

## QUERY 1

To Update the product id (`pld`) to '18' in the product table, where `pld` = '9' and then `update cascade` across the connecting tables using `inner join`. This will update the value of productid in all connecting tables e.g. product\_supplier, product\_category, order table

Structure of tables – Relation view ( showing update cascade ): We set the product id to update cascade in the 'relation view' for the following tables.

### Order table:

Foreign key constraints for the 'order' table:

Actions	Constraint properties	Column	Foreign key constraint (INnoDB)						
		Database	Table	Column					
Drop	productid_pk_fk	ON DELETE	CASCADE	ON UPDATE	CASCADE	product_id	ecommerce_wel	product	pld
+ Add column									
Drop	shippingid_pk_fk	ON DELETE	CASCADE	ON UPDATE	CASCADE	shipping_id	ecommerce_wel	shipping	sld
+ Add column									
Drop	userid_pk_fk	ON DELETE	CASCADE	ON UPDATE	CASCADE	user_id	ecommerce_wel	user	uld
+ Add column									
+ Add constraint									

### Product category table:

Foreign key constraints for the 'product\_category' table:

Actions	Constraint properties	Column	Foreign key constraint (INnoDB)						
		Database	Table	Column					
Drop	product_category_fk_1	ON DELETE	CASCADE	ON UPDATE	CASCADE	product_id	ecommerce_wel	product	pld
+ Add column									
Drop	product_category_fk_2	ON DELETE	CASCADE	ON UPDATE	CASCADE	category_id	ecommerce_wel	category	cld
+ Add column									
+ Add constraint									

### Product supplier table:

Foreign key constraints for the 'product\_supplier' table:

Actions	Constraint properties	Column	Foreign key constraint (INnoDB)						
		Database	Table	Column					
Drop	prodid_pk_fk	ON DELETE	CASCADE	ON UPDATE	CASCADE	product_id	ecommerce_wel	product	pld
+ Add column									
Drop	supp_id_pk_fk	ON DELETE	CASCADE	ON UPDATE	CASCADE	supp_id	ecommerce_wel	supplier	sld
+ Add column									
+ Add constraint									

**Status 'Before':** The following tables showing old product ID = 9.

### Product table:

Showing rows 0 - 8 (9 total, Query took 0.0429 seconds.)

```
SELECT * FROM `product`
```

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

	pId	pName	pDesc	pPrice	plmg
<input type="checkbox"/>	1	Lego star wars	For the kids who love Legos..builds imaginati	35.00	[BLOB - 64 KiB]
<input type="checkbox"/>	2	teddy bear	Soft & Fluffy Teddy Bear	84.50	[BLOB - 46.1 KiB]
<input type="checkbox"/>	3	toy piano	Pink Toy Piano for toddlers	45.50	[BLOB - 20.9 KiB]
<input type="checkbox"/>	4	The art of living	The Bestseller of 2016. A Book about life and	85.50	[BLOB - 36.8 KiB]
<input type="checkbox"/>	5	The man who sold his ferrari	The Bestseller of 2017.	45.50	[BLOB - 33.7 KiB]
<input type="checkbox"/>	6	Inspirations	The Bestseller of 2018	65.50	[BLOB - 13 KiB]
<input type="checkbox"/>	7	Pink Jumper	The pink floral jumper	25.50	[BLOB - 64 KiB]
<input type="checkbox"/>	8	Blue Jeans	The blue straight fit ankkle Jeans	85.50	[BLOB - 64 KiB]
<input type="checkbox"/>	9	Brown jacket	The chocolate brown winter jacket	185.50	[BLOB - 17.6 KiB]

Query results operations

### Product category table:

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 9 (10 total, Query took 0.0114 seconds.)

```
SELECT * FROM `product_category`
```

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

product_id	category_id
1	1
2	2
3	3
3	3
4	3
6	3
7	1
8	2
9	3

Query results operations

### Order table:

← → ↺ 🏠 ⓘ localhost/phpmyadmin/sql.php?server=1&db=ecommerce\_website&table=order&pos=0

Apps

★ Bookmarks

📄 Wirify by Volkside

👤 Rishan

💰 Payal

🏠 Dell

🚗 Automotive

📁 Elements

🔗 Elements Home - Ele

phpMyAdmin

🏠 📄 ⚙️ 🔄

Recent Favorites

+

New

ecommerce\_website

+

New

category

+

order

+

product

+

product\_category

+

product\_supplier

+

shipping

+

supplier

+

user

+

information\_schema

+

mysql

+

performance\_schema

+

phpmyadmin

+

test

Server: 127.0.0.1 » Database: ecommerce\_website » Table: order

Browse

Structure

SQL

Search

Insert

Export

Import

✔ Showing rows 0 - 7 (8 total, Query took 0.0019 seconds.)

