quantity
 - category_id (Foreign Key referencing category_id in the categories table)

creating items table:-

```
create table items ( item_id int(11) not null auto_increment, category_id int  
(11), foreign key(category_id) references categories(category_id), item_name  
varchar(20) default null, description varchar(100) default null, price int(11  
) default null, stock_quantity int(11) default null, primary key (item_id) );
```

```
desc items;
```

The screenshot shows the phpMyAdmin interface. On the left is a sidebar with a database tree. The main area displays the structure of the 'items' table. A message at the top states 'Your SQL query has been executed successfully.' Below this, the SQL query 'desc items;' is shown. A table titled 'Extra options' lists the table's fields and their properties.

Field	Type	Null	Key	Default	Extra
item_id	int(11)	NO	PRI	NULL	auto_increment
category_id	int(11)	YES	MUL	NULL	
item_name	varchar(20)	YES		NULL	
description	varchar(100)	YES		NULL	
price	int(11)	YES		NULL	
stock_quantity	int(11)	YES		NULL	

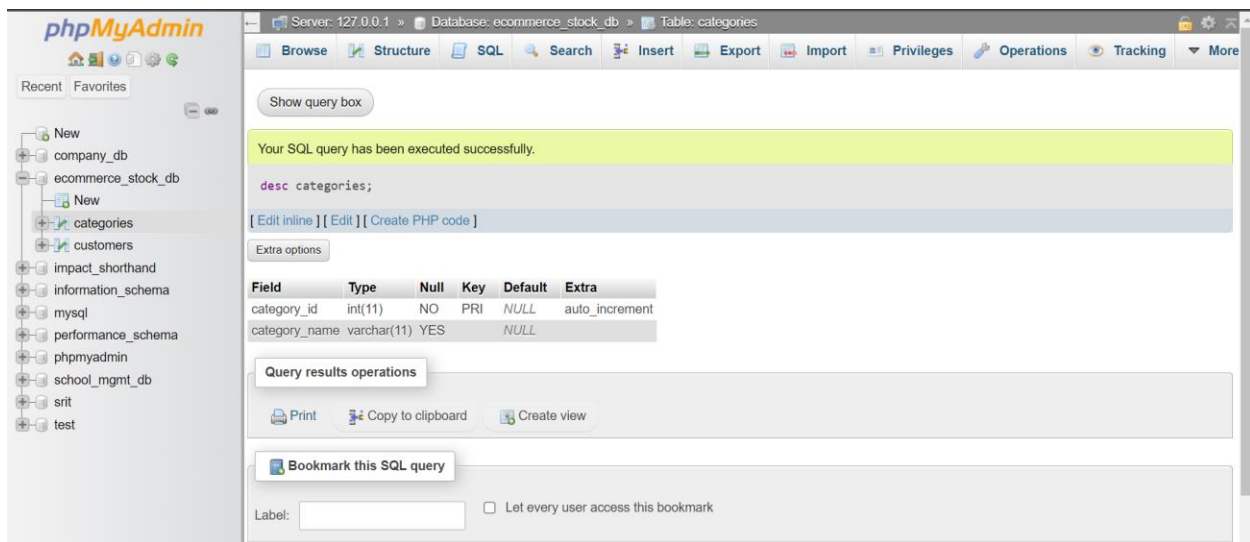
Below the table, there are buttons for 'Print', 'Copy to clipboard', and 'Create view'. At the bottom, there is a 'Console' tab with the text 'mark this SQL query'.

- categories table with the following columns:
 - category_id (Primary Key, Auto Increment)
 - category_name

Creating category table:-

```
create table categories ( category_id int(11) not null auto_increment, category_name varchar(11) default null, primary key (category_id) );
```

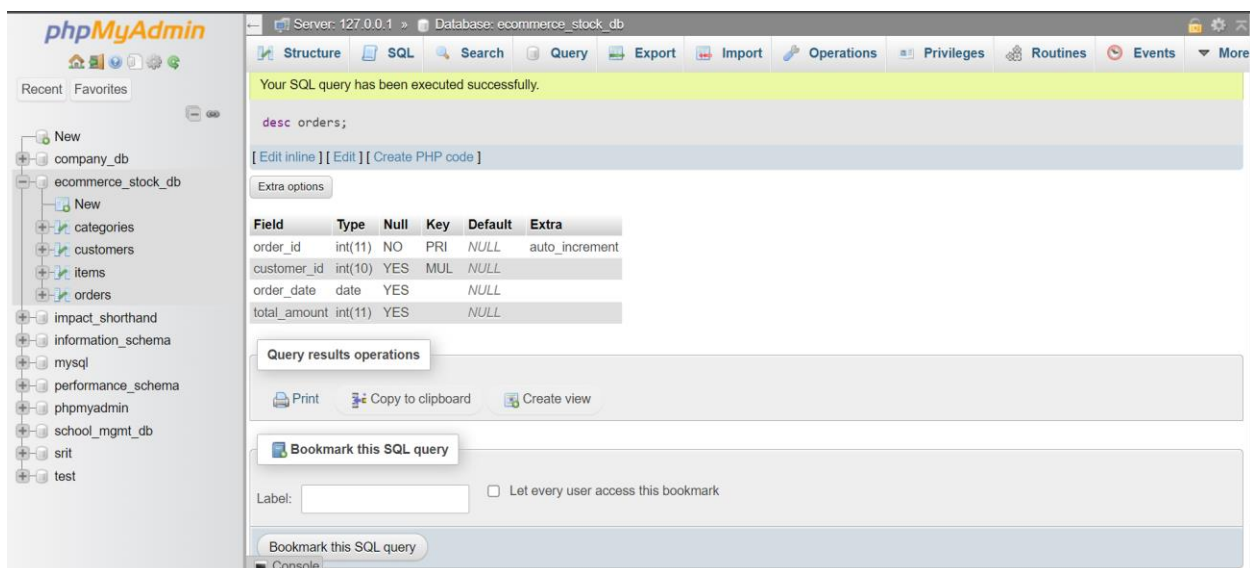
```
desc categories;
```



- orders table with the following columns:
 - order_id (Primary Key, Auto Increment)
 - customer_id (Foreign Key referencing customer_id in the customers table)
 - order_date
 - total_amount

creating orders table:-

```
create table orders ( order_id int(11) not null auto_increment, customer_id int(10), foreign key (customer_id) references customers (customer_id), order_date date default null, total_amount int(11) default null, primary key(order_id) );
```



Task 3: Insert Data Insert at least 10 records into the `customers` table, 20 records into the `items` table, 5 records into the `categories` table, and 30 records into the `orders` table. Ensure that items are assigned to categories and orders are associated with customers and items.

Ans:-

Inserting data into customers table :-

```
insert into customers (first_name, last_name, email, Phone, address)
```

values

```
('John', 'Doe', 'john.doe@example.com', '123-456-7890', '123 Main St'),  
( 'Jane', 'Smith', 'jane.smith@example.com', '987-654-3210', '456 Elm St'),  
( 'Michael', 'Johnson', 'michael.j@example.com', '555-123-4567', '789 Oak Ave'),  
( 'Emily', 'Wilson', 'emily.w@example.com', '444-987-6543', '101 Pine St'),  
( 'Robert', 'Brown', 'robert.b@example.com', '777-555-8888', '321 Cedar Rd'),  
( 'Sarah', 'Davis', 'sarah.d@example.com', '999-333-2222', '555 Elm St'),  
( 'William', 'Jones', 'william.j@example.com', '111-777-9999', '456 Oak St'),  
( 'Jennifer', 'Anderson', 'jennifer.a@example.com', '333-666-1111', '888 Maple Rd'),  
( 'David', 'Martinez', 'david.m@example.com', '222-888-7777', '777 Pine St'),  
( 'Susan', 'Garcia', 'susan.g@example.com', '444-111-3333', '222 Birch Ave');
```

Server: 127.0.0.1 » Database: ecommerce_stock_db » Table: customers

SELECT * FROM `customers`

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

customer_id	first_name	last_name	email	Phone	address
1	John	Doe	john.doe@example.com	123-456-7890	123 Main St
2	Jane	Smith	jane.smith@example.com	987-654-3210	456 Elm St
3	Michael	Johnson	michael.j@example.com	555-123-4567	789 Oak Ave
4	Emily	Wilson	emily.w@example.com	444-987-6543	101 Pine St
5	Robert	Brown	robert.b@example.com	777-555-8888	321 Cedar Rd
6	Sarah	Davis	sarah.d@example.com	999-333-2222	555 Elm St
7	William	Jones	william.j@example.com	111-777-9999	456 Oak St
8	Jennifer	Anderson	jennifer.a@example.com	333-666-1111	888 Maple Rd
9	David	Martinez	david.m@example.com	222-888-7777	777 Pine St
10	Susan	Garcia	susan.g@example.com	444-111-3333	222 Birch Ave

Then I had to insert data into categories table where no foreign key is used

```
insert into categories (category_name) values ('Electronics'), ('Clothing'), ('Furniture'), ('Books'), ('Toys');
```

Server: 127.0.0.1 » Database: ecommerce_stock_db » Table: categories

Showing rows 0 - 4 (5 total, Query took 0.0004 seconds.)

SELECT * FROM `categories`

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

category_id	category_name
1	Electronics
2	Clothing
3	Furniture
4	Books
5	Toys

Then I inserted data into items table:-

```
insert into items (category_id, item_name, description, price, stock_quantity)
```

values

```
(1, 'Smartphone', 'High-end smartphone', 599, 50),
```

(1, 'Laptop', 'Powerful laptop', 999, 30),
(1, 'Tablet', 'High-performance tablet', 349, 20),
(1, 'Headphones', 'Wireless headphones', 99, 75),
(1, 'Smartwatch', 'Fitness smartwatch', 149, 40),
(1, 'Digital Camera', 'Professional DSLR camera', 799, 15),
(1, 'Gaming Console', 'Next-gen gaming console', 499, 25),
(1, 'Wireless Router', 'High-speed router', 69, 30),
(2, 'T-Shirt', 'Cotton T-Shirt', 15, 100),
(2, 'Jeans', 'Blue denim jeans', 29, 120),
(2, 'Dress', 'Elegant black dress', 79, 60),
(2, 'Sneakers', 'Running sneakers', 49, 90),
(2, 'Hoodie', 'Comfortable hoodie', 39, 80),
(2, 'Skirt', 'Floral print skirt', 34, 55),
(3, 'Coffee Table', 'Wooden coffee table', 199, 15),
(3, 'Sofa', 'Comfortable sofa', 599, 10),
(4, 'Science Fiction Book', 'Bestseller sci-fi book', 19, 50),
(4, 'Cookbook', 'Delicious recipes', 29, 40),
(5, 'Action Figure', 'Collectible action figure', 10, 80),
(5, 'Puzzle', '1000-piece jigsaw puzzle', 15, 60)

;

item_id	category_id	item_name	description	price	stock_quantity
1	1	Smartphone	High-end smartphone	599	50
2	1	Laptop	Powerful laptop	999	30
3	1	Tablet	High-performance tablet	349	20
4	1	Headphones	Wireless headphones	99	75
5	1	Smartwatch	Fitness smartwatch	149	40
6	1	Digital Camera	Professional DSLR camera	799	15
7	1	Gaming Console	Next-gen gaming console	499	25
8	1	Wireless Router	High-speed router	69	30
9	2	T-Shirt	Cotton T-Shirt	15	100
10	2	Jeans	Blue denim jeans	29	120
11	2	Dress	Elegant black dress	79	60
12	2	Sneakers	Running sneakers	49	90
13	2	Hoodie	Comfortable hoodie	39	80
14	2	Skirt	Floral print skirt	34	55
15	3	Coffee Table	Wooden coffee table	199	15
16	3	Sofa	Comfortable sofa	599	10
17	4	Science Fiction Book	Bestseller sci-fi book	19	50
18	4	Cookbook	Delicious recipes	29	40
19	5	Action Figure	Collectible action figure	10	80
20	5	Puzzle	1000-piece jigsaw puzzle	15	60

Now inserting data into orders table :-

insert into orders (customer_id, order_date, total_amount)

values

(1, '2023-09-06', 599),

(2, '2023-09-07', 1014),

(3, '2023-09-08', 1298),

(4, '2023-09-09', 499),

(5, '2023-09-10', 899),

(6, '2023-09-11', 349),

(7, '2023-09-12', 1245),

(8, '2023-09-13', 899),

(9, '2023-09-14', 139),

(10, '2023-09-15', 769),

(1, '2023-09-16', 299),

(2, '2023-09-17', 799),
(3, '2023-09-18', 149),
(4, '2023-09-19', 259),
(5, '2023-09-20', 499),
(6, '2023-09-21', 69),
(7, '2023-09-22', 199),
(8, '2023-09-23', 499),
(9, '2023-09-24', 159),
(10, '2023-09-25', 449),
(1, '2023-09-26', 399),
(2, '2023-09-27', 799),
(3, '2023-09-28', 129),
(4, '2023-09-29', 399),
(5, '2023-09-30', 899),
(6, '2023-10-01', 179),
(7, '2023-10-02', 249),
(8, '2023-10-03', 799),
(9, '2023-10-04', 139),
(10, '2023-10-05', 349);

company_db	
ecommerce_stock_db	
New	
categories	
customers	
items	
orders	
impact_shorthand	
information_schema	
mysql	
performance_schema	
phpmyadmin	
school_mgmt_db	
srit	
test	

