1) Update the categoryName From "Beverages" to "Drinks" in the categories table.

Showing rows: 1 to 8   Page No: 1   of 1

| categoryID [PK] integer | categoryName character varying (50) | description text |
|---|---|---|
| 2 | Condiments | Sweet and savory sauces, relishes, spreads, and seasonin... |
| 3 | Confections | Desserts, candies, and sweet breads |
| 4 | Dairy Products | Cheeses |
| 5 | Grains & Cereals | Breads, crackers, pasta, and cereal |
| 6 | Meat & Poultry | Prepared meats |
| 7 | Produce | Dried fruit and bean curd |
| 8 | Seafood | Seaweed and fish |
| 1 | Drinks | Soft drinks, coffees, teas, beers, and ales |

Total rows: 8    Query complete 00:00:00.178          LF    Ln 2, Col 1

2) Insert into shipper new record (give any values) Delete that new record from shippers table.

**Data Output**    Messages    Notifications

| | shipperid [PK] integer | companyname character varying (100) |
|---|---|---|
| 1 | 1 | Speedy Express |
| 2 | 2 | United Package |
| 3 | 3 | Federal Shipping |

Total rows: 3    Query complete 00:00:00.126

3) Update categoryID=1 to categoryID=1001. Make sure related products update their categoryID too. Display both category and products table to show the cascade.

Delete the categoryID= "3" from categories. Verify that the corresponding records are deleted automatically from products.

(HINT: Alter the foreign key on products(categoryID) to add ON UPDATE CASCADE, ON DELETE CASCADE, add ON DELETE CASCADE for order_details(productid) )

CATEGORIES TABLE AFTER "ON UPDATE CASCADE"

Data Output   Messages   Notifications

| | categoryID [PK] integer | categoryName character varying (50) | description text |
|---|---|---|---|
| 1 | 2 | Condiments | Sweet and savory sauces, relishes, spreads, and seasonin... |
| 2 | 3 | Confections | Desserts, candies, and sweet breads |
| 3 | 4 | Dairy Products | Cheeses |
| 4 | 5 | Grains & Cereals | Breads, crackers, pasta, and cereal |
| 5 | 6 | Meat & Poultry | Prepared meats |
| 6 | 7 | Produce | Dried fruit and bean curd |
| 7 | 8 | Seafood | Seaweed and fish |
| 8 | 1001 | Drinks | Soft drinks, coffees, teas, beers, and ales |

Total rows: 8    Query complete 00:00:00.111

PRODUCTS TABLE AFTER  "ON UPDATE CASCADE"

Showing rows: 1 to 77

| productid [PK] integer | productname character varying (100) | quantityperunit character varying (50) | unitprice numeric (10,2) | discontinued boolean | categoryid integer |
|---|---|---|---|---|---|
| 63 | 65 | Louisiana Fiery Hot Pepper Sauce | 32 - 8 oz bottles | 23.16 | false | 2 |
| 64 | 66 | Louisiana Hot Spiced Okra | 24 - 8 oz jars | 18.70 | false | 2 |
| 65 | 77 | Original Frankfurter GrУMne SoУ  e | 12 boxes | 14.30 | false | 2 |
| 66 | 1 | Chai | 10 boxes x 20 bags | 18.00 | false | 1001 |
| 67 | 2 | Chang | 24 - 12 oz bottles | 19.00 | false | 1001 |
| 68 | 24 | Guarana Fantastica | 12 - 355 ml cans | 4.50 | true | 1001 |
| 69 | 34 | Sasquatch Ale | 24 - 12 oz bottles | 14.00 | false | 1001 |
| 70 | 35 | Steeleye Stout | 24 - 12 oz bottles | 18.00 | false | 1001 |
| 71 | 38 | СУДte de Blaye | 12 - 75 cl bottles | 263.50 | false | 1001 |
| 72 | 39 | Chartreuse verte | 750 cc per bottle | 18.00 | false | 1001 |
| 73 | 43 | Ipoh Coffee | 16 - 500 g tins | 46.00 | false | 1001 |
| 74 | 67 | Laughing Lumberjack Lager | 24 - 12 oz bottles | 14.00 | false | 1001 |
| 75 | 70 | Outback Lager | 24 - 355 ml bottles | 15.00 | false | 1001 |
| 76 | 75 | RhУЖnbrУЄu Klosterbier | 24 - 0.5 l bottles | 7.75 | false | 1001 |
| 77 | 76 | LakkalikУЖri | 500 ml | 18.00 | false | 1001 |