SELECT \* FROM `order`

☐ Show all

Number of rows: 25

Filter rows: Search this table

Sort by key:

+ Options

⏪ ⏴ ⏵ ⏩

	old	user_id	shipping_id	product_id	oQuantity
<input type="checkbox"/> Edit Copy Delete	2	1	2	4	5
<input type="checkbox"/> Edit Copy Delete	3	2	3	5	2
<input type="checkbox"/> Edit Copy Delete	4	1	3	2	3
<input type="checkbox"/> Edit Copy Delete	5	1	3	6	7
<input type="checkbox"/> Edit Copy Delete	6	2	4	7	9
<input type="checkbox"/> Edit Copy Delete	7	2	2	3	2
<input type="checkbox"/> Edit Copy Delete	8	1	1	8	3
<input type="checkbox"/> Edit Copy Delete	9	1	2	9	4

⏴

☐ Check all

With selected: Edit Copy Delete Export

☐ Show all

Number of rows: 25

Filter rows: Search this table

Sort by key:

Overwrite options

## Product\_supplier table:

The screenshot shows the phpMyAdmin interface for the 'ecommerce\_website' database. The 'product\_supplier' table is selected. The table structure is as follows:

supp_id	product_id
1	2
2	1
1	3
2	4
3	9
3	6
4	1
4	2
5	7
5	8
5	9
5	3

## The Query:

UPDATE

`product`

INNER JOIN `product\_supplier`

ON

`product\_supplier`.`product\_id` = `product`.`pld`

INNER JOIN `product\_category`

ON

`product\_category`.`product\_id` = `product`.`pld`

INNER JOIN `order`

ON

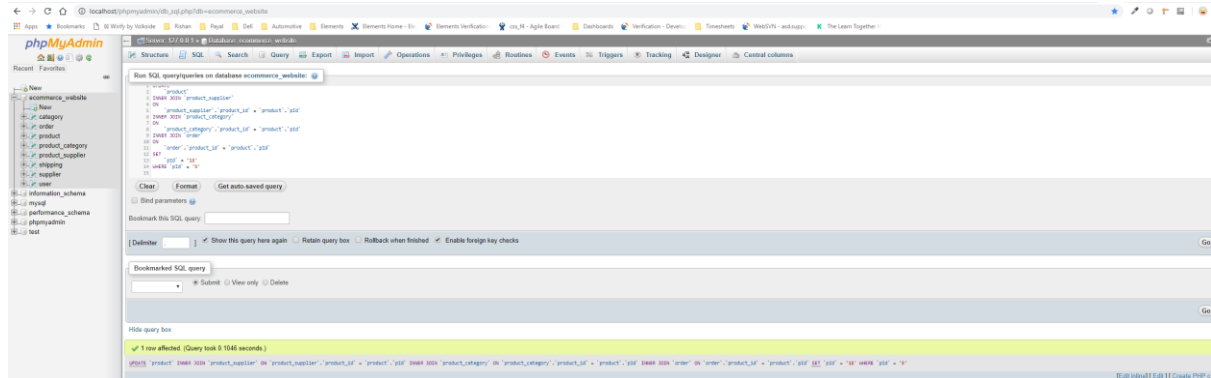
`order`.`product\_id` = `product`.`pld`

SET

`pld` = '18'

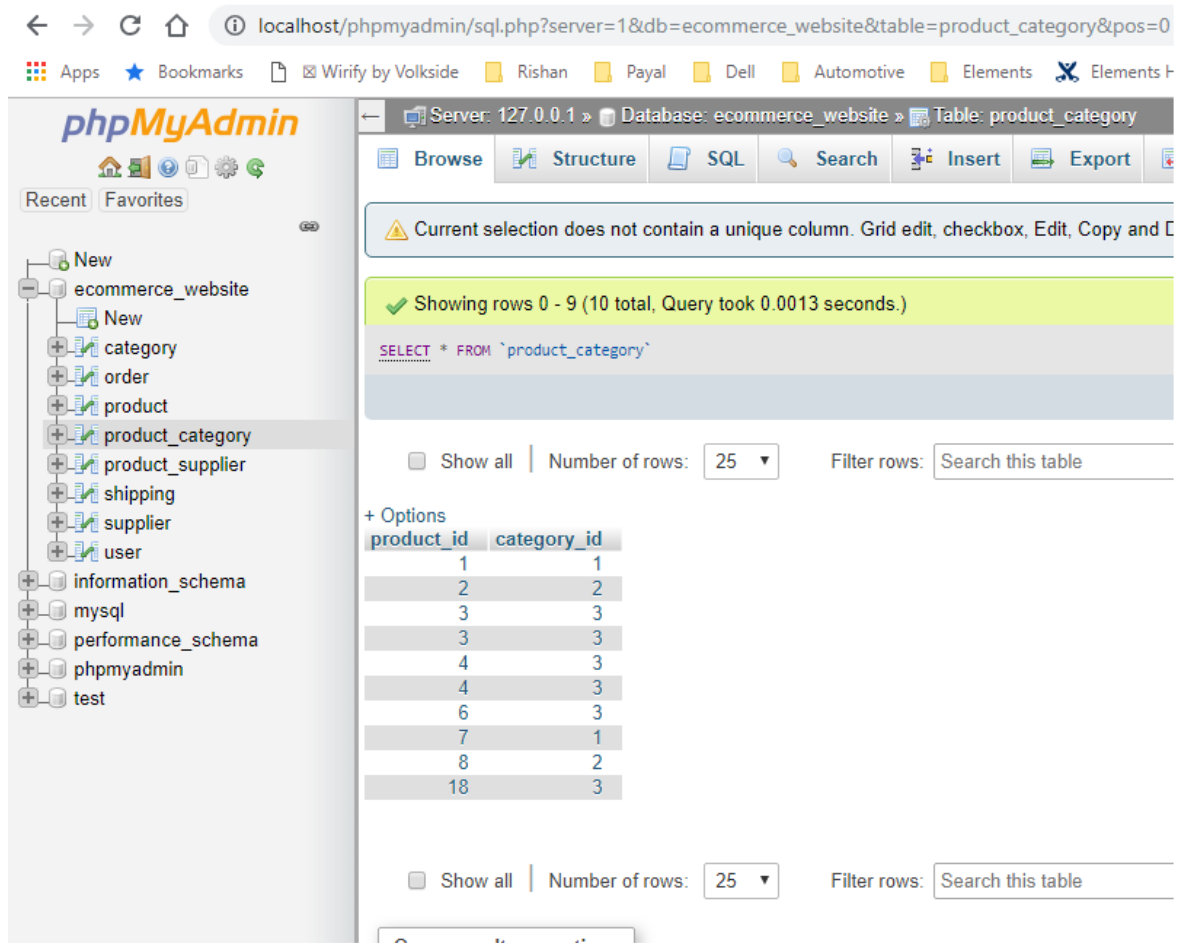
WHERE `pid` = '9'

### Executing the query:



**Status 'After':** The following tables showing product ID which has been changed from 9 to 18.

### Product\_category table:



### Order table:

The screenshot shows the phpMyAdmin interface for the 'ecommerce\_website' database. The 'order' table is selected, and its structure and data are displayed. The table has columns: old, user\_id, shipping\_id, product\_id, and oQuantity. The data is shown in a grid with 8 rows. The interface includes a sidebar with a database tree, a top navigation bar with tabs (Browse, Structure, SQL, Search, Insert, Export, Import), and a bottom section for query results and operations.

Showing rows 0 - 7 (8 total, Query took 0.0015 seconds.)

```
SELECT * FROM `order`
```

Number of rows: 25 Filter rows: Search this table Sort by key:

+ Options

	old	user_id	shipping_id	product_id	oQuantity
<input type="checkbox"/> Edit Copy Delete	2	1	2	4	5
<input type="checkbox"/> Edit Copy Delete	3	2	3	5	2
<input type="checkbox"/> Edit Copy Delete	4	1	3	2	3
<input type="checkbox"/> Edit Copy Delete	5	1	3	6	7
<input type="checkbox"/> Edit Copy Delete	6	2	4	7	9
<input type="checkbox"/> Edit Copy Delete	7	2	2	3	2
<input type="checkbox"/> Edit Copy Delete	8	1	1	8	3
<input type="checkbox"/> Edit Copy Delete	9	1	2	18	4

Check all With selected: Edit Copy Delete Export

Number of rows: 25 Filter rows: Search this table Sort by key:

Query results operations

### Product\_supplier table:

The screenshot shows the phpMyAdmin interface for the 'ecommerce\_website' database. The 'product\_supplier' table is selected, and its structure and data are displayed. The table has columns: supp\_id and product\_id. The data is shown in a grid with 12 rows. The interface includes a sidebar with a database tree, a top navigation bar with tabs (Browse, Structure, SQL, Search, Insert, Export, Import), and a bottom section for query results and operations.

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 11 (12 total, Query took 0.0013 seconds.)

```
SELECT * FROM `product_supplier`
```

Number of rows: 25 Filter rows: Search this table Sort by key:

+ Options

supp_id	product_id
1	2
2	1
1	3
2	4
3	18
3	6
4	1
4	2
5	7
5	8
5	18
5	3

Number of rows: 25 Filter rows: Search this table Sort by key:

Query results operations

## Product table:

The screenshot shows the phpMyAdmin interface for the 'ecommerce\_website' database. The 'product' table is selected, and the 'Browse' tab is active. The table contains 9 rows of data. The columns are: pId, pName, pDesc, pPrice, and plmg. The data is as follows:

pId	pName	pDesc	pPrice	plmg
1	Lego star wars	For the kids who love Legos..builds imaginati	35.00	[BLOB - 64 KiB]
2	teddy bear	Soft & Fluffy Teddy Bear	84.50	[BLOB - 46.1 KiB]
3	toy piano	Pink Toy Piano for toddlers	45.50	[BLOB - 20.9 KiB]
4	The art of living	The Bestseller of 2016. A Book about life and	85.50	[BLOB - 36.8 KiB]
5	The man who sold his ferrari	The Bestseller of 2017.	45.50	[BLOB - 33.7 KiB]
6	Inspirations	The Bestseller of 2018	65.50	[BLOB - 13 KiB]
7	Pink Jumper	The pink floral jumper	25.50	[BLOB - 64 KiB]
8	Blue Jeans	The blue straight fit annkle Jeans	85.50	[BLOB - 64 KiB]
18	Brown jacket	The chocolate brown winter jacket	185.50	[BLOB - 17.6 KiB]

## Un-doing the Update Query:

### QUERY:

UPDATE

`product`

INNER JOIN `product\_supplier`

ON

`product\_supplier`.`product\_id` = `product`.`pId`

INNER JOIN `product\_category`

ON

`product\_category`.`product\_id` = `product`.`pId`

INNER JOIN `order`

ON

`order`.`product\_id` = `product`.`pId`

SET

`pId` = '9'

WHERE `pId` = '18'

## Executing the Query:

The screenshot shows the phpMyAdmin interface with the 'Run SQL query/queries on database ecommerce\_website:' window open. The SQL query executed is:

```
UPDATE `product` INNER JOIN `product_supplier` ON `product_supplier`.`product_id` = `product`.`pid` INNER JOIN `product_category` ON `product_category`.`product_id` = `product`.`pid` INNER JOIN `order` ON `order`.`product_id` = `product`.`pid` SET `pid` = '9' WHERE `pid` = '18';
```

The status bar at the bottom indicates: **1 row affected. (Query took 0.1581 seconds.)**

## Status 'Now':

### Product table:

The screenshot shows the phpMyAdmin interface with the 'product' table selected. The table contains 9 rows of data. The status bar at the top indicates: **Showing rows 0 - 8 (9 total, Query took 0.0041 seconds.)**

	pId	pName	pDesc	pPrice	plmg
<input type="checkbox"/>	1	Lego star wars	For the kids who love Legos..builds imaginati	35.00	[BLOB - 64 KiB]
<input type="checkbox"/>	2	teddy bear	Soft & Fluffy Teddy Bear	84.50	[BLOB - 46.1 KiB]
<input type="checkbox"/>	3	toy piano	Pink Toy Piano for toddlers	45.50	[BLOB - 20.9 KiB]
<input type="checkbox"/>	4	The art of living	The Bestseller of 2016. A Book about life and	85.50	[BLOB - 36.8 KiB]
<input type="checkbox"/>	5	The man who sold his ferrari	The Bestseller of 2017.	45.50	[BLOB - 33.7 KiB]
<input type="checkbox"/>	6	Inspirations	The Bestseller of 2018	65.50	[BLOB - 13 KiB]
<input type="checkbox"/>	7	Pink Jumper	The pink floral jumper	25.50	[BLOB - 64 KiB]
<input type="checkbox"/>	8	Blue Jeans	The blue straight fit annkle Jeans	85.50	[BLOB - 64 KiB]
<input type="checkbox"/>	9	Brown jacket	The chocolate brown winter jacket	185.50	[BLOB - 17.6 KiB]



### Product\_supplier table:

The screenshot shows the phpMyAdmin interface for the 'ecommerce\_website' database. The 'product\_supplier' table is selected. The table structure is as follows:

supp_id	product_id
1	2
2	1
1	3
2	4
3	9
3	6
4	1
4	2
5	7
5	8
5	9
5	3

The interface includes a sidebar with a tree view of the database structure, a top navigation bar with options like Browse, Structure, SQL, Search, Insert, Export, Import, and Print. A warning message states: 'Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.' The status bar indicates 'Showing rows 0 - 11 (12 total, Query took 0.0013 seconds.)' and the SQL query 'SELECT \* FROM `product\_supplier`' is displayed.

### Product\_category table:

The screenshot shows the phpMyAdmin interface for the 'ecommerce\_website' database. The 'product\_category' table is selected. The table structure is as follows:

product_id	category_id
1	1
2	2
3	3
3	3
4	3
4	3
6	3
7	1
8	2
9	3

The interface includes a sidebar with a tree view of the database structure, a top navigation bar with options like Browse, Structure, SQL, Search, Insert, Export, Import, and Print. A warning message states: 'Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.' The status bar indicates 'Showing rows 0 - 9 (10 total, Query took 0.0014 seconds.)' and the SQL query 'SELECT \* FROM `product\_category`' is displayed.

## Order table:

phpMyAdmin

Recent Favorites

Server: 127.0.0.1 » Database: ecommerce\_website » Table: order

Browse Structure SQL Search Insert Export Import

Showing rows 0 - 7 (8 total, Query took 0.0023 seconds.)

`SELECT * FROM `order``

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

+ Options

				old	user_id	shipping_id	product_id	oQuantity
<input type="checkbox"/>	Edit	Copy	Delete	2	1	2	4	5
<input type="checkbox"/>	Edit	Copy	Delete	3	2	3	5	2
<input type="checkbox"/>	Edit	Copy	Delete	4	1	3	2	3
<input type="checkbox"/>	Edit	Copy	Delete	5	1	3	6	7
<input type="checkbox"/>	Edit	Copy	Delete	6	2	4	7	9
<input type="checkbox"/>	Edit	Copy	Delete	7	2	2	3	2
<input type="checkbox"/>	Edit	Copy	Delete	8	1	1	8	3
<input type="checkbox"/>	Edit	Copy	Delete	9	1	2	9	4

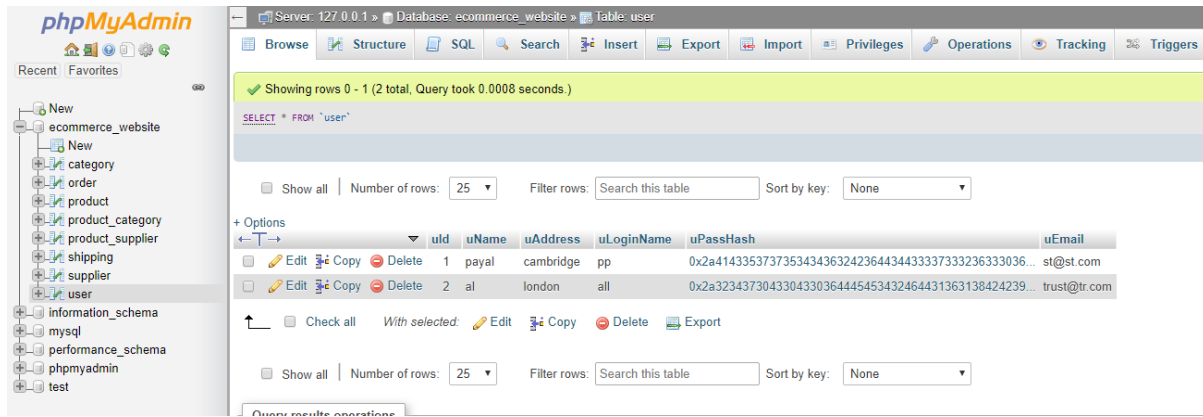
☐ Check all | With selected: Edit Copy Delete Export

## QUERY 2

To display the username, user's chosen shipping type and product name with order id = 2. Using inner join, to get the value of username from user table, shipping type from shipping table and product name from product table.

The tables: Following tables showing the data stored.

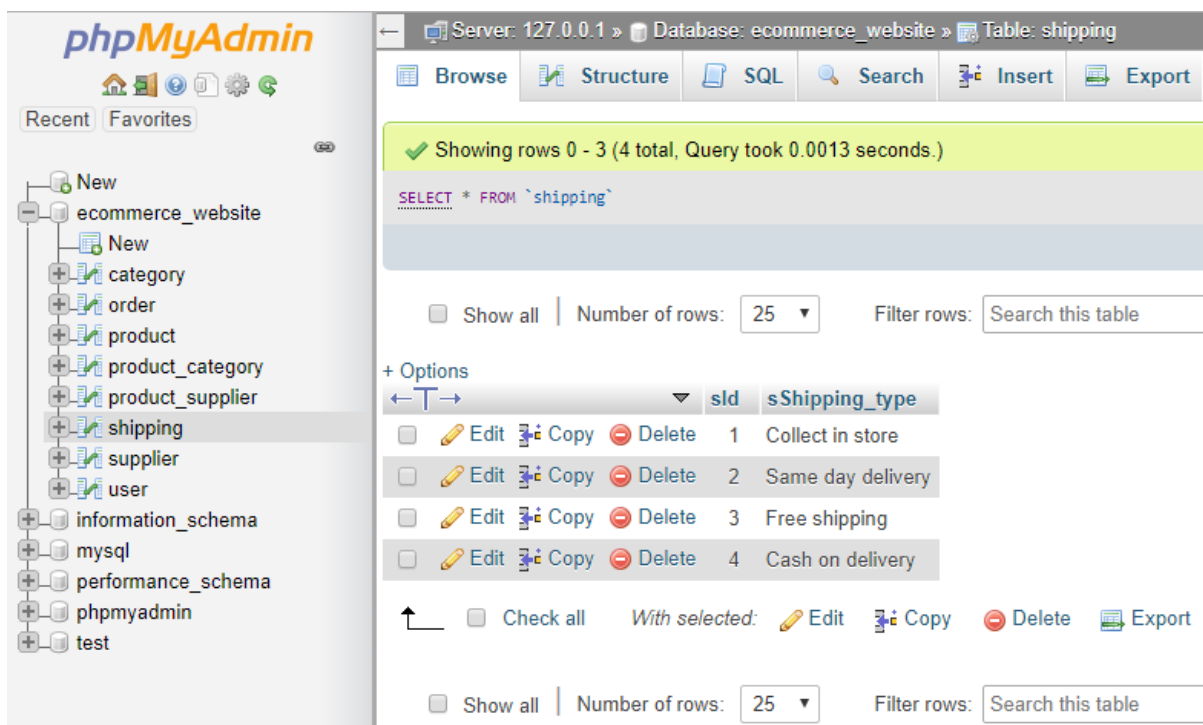
### User table:



The screenshot shows the phpMyAdmin interface for the 'ecommerce\_website' database. The 'user' table is selected, and its structure and data are displayed. The table has columns: uid, uName, uAddress, uLoginName, uPassHash, and uEmail. Two rows of data are shown.

uid	uName	uAddress	uLoginName	uPassHash	uEmail
1	payal	cambridge	pp	0x2a4143353737353434363242364434433337333236333036...	st@st.com
2	al	london	all	0x2a3234373043304330364445453432464431363138424239...	trust@tr.com

### Shipping table:



The screenshot shows the phpMyAdmin interface for the 'ecommerce\_website' database. The 'shipping' table is selected, and its structure and data are displayed. The table has columns: sId and sShipping\_type. Four rows of data are shown.

sId	sShipping_type
1	Collect in store
2	Same day delivery
3	Free shipping
4	Cash on delivery

## Product table:

The screenshot shows the phpMyAdmin interface for the 'ecommerce\_website' database. The 'product' table is selected, and the 'Browse' tab is active. The table structure is displayed, showing columns: pId, pName, pDesc, pPrice, and plmg. The table contains 9 rows of data, including products like 'Lego star wars', 'teddy bear', 'toy piano', 'The art of living', 'The man who sold his ferrari', 'Inspirations', 'Pink Jumper', 'Blue Jeans', and 'Brown jacket'.

pId	pName	pDesc	pPrice	plmg
1	Lego star wars	For the kids who love Legos..builds imaginati	35.00	[BLOB - 64 KiB]
2	teddy bear	Soft & Fluffy Teddy Bear	84.50	[BLOB - 46.1 KiB]
3	toy piano	Pink Toy Piano for toddlers	45.50	[BLOB - 20.9 KiB]
4	The art of living	The Bestseller of 2016. A Book about life and	85.50	[BLOB - 36.8 KiB]
5	The man who sold his ferrari	The Bestseller of 2017.	45.50	[BLOB - 33.7 KiB]
6	Inspirations	The Bestseller of 2018	65.50	[BLOB - 13 KiB]
7	Pink Jumper	The pink floral jumper	25.50	[BLOB - 64 KiB]
8	Blue Jeans	The blue straight fit ankle Jeans	85.50	[BLOB - 64 KiB]
18	Brown jacket	The chocolate brown winter jacket	185.50	[BLOB - 17.6 KiB]

## Order table:

The screenshot shows the phpMyAdmin interface for the 'ecommerce\_website' database. The 'order' table is selected, and the 'Browse' tab is active. The table structure is displayed, showing columns: old, user\_id, shipping\_id, product\_id, and oQuantity. The table contains 8 rows of data, including orders for products like 'Lego star wars', 'teddy bear', 'toy piano', 'The art of living', 'The man who sold his ferrari', 'Inspirations', 'Pink Jumper', and 'Blue Jeans'.

old	user_id	shipping_id	product_id	oQuantity
2	1	2	4	5
3	2	3	5	2
4	1	3	2	3
5	1	3	6	7
6	2	4	7	9
7	2	2	3	2
8	1	1	8	3
9	1	2	18	4

## The Query :

SELECT

`user`.`uName` AS `USERNAME`,

`shipping`.`sShipping\_type` AS `SHIPPING TYPE`,

`product`.`pName` AS `PRODUCT NAME`

FROM

    `order`

INNER JOIN `user`

ON

    `user`.`uid` = `order`.`user\_id`

INNER JOIN `shipping`

ON

    `shipping`.`sld` = `order`.`shipping\_id`

INNER JOIN `product`

ON

    `product`.`pld` = `order`.`product\_id`

WHERE `oid` = '2'

[Executing the query:](#) This displays the username, shipping type and the product name.

The screenshot shows the phpMyAdmin interface for a database named 'ecommerce\_website'. The left sidebar displays the database structure with tables: category, order, product, product\_category, product\_supplier, shipping, supplier, and user. The main panel shows a SQL query executed successfully, displaying the results in a table with columns: USERNAME, SHIPPING TYPE, and PRODUCT NAME. The result shows a single row for user 'payal' with shipping type 'Same day delivery' and product name 'The art of living'.

Showing rows 0 - 0 (1 total. Query took 0.0600 seconds)

```
SELECT `user`.`uname` AS `USERNAME`, `shipping`.`shipping_type` AS `SHIPPING TYPE`, `product`.`pname` AS `PRODUCT NAME` FROM `order` INNER JOIN `user` ON `user`.`uid` = `order`.`user_id` INNER JOIN `shipping` ON `shipping`.`sld` = `order`.`shipping_id` INNER JOIN `product` ON `product`.`pld` = `order`.`product_id` WHERE `oid` = '2'
```

USERNAME	SHIPPING TYPE	PRODUCT NAME
payal	Same day delivery	The art of living

Query results operations: Print, Copy to clipboard, Export, Display chart, Create view