	order_id	customer_id	order_date	total_amount
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	1	2023-09-06	599
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	2	2023-09-07	1014
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	3	2023-09-08	1298
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	4	4	2023-09-09	499
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	5	5	2023-09-10	899
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	6	6	2023-09-11	349
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	7	7	2023-09-12	1245
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	8	8	2023-09-13	899
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	9	9	2023-09-14	139
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	10	10	2023-09-15	769
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	11	1	2023-09-16	299
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	12	2	2023-09-17	799
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	13	3	2023-09-18	149
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	14	4	2023-09-19	259
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	15	5	2023-09-20	499
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	16	6	2023-09-21	69
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	17	7	2023-09-22	199
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	18	8	2023-09-23	499
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	19	9	2023-09-24	159
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	20	10	2023-09-25	449
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	21	1	2023-09-26	399
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	22	2	2023-09-27	799
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	23	3	2023-09-28	129
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	24	4	2023-09-29	399
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	25	5	2023-09-30	899
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	26	6	2023-10-01	179
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	27	7	2023-10-02	249
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	28	8	2023-10-03	799
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	29	9	2023-10-04	139
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	30	10	2023-10-05	349

Task 4: Update Data Write a SQL query to update the stock quantity of a specific item in the `items` table.

Ans:-

```
update items set stock_quantity = 85 where item_id=1;
```

item_id	category_id	item_name	description	price	stock_quantity
1	1	Smartphone	High-end smartphone	599	85
2	1	Laptop	Powerful laptop	999	30
3	1	Tablet	High-performance tablet	349	20
4	1	Headphones	Wireless headphones	99	75
5	1	Smartwatch	Fitness smartwatch	149	40
6	1	Digital Camera	Professional DSLR camera	799	15
7	1	Gaming Console	Next-gen gaming console	499	25
8	1	Wireless Router	High-speed router	69	30
9	2	T-Shirt	Cotton T-Shirt	15	100
10	2	Jeans	Blue denim jeans	29	120
11	2	Dress	Elegant black dress	79	60
12	2	Sneakers	Running sneakers	49	90
13	2	Hoodie	Comfortable hoodie	39	80
14	2	Skirt	Floral print skirt	34	55
15	3	Coffee Table	Wooden coffee table	199	15
16	3	Sofa	Comfortable sofa	599	10
17	4	Science Fiction Book	Bestseller sci-fi book	19	50
18	4	Cookbook	Delicious recipes	29	40
19	5	Action Figure	Collectible action figure	10	80
20	5	Puzzle	1000-piece jigsaw puzzle	15	60

Task 5: Delete Data Write a SQL query to delete a customer from the `customers` table and all related orders (if any) in the database.

Before deleting data from customers table:-

customer_id	first_name	last_name	email	Phone	address
1	John	Doe	john.doe@example.com	123-456-7890	123 Main St
2	Jane	Smith	jane.smith@example.com	987-654-3210	456 Elm St
3	Michael	Johnson	michael.j@example.com	555-123-4567	789 Oak Ave
4	Emily	Wilson	emily.w@example.com	444-987-6543	101 Pine St
5	Robert	Brown	robert.b@example.com	777-555-8888	321 Cedar Rd
6	Sarah	Davis	sarah.d@example.com	999-333-2222	555 Elm St
7	William	Jones	william.j@example.com	111-777-9999	456 Oak St
8	Jennifer	Anderson	jennifer.a@example.com	333-666-1111	888 Maple Rd
9	David	Martinez	david.m@example.com	222-888-7777	777 Pine St
10	Susan	Garcia	susan.g@example.com	444-111-3333	222 Birch Ave

Note:-

This query is not working because of fkey constraints(delete customers, orders from customers left join orders on customers.customer_id=orders.customer_id where customers.customer_id=1;)

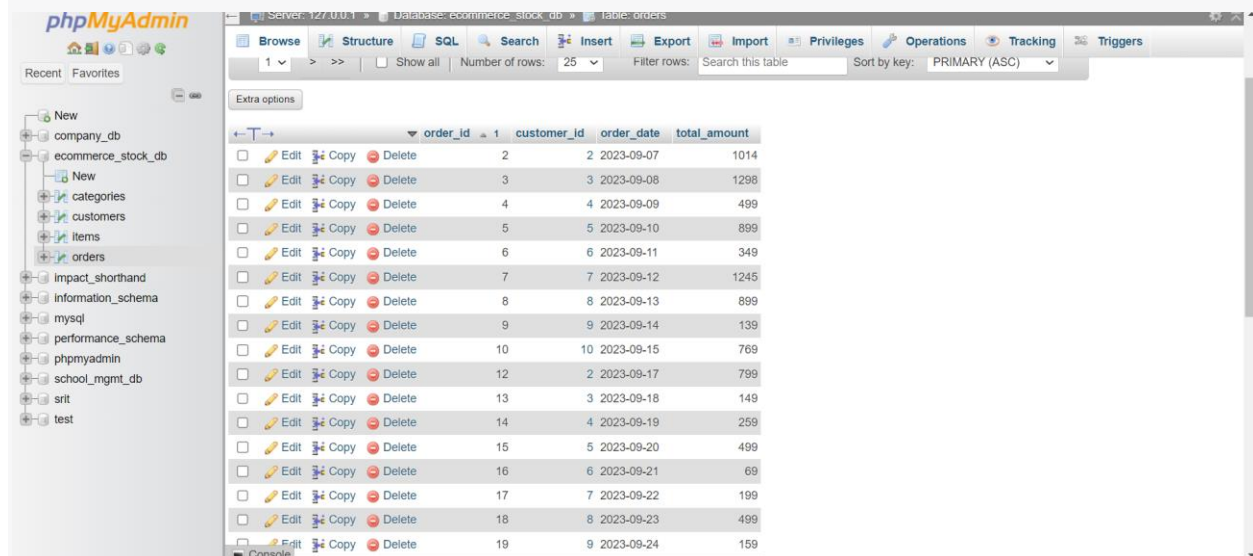
now I used
delete from customers where customer_id=1;

yet it will not work because there is data related to it in orders table so first of all I will delete from orders table.

```
delete from orders where customer_id=1;
```

(it worked)

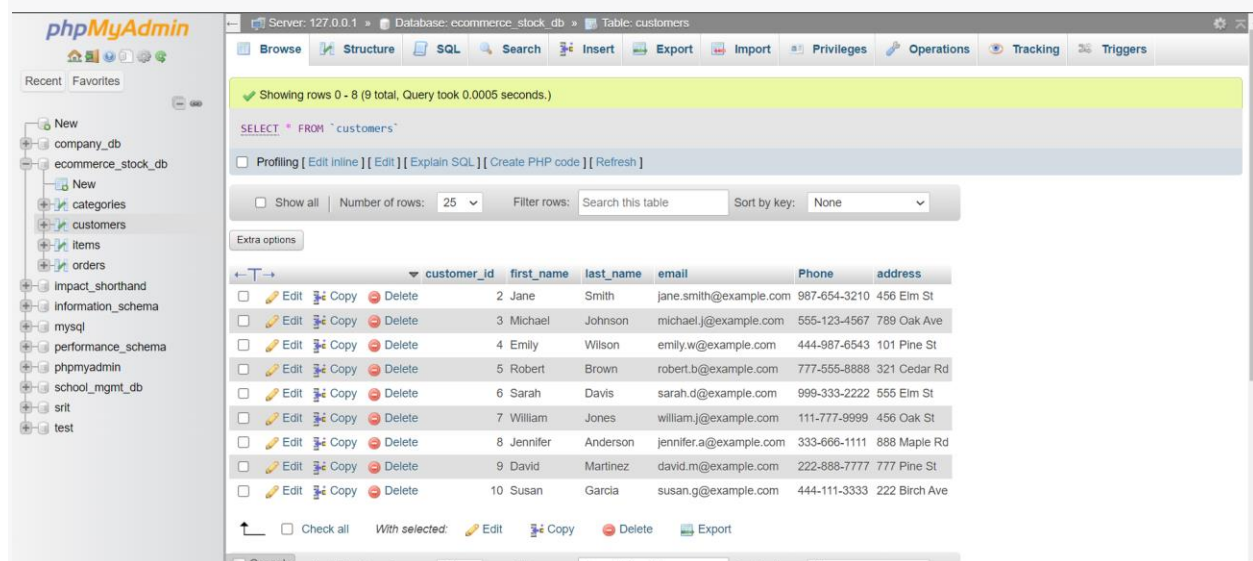
now we will delete from customers table and all records for customer_id 1 is deleted.



order_id	customer_id	order_date	total_amount
1	1		
2	2	2023-09-07	1014
3	3	2023-09-08	1298
4	4	2023-09-09	499
5	5	2023-09-10	899
6	6	2023-09-11	349
7	7	2023-09-12	1245
8	8	2023-09-13	899
9	9	2023-09-14	139
10	10	2023-09-15	769
12	2	2023-09-17	799
13	3	2023-09-18	149
14	4	2023-09-19	259
15	5	2023-09-20	499
16	6	2023-09-21	69
17	7	2023-09-22	199
18	8	2023-09-23	499
19	9	2023-09-24	159

now I will delete the data where customer_id =1

```
delete from customers where customer_id=1;
```

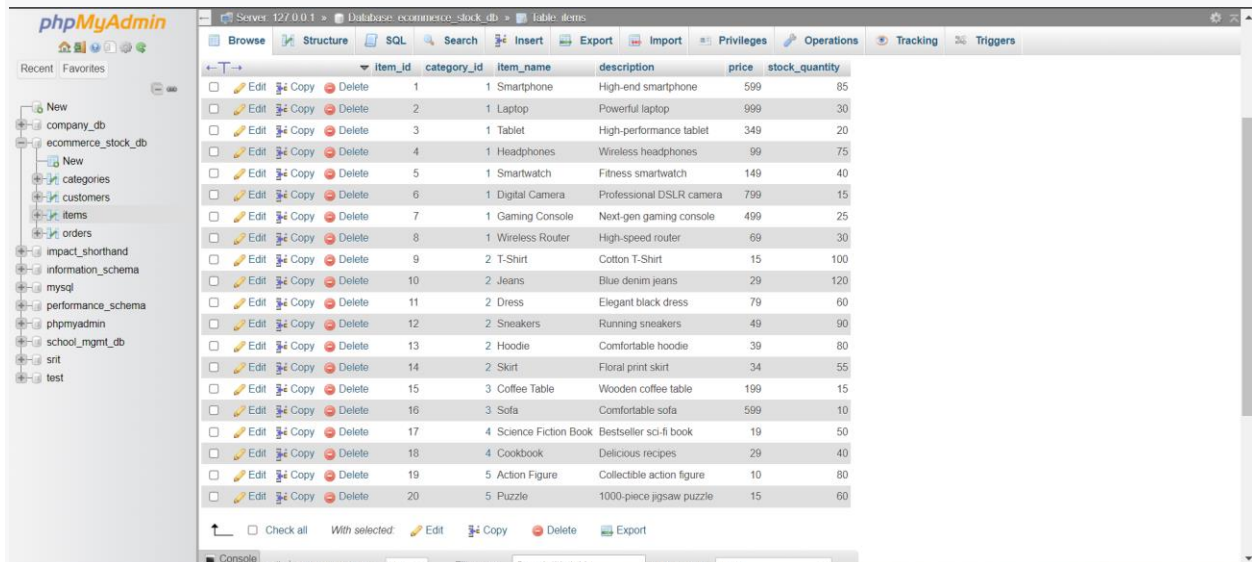


customer_id	first_name	last_name	email	Phone	address
2	Jane	Smith	jane.smith@example.com	987-654-3210	456 Elm St
3	Michael	Johnson	michael.j@example.com	555-123-4567	789 Oak Ave
4	Emily	Wilson	emily.w@example.com	444-987-6543	101 Pine St
5	Robert	Brown	robert.b@example.com	777-555-8888	321 Cedar Rd
6	Sarah	Davis	sarah.d@example.com	999-333-2222	555 Elm St
7	William	Jones	william.j@example.com	111-777-9999	456 Oak St
8	Jennifer	Anderson	jennifer.a@example.com	333-666-1111	888 Maple Rd
9	David	Martinez	david.m@example.com	222-888-7777	777 Pine St
10	Susan	Garcia	susan.g@example.com	444-111-3333	222 Birch Ave

Task 6: Retrieve Item Information Write an SQL query to retrieve information about an item, including its name, description, price, and category name, for a specific item.

Ans:-

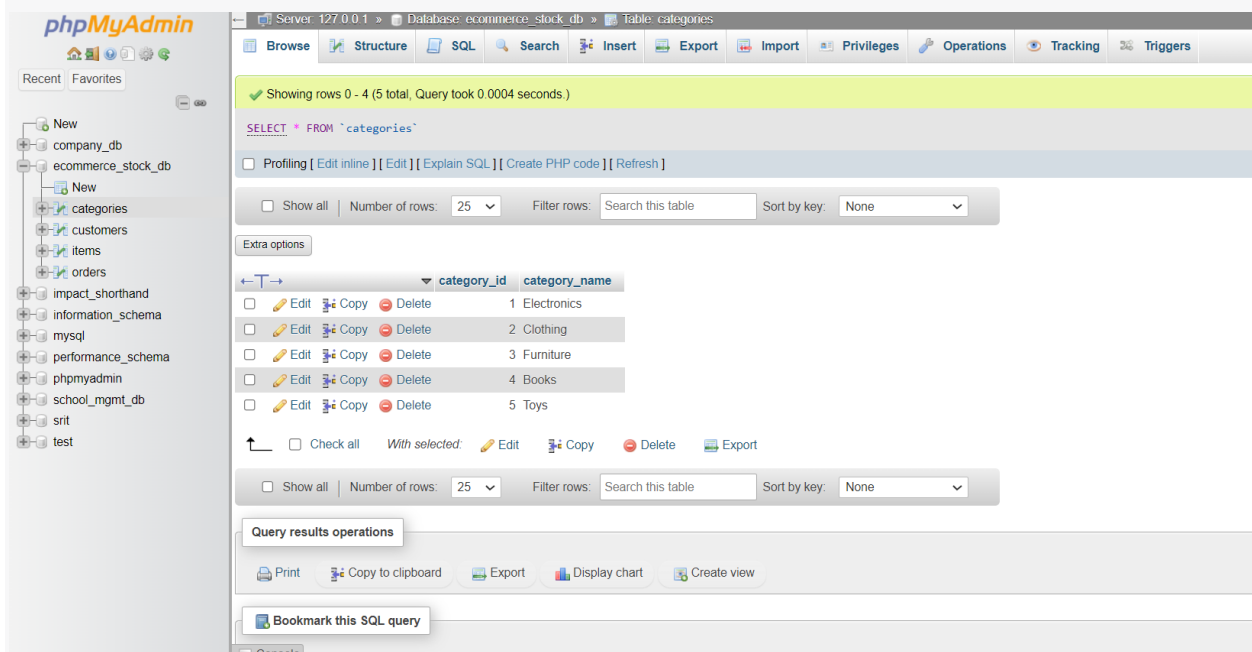
Items table :-



The screenshot shows the phpMyAdmin interface for the 'ecommerce_stock_db' database. The 'items' table is selected, and its structure and data are displayed. The table has columns: item_id, category_id, item_name, description, price, and stock_quantity. The data is as follows:

item_id	category_id	item_name	description	price	stock_quantity
1	1	Smartphone	High-end smartphone	599	85
2	1	Laptop	Powerful laptop	999	30
3	1	Tablet	High-performance tablet	349	20
4	1	Headphones	Wireless headphones	99	75
5	1	Smartwatch	Fitness smartwatch	149	40
6	1	Digital Camera	Professional DSLR camera	799	15
7	1	Gaming Console	Next-gen gaming console	499	25
8	1	Wireless Router	High-speed router	69	30
9	2	T-Shirt	Cotton T-Shirt	15	100
10	2	Jeans	Blue denim jeans	29	120
11	2	Dress	Elegant black dress	79	60
12	2	Sneakers	Running sneakers	49	90
13	2	Hoodie	Comfortable hoodie	39	80
14	2	Skirt	Floral print skirt	34	55
15	3	Coffee Table	Wooden coffee table	199	15
16	3	Sofa	Comfortable sofa	599	10
17	4	Science Fiction Book	Bestseller sci-fi book	19	50
18	4	Cookbook	Delicious recipes	29	40
19	5	Action Figure	Collectible action figure	10	80
20	5	Puzzle	1000-piece jigsaw puzzle	15	60

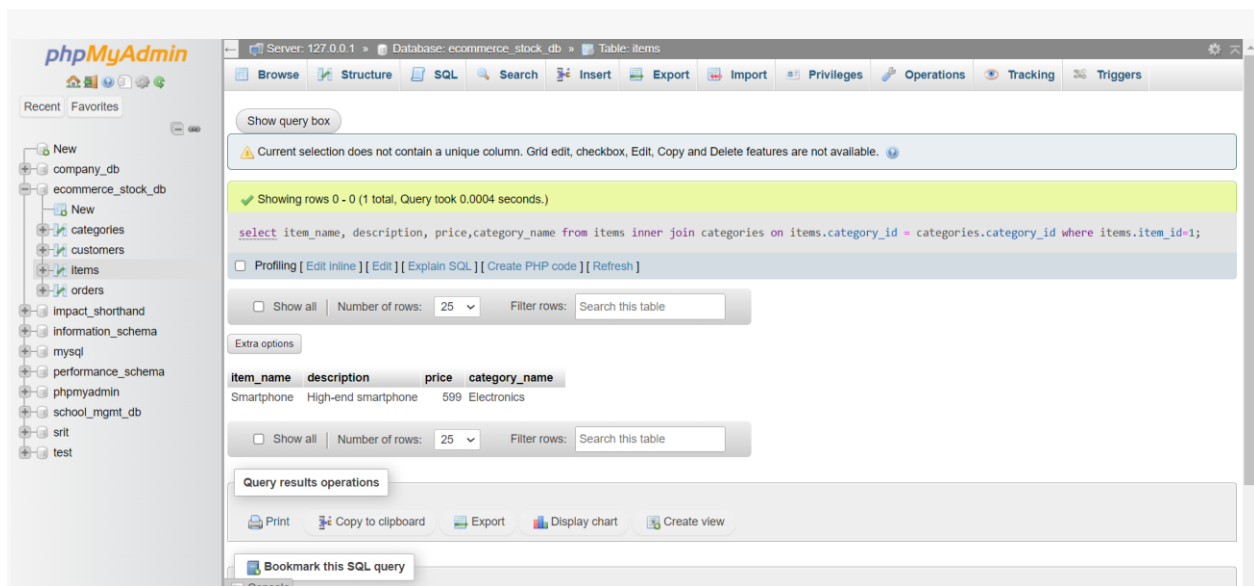
Categories table:-



The screenshot shows the phpMyAdmin interface for the 'ecommerce_stock_db' database. The 'categories' table is selected, and its structure and data are displayed. The table has columns: category_id and category_name. The data is as follows:

category_id	category_name
1	Electronics
2	Clothing
3	Furniture
4	Books
5	Toys

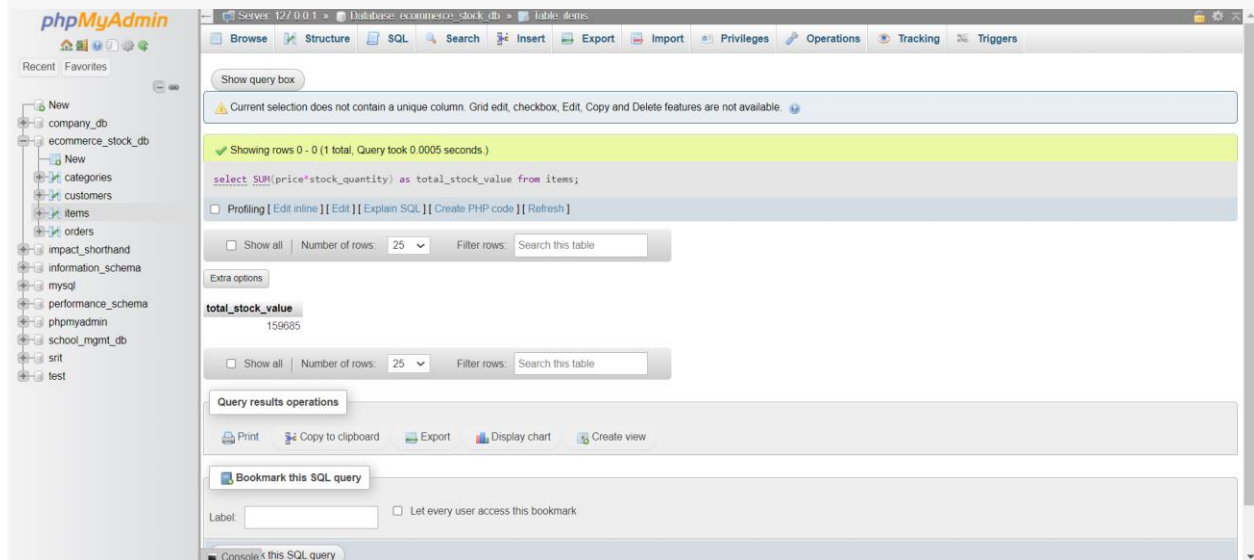
```
select item_name, description, price, category_name from items inner join categories on items.category_id = categories.category_id where items.item_id=1;
```



Task 7: Calculate Total Stock Value Write an SQL query to calculate the total value of all items in stock, considering the price and stock quantity.

Ans:-

```
select sum(price*stock_quantity) as total_stock_value from items;
```

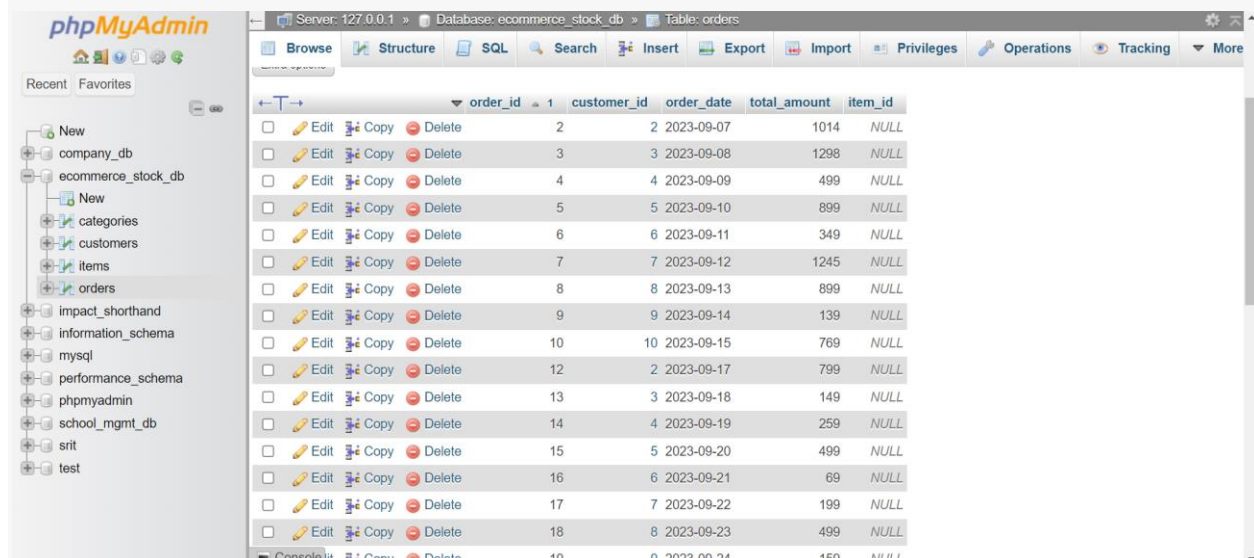


Task 8: Retrieve Customer Order History Write an SQL query to retrieve the order history for a specific customer, including order dates, item names, quantities, and total amounts spent.

Ans:- To achieve this I must establish relationship among tables to fetch data using fkey, so I am going to add item_id column in orders table with foreign key constraints.

Adding item_id column in orders table:-

alter table orders add column item_id int(11);



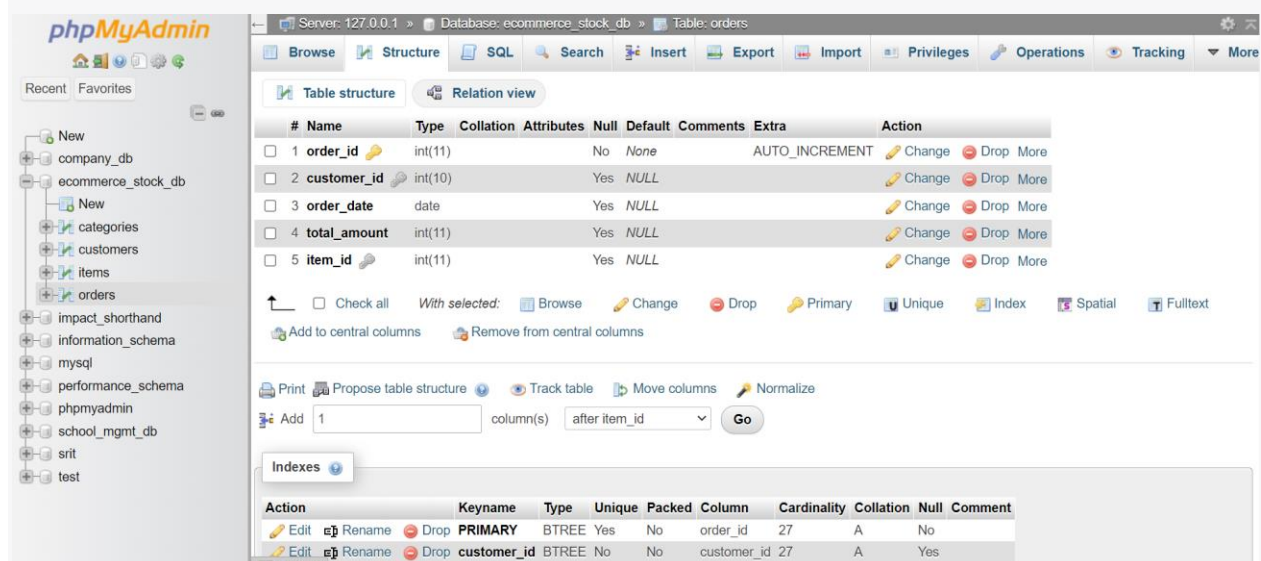
The screenshot shows the phpMyAdmin interface for the 'ecommerce_stock_db' database. The 'orders' table is selected, and its structure and data are displayed. The table has columns: order_id, customer_id, order_date, total_amount, and item_id. The data shows 19 orders, with item_id values ranging from 1014 to 159, and many NULL values.

order_id	customer_id	order_date	total_amount	item_id
2	2	2023-09-07	1014	NULL
3	3	2023-09-08	1298	NULL
4	4	2023-09-09	499	NULL
5	5	2023-09-10	899	NULL
6	6	2023-09-11	349	NULL
7	7	2023-09-12	1245	NULL
8	8	2023-09-13	899	NULL
9	9	2023-09-14	139	NULL
10	10	2023-09-15	769	NULL
12	2	2023-09-17	799	NULL
13	3	2023-09-18	149	NULL
14	4	2023-09-19	259	NULL
15	5	2023-09-20	499	NULL
16	6	2023-09-21	69	NULL
17	7	2023-09-22	199	NULL
18	8	2023-09-23	499	NULL
19	9	2023-09-24	159	NULL

Now making it foreign key referencing from items table:-

Note:- (there is already another fkey available as customer_id referencing from customers table)

Alter table orders add constraint item_id foreign key (item_id) references items (item_id);



The screenshot shows the phpMyAdmin interface for the 'ecommerce_stock_db' database. The 'orders' table is selected, and its structure and indexes are displayed. The table structure shows columns: order_id, customer_id, order_date, total_amount, and item_id. The indexes section shows the PRIMARY key on order_id and a foreign key on customer_id.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	order_id	int(11)			No	None		AUTO_INCREMENT	Change Drop More
2	customer_id	int(10)			Yes	NULL			Change Drop More
3	order_date	date			Yes	NULL			Change Drop More
4	total_amount	int(11)			Yes	NULL			Change Drop More
5	item_id	int(11)			Yes	NULL			Change Drop More

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Rename Drop	PRIMARY	BTREE	Yes	No	order_id	27	A	No	
Edit Rename Drop	customer_id	BTREE	No	No	customer_id	27	A	Yes	

Now there are 2 fkeys in orders table 1st is customer_id and 2nd is items_id.

Now I will be adding or setting data into item_id associated with items table in item_id referencing from items table.

```
update orders set item_id=1 where orders.order_id=2;
```

```
update orders set item_id=2 where orders.order_id=3
```

```
update orders set item_id=3 where orders.order_id=4;
```

```
update orders set item_id=4 where orders.order_id=5;
```

```
update orders set item_id=5 where orders.order_id=6;
```

```
update orders set item_id=6 where orders.order_id=7;
```

```
update orders set item_id=7 where orders.order_id=8;
```

```
update orders set item_id=8 where orders.order_id=9;
```

```
update orders set item_id=9 where orders.order_id=10;
```

```
update orders set item_id=11 where orders.order_id=12;
```

```
update orders set item_id=12 where orders.order_id=13;
```

```
update orders set item_id=13 where orders.order_id=14;
```

```
update orders set item_id=14 where orders.order_id=15;
```

```
update orders set item_id=15 where orders.order_id=16;
```

```
update orders set item_id=16 where orders.order_id=17;
```

```
update orders set item_id=17 where orders.order_id=18;
```

```
update orders set item_id=18 where orders.order_id=19;
```

```
update orders set item_id=19 where orders.order_id=20;
```

```
update orders set item_id=20 where orders.order_id=22;
```


update orders set item_id=10 where orders.order_id=23;

update orders set item_id=3 where orders.order_id=24;

update orders set item_id=4 where orders.order_id=25;

update orders set item_id=5 where orders.order_id=26;

update orders set item_id=6 where orders.order_id=27;

update orders set item_id=7 where orders.order_id=28;

update orders set item_id=8 where orders.order_id=29;

update orders set item_id=9 where orders.order_id=30;

Recent

Favorites

New

company_db

ecommerce_stock_db

New

categories

customers

items

orders

impact_shorthand

information_schema

mysql

performance_schema

phpmyadmin

school_mgmt_db

srit

test

retrieving the order history for a specific customer, including order dates, item names, quantities, and total amounts spent.

```
select customer_id, order_date, item_name, total_amount, stock_quantity from
orders inner join items on orders.item_id = items.item_id where orders.customer_id=2;
```

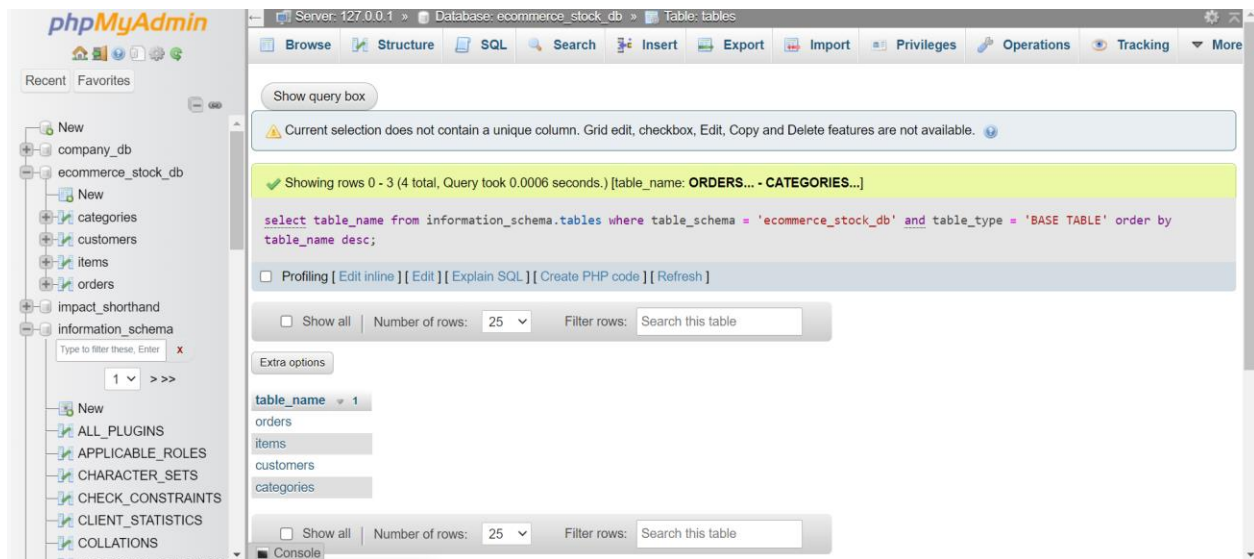
The screenshot shows the phpMyAdmin interface for a database named 'ecommerce_stock_db'. The 'orders' table is selected. A SQL query is entered in the 'SQL' tab: `select customer_id, order_date, item_name, total_amount, stock_quantity from orders inner join items on orders.item_id = items.item_id where orders.customer_id=2;`. The query is executed, and the results are displayed in a table with 3 rows and 5 columns: `customer_id`, `order_date`, `item_name`, `total_amount`, and `stock_quantity`. The results are:
1. `customer_id`: 2, `order_date`: 2023-09-07, `item_name`: Smartphone, `total_amount`: 1014, `stock_quantity`: 85
2. `customer_id`: 2, `order_date`: 2023-09-17, `item_name`: Dress, `total_amount`: 799, `stock_quantity`: 60
3. `customer_id`: 2, `order_date`: 2023-09-27, `item_name`: Puzzle, `total_amount`: 799, `stock_quantity`: 60

customer_id	order_date	item_name	total_amount	stock_quantity
2	2023-09-07	Smartphone	1014	85
2	2023-09-17	Dress	799	60
2	2023-09-27	Puzzle	799	60

Task 9: Implement ORDER BY DESC Write an SQL query to retrieve a list of all tables, ordering them in descending order by the `primary_key` or `id` column.

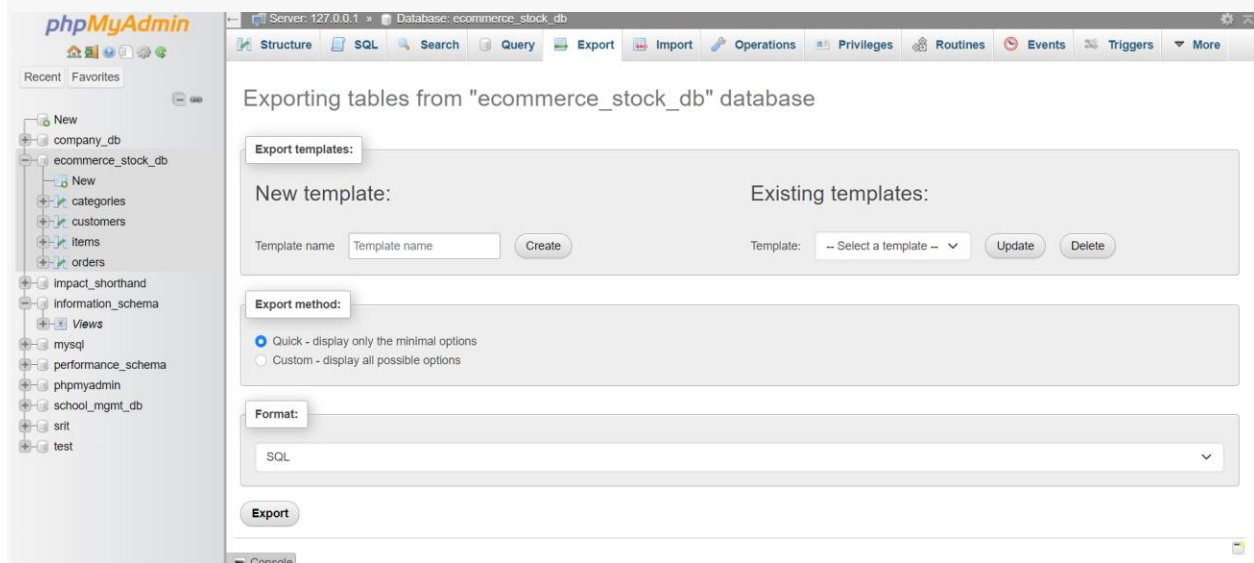
Ans:-

```
select table_name from information_schema.tables where table_schema = 'ecomme
rce_stock_db' and table_type = 'BASE TABLE' order by table_name desc;
```



Task 10: Backup and Restore Export a backup of the `ecommerce_stock_db` database to a SQL file. Then, write SQL statements to restore the database from the backup file.
Submission:

Ans:-

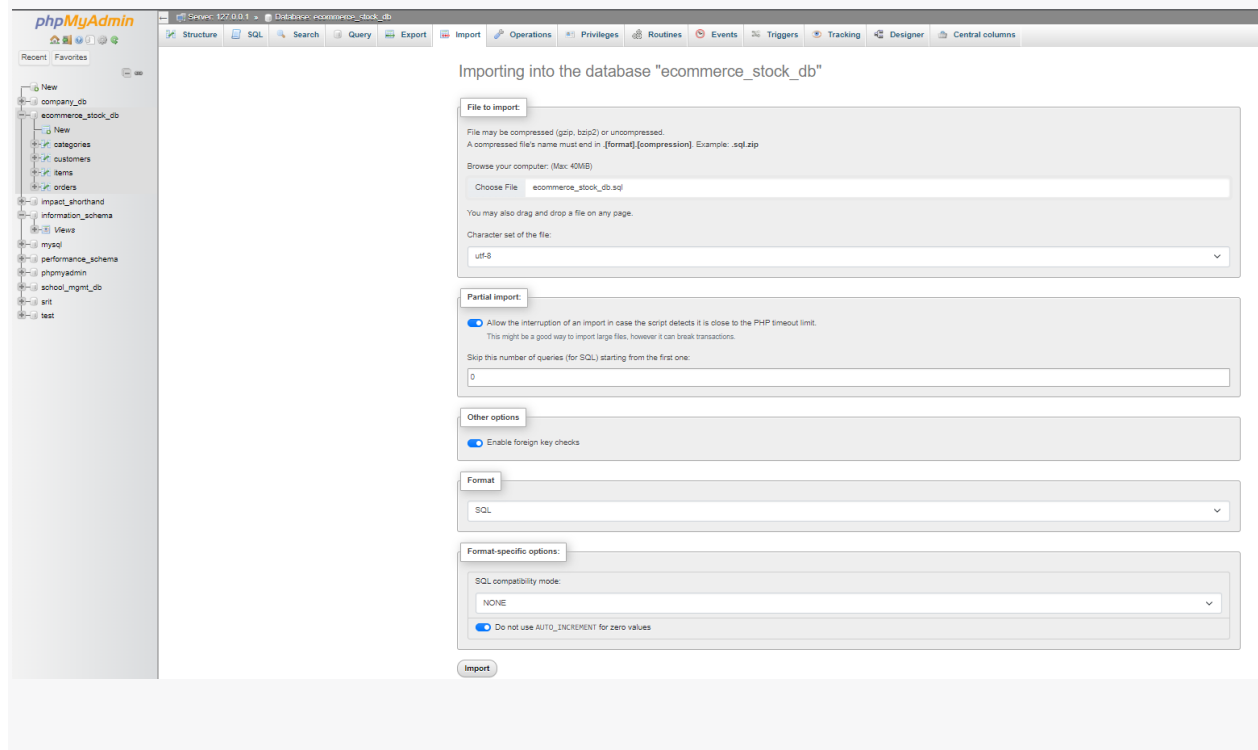


Export tab selected > Export method > quick -display only the minimal options and pressed Export button at bottom of the page which started downloading db file named `ecommerce_stock_db`.

File saved as `ecommerce_stock_db`.

Now to Import it

Import tab selected > in file import block choosed file ecommerce_stock_db > pressed import button to import db.



- Save your SQL script with a meaningful filename (e.g., `ecommerce_assignment.sql`).

:-Done, Please check above.

- Submit the SQL script by the due date specified.

:-Done.