Total rows: 77      Query complete 00:00:00.146

4)    Delete the customer = "VINET"  from customers. Corresponding customers in orders table should be set to null (HINT: Alter the foreign key on orders(customerID) to use ON DELETE SET NULL)

Showing rows: 1 to

| orderID [PK] integer | customerID character varying (10) | employeeID integer | orderDate date | requiredDate date | shippedDate date | shipperID integer | freight numeric (10,2) |
|---|---|---|---|---|---|---|---|
| 817 | 11069 | TORTU | 1 | 2015-05-04 | 2015-06-01 | 2015-05-06 | 2 | 15.67 |
| 818 | 11070 | LEHMS | 2 | 2015-05-05 | 2015-06-02 | [null] | 1 | 136.00 |
| 819 | 11071 | LILAS | 1 | 2015-05-05 | 2015-06-02 | [null] | 1 | 0.93 |
| 820 | 11072 | ERNSH | 4 | 2015-05-05 | 2015-06-02 | [null] | 2 | 258.64 |
| 821 | 11073 | PERIC | 2 | 2015-05-05 | 2015-06-02 | [null] | 2 | 24.95 |
| 822 | 11074 | SIMOB | 7 | 2015-05-06 | 2015-06-03 | [null] | 2 | 18.44 |
| 823 | 11075 | RICSU | 8 | 2015-05-06 | 2015-06-03 | [null] | 2 | 6.19 |
| 824 | 11076 | BONAP | 4 | 2015-05-06 | 2015-06-03 | [null] | 2 | 38.28 |
| 825 | 11077 | RATTC | 1 | 2015-05-06 | 2015-06-03 | [null] | 2 | 8.53 |
| 826 | 10248 | [null] | 5 | 2013-07-04 | 2013-08-01 | 2013-07-16 | 3 | 32.38 |
| 827 | 10274 | [null] | 6 | 2013-08-06 | 2013-09-03 | 2013-08-16 | 1 | 6.01 |
| 828 | 10295 | [null] | 2 | 2013-09-02 | 2013-09-30 | 2013-09-10 | 2 | 1.15 |
| 829 | 10737 | [null] | 2 | 2014-11-11 | 2014-12-09 | 2014-11-18 | 2 | 7.79 |
| 830 | 10739 | [null] | 3 | 2014-11-12 | 2014-12-10 | 2014-11-17 | 3 | 11.08 |
| 831 | 11078 | [null] | 5 | 2025-04-23 | 2025-04-30 | 2025-04-25 | 2 | [null] |

5)    Insert the following data to Products using UPSERT:

product_id = 100, product_name = Wheat bread, quantityperunit=1,unitprice = 13, discontinued = 0, categoryID=5

product_id = 101, product_name = White bread, quantityperunit=5 boxes,unitprice = 13, discontinued = 0, categoryID=5

product_id = 100, product_name = Wheat bread, quantityperunit=10 boxes,unitprice = 13, discontinued = 0, categoryID=5

(this should update the quantityperunit for product_id = 100)

Data Output   Messages   Notifications

Showing rows: 1

| | productid [PK] integer | productname character varying (100) | quantityperunit character varying (50) | unitprice numeric (10,2) | discontinued boolean | categoryid integer |
|---|---|---|---|---|---|---|
| 52 | 77 | Original Frankfurter GrУМne SoУ   e | 12 boxes | 14.30 | false | 2 |
| 53 | 1 | Chai | 10 boxes x 20 bags | 18.00 | false | 1001 |
| 54 | 2 | Chang | 24 - 12 oz bottles | 19.00 | false | 1001 |
| 55 | 24 | Guarana Fantastica | 12 - 355 ml cans | 4.50 | true | 1001 |
| 56 | 34 | Sasquatch Ale | 24 - 12 oz bottles | 14.00 | false | 1001 |
| 57 | 35 | Steeleye Stout | 24 - 12 oz bottles | 18.00 | false | 1001 |
| 58 | 38 | СУДte de Blaye | 12 - 75 cl bottles | 263.50 | false | 1001 |
| 59 | 39 | Chartreuse verte | 750 cc per bottle | 18.00 | false | 1001 |
| 60 | 43 | Ipoh Coffee | 16 - 500 g tins | 46.00 | false | 1001 |
| 61 | 67 | Laughing Lumberjack Lager | 24 - 12 oz bottles | 14.00 | false | 1001 |
| 62 | 70 | Outback Lager | 24 - 355 ml bottles | 15.00 | false | 1001 |
| 63 | 75 | RhУЖnbrУЄu Klosterbier | 24 - 0.5 l bottles | 7.75 | false | 1001 |
| 64 | 76 | LakkalikУЖri | 500 ml | 18.00 | false | 1001 |
| 65 | 101 | White bread | 5 boxes | 13.00 | false | 5 |
| 66 | 100 | Wheat bread | 10 boxes | 13.00 | false | 5 |

6)

Data Output   Messages   Notifications

```
MERGE 4


Query returned successfully in 84 msec.
```

Total rows: 7   |   Query complete 00:00:00.084

| | productid [PK] integer | productname character varying (100) | quantityperunit character varying (50) | unitprice numeric (10,2) | discontinued boolean | categoryid integer |
|---|---|---|---|---|---|---|
| 53 | 101 | White bread | 5 boxes | 19.99 | false | 5 |
| 54 | 102 | Midnight Mango Fizz | 24-12 oz bottles | 19.00 | false | 1 |
| 55 | 103 | Savory Fire Sauce | 12-550 ml bottles | 10.00 | false | 2 |
| 56 | 1 | Chai | 10 boxes x 20 bags | 18.00 | false | 1 |
| 57 | 2 | Chang | 24 - 12 oz bottles | 19.00 | false | 1 |
| 58 | 24 | Guarana Fantastica | 12 - 355 ml cans | 4.50 | true | 1 |
| 59 | 34 | Sasquatch Ale | 24 - 12 oz bottles | 14.00 | false | 1 |
| 60 | 35 | Steeleye Stout | 24 - 12 oz bottles | 18.00 | false | 1 |
| 61 | 38 | СУДte de Blaye | 12 - 75 cl bottles | 263.50 | false | 1 |
| 62 | 39 | Chartreuse verte | 750 cc per bottle | 18.00 | false | 1 |
| 63 | 43 | Ipoh Coffee | 16 - 500 g tins | 46.00 | false | 1 |
| 64 | 67 | Laughing Lumberjack Lager | 24 - 12 oz bottles | 14.00 | false | 1 |
| 65 | 70 | Outback Lager | 24 - 355 ml bottles | 15.00 | false | 1 |
| 66 | 75 | RhУЖnbrУЄu Klosterbier | 24 - 0.5 l bottles | 7.75 | false | 1 |
| 67 | 76 | LakkalikУЖri | 500 ml | 18.00 | false | 1 |

Total rows: 67    Query complete 00:00:00.105

7) List all orders with employee full names. (Inner join)

| | productid<br>[PK] integer | productname<br>character varying (100) | quantityperunit<br>character varying (50) | unitprice<br>numeric (10,2) | discontinued<br>boolean | categoryid<br>integer |
|---|---|---|---|---|---|---|
| 53 | 101 | White bread | 5 boxes | 19.99 | false | 5 |
| 54 | 102 | Midnight Mango Fizz | 24-12 oz bottles | 19.00 | false | 1 |
| 55 | 103 | Savory Fire Sauce | 12-550 ml bottles | 10.00 | false | 2 |
| 56 | 1 | Chai | 10 boxes x 20 bags | 18.00 | false | 1 |
| 57 | 2 | Chang | 24 - 12 oz bottles | 19.00 | false | 1 |
| 58 | 24 | Guarana Fantastica | 12 - 355 ml cans | 4.50 | true | 1 |
| 59 | 34 | Sasquatch Ale | 24 - 12 oz bottles | 14.00 | false | 1 |
| 60 | 35 | Steeleye Stout | 24 - 12 oz bottles | 18.00 | false | 1 |
| 61 | 38 | СУДte de Blaye | 12 - 75 cl bottles | 263.50 | false | 1 |
| 62 | 39 | Chartreuse verte | 750 cc per bottle | 18.00 | false | 1 |
| 63 | 43 | Ipoh Coffee | 16 - 500 g tins | 46.00 | false | 1 |
| 64 | 67 | Laughing Lumberjack Lager | 24 - 12 oz bottles | 14.00 | false | 1 |
| 65 | 70 | Outback Lager | 24 - 355 ml bottles | 15.00 | false | 1 |
| 66 | 75 | RhУЖnbrУЄu Klosterbier | 24 - 0.5 l bottles | 7.75 | false | 1 |
| 67 | 76 | LakkalikУЖri | 500 ml | 18.00 | false | 1 |

Total rows: 67　　Query complete 00:00:00.105