DATABASE FOR A RETAIL ORGANIZATION

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INFO6210: DATA MANAGEMENT AND DATABASE DESIGN

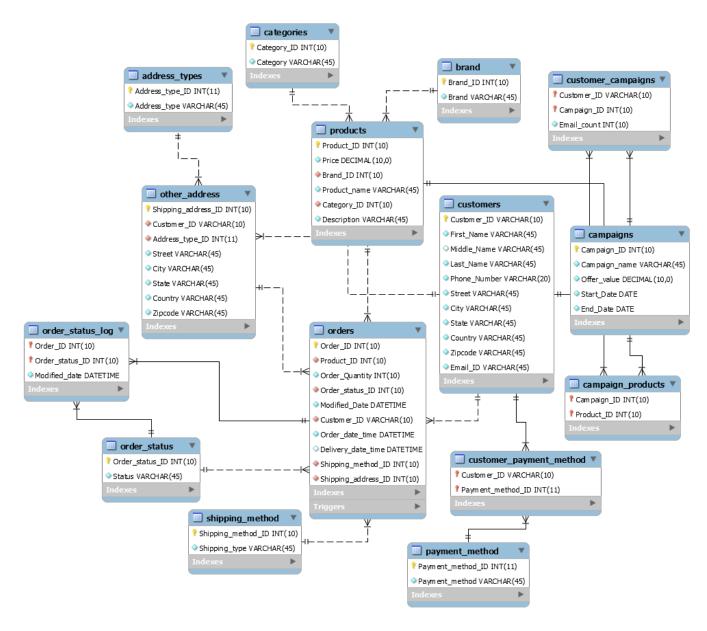
SUMMARY:

The aim of the project is to build a database for a retail organization which has online sales. Different products of different brands are being sold and the customer is given options to make payment using different methods. Also, different coupons with offer values are sent out to specific customers and a track of the number of customers participating in those specific campaigns is stored. In the end, we find out which is the highest selling brand out of the given orders.

BUSINESS REQUIREMENTS:

- Managing an online retail organization's database that sells various products of different brands.
- The shipping date and delivery date of the orders are tracked and stored in a log.
- Different products are grouped in categories and the products are linked to a particular brand.
- One customer can have more than one payment method and can have different shipping address and billing address.
- Different customer campaigns are introduced and the count of the Emails being sent out is stored.
- Also, based on the order records stored in the database the most bought brand by the customers is analyzed.

ENTITY-RELATIONSHIP DIAGRAM:



This diagram represents all the tables involved from placing the order to the order being delivered.

TRIGGERS:

- In this database, two triggers are created. One trigger is used AFTER inserting the records and another one is used AFTER updating the records.
- These changes are triggered to be shown in another table which is the customer log table.

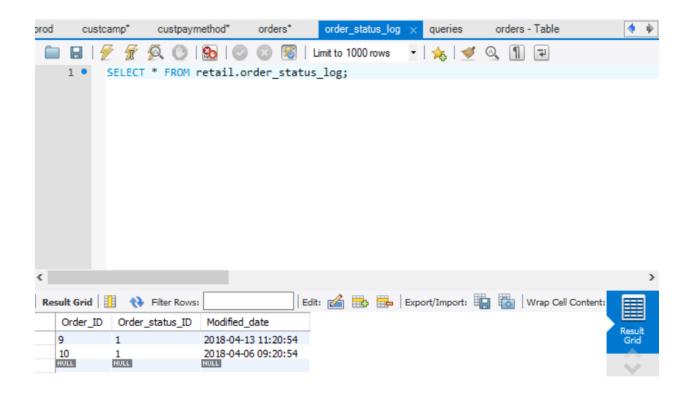
AFTER INSERT TRIGGER:

Query:

As mentioned above, the **AFTER INSERT** trigger is placed in the orders table and the order attributes are updated. The trigger runs and the output of this query appears in the order status log table.

AFTER INSERT TRIGGER:

Output:



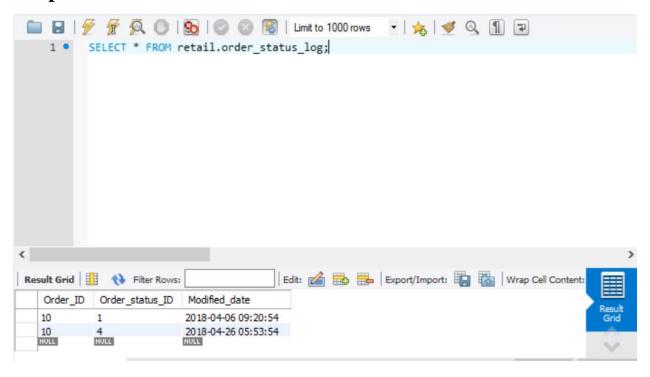
AFTER UPDATE TRIGGER:

```
UPDATE orders
SET Order_status_ID= 4, Modified_Date = current_timestamp()
WHERE Order_ID=10;
```

Here, once the **AFTER UPDATE** trigger is given in the orders table, the update query is written with changes in the order status ID. Once this query runs successfully, the changes are updated in the order status log.

AFTER UPDATE TRIGGER:

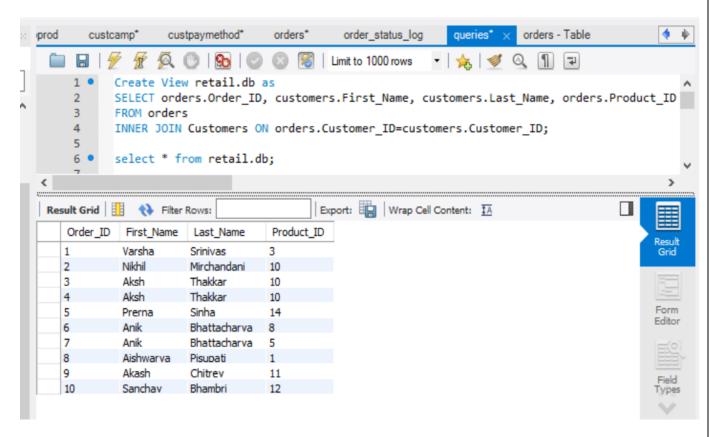
Output:



Here the two values in the result grid represent the changes made in the order status ID, 1 being order placed and 4 being the order is in transit.

The date and time is also mentioned for the convenience of the customer.

CREATING AN INNER JOIN IN A VIEW:



An inner join is created to view which items are being ordered by different customers.

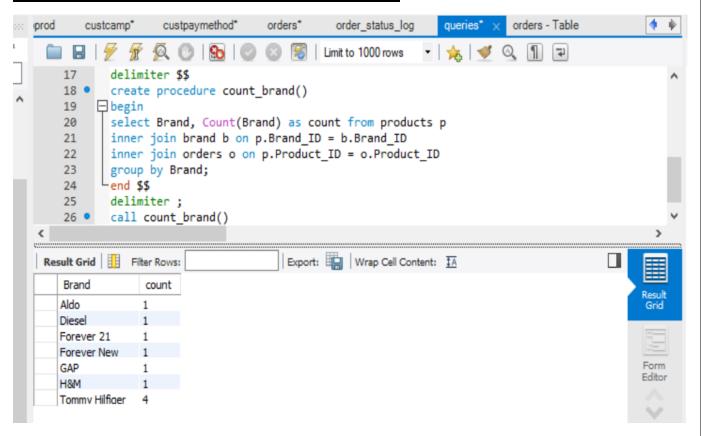
The join is created within a view and the view name is called to view the result of the above written query. A view is used here instead of stored procedure as the data can be fetched from the database without having to call the query multiple times.

CREATING A PROCEDURE TO FIND OUT THE NUMBER OF CUSTOMERS PARTICIPATING IN A CAMPAIGN:



A stored procedure is written to execute a query which will give the value of the customers participating in a particular campaign. Here the number 001 refers to the campaign.

WRITING A QUERY TO FIND OUT THE MOST BOUGHT BRAND FROM THE LIST OF ORDERS:



A stored procedure is created to select the brand that has the maximum sales under different categories. Inner joins are used to join the brand and order tables thereby displaying a count of all the brands placed in the orders. To display the result of the query, the particular stored procedure is called.

CONCLUSION:

Thus, a few of the queries are executed and explained to demonstrate the working of the database. A track of the order status log is maintained using triggers and a sample analytics of the orders records was performed by finding out the most bought brand of products.

APPENDIX:

ATTACHING THE MySQL DUMP FILE:

CREATE DATABASE IF NOT EXISTS 'retail' /*!40100 DEFAULT CHARACTER SET utf8 */; USE `retail`; -- MySQL dump 10.13 Distrib 5.7.17, for Win64 (x86_64) -- Host: 127.0.0.1 Database: retail -- Server version 5.6.39-log /*!40101 SET @OLD CHARACTER SET CLIENT=@@CHARACTER SET CLIENT */; /*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */; /*!40101 SET @OLD COLLATION CONNECTION=@@COLLATION CONNECTION */; /*!40101 SET NAMES utf8 */; /*!40103 SET @OLD_TIME_ZONE=@@TIME_ZONE */; /*!40103 SET TIME_ZONE='+00:00' */; /*!40014 SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0 */; /*!40014 SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0 */; /*!40101 SET @OLD SQL MODE=@@SQL MODE, SQL_MODE='NO_AUTO_VALUE_ON_ZERO' */; /*!40111 SET @OLD_SQL_NOTES=@@SQL_NOTES, SQL_NOTES=0 */; -- Table structure for table `address types`

```
DROP TABLE IF EXISTS `address_types`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `address_types` (
`Address type ID` int(11) unsigned NOT NULL,
`Address_type` varchar(45) NOT NULL,
 PRIMARY KEY (`Address_type_ID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
/*!40101 SET character_set_client = @saved_cs_client */;
-- Dumping data for table `address_types`
LOCK TABLES `address_types` WRITE;
/*!40000 ALTER TABLE `address_types` DISABLE KEYS */;
INSERT INTO `address_types` VALUES (1,'Billing Address'),(2,'Shipping Address');
/*!40000 ALTER TABLE `address_types` ENABLE KEYS */;
UNLOCK TABLES;
-- Table structure for table `brand`
DROP TABLE IF EXISTS `brand`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `brand` (
```

```
`Brand_ID` int(10) unsigned NOT NULL,
 `Brand` varchar(45) NOT NULL,
PRIMARY KEY (`Brand_ID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
/*!40101 SET character set client = @saved cs client */;
-- Dumping data for table `brand`
LOCK TABLES `brand` WRITE;
/*!40000 ALTER TABLE `brand` DISABLE KEYS */;
INSERT INTO `brand` VALUES (1, 'Zara'), (2, 'Mango'), (3, 'H&M'), (4, 'Aldo'), (5, 'Michael
Kors'),(6,'Forever New'),(7,'Forever 21'),(8,'Coach'),(9,'Tommy Hilfiger'),(10,'Victorias
Secret'),(11,'Banana Republic'),(12,'GAP'),(13,'Aeropostale'),(14,'Diesel'),(15,'Calvin Klein');
/*!40000 ALTER TABLE `brand` ENABLE KEYS */;
UNLOCK TABLES;
-- Table structure for table `campaign_products`
DROP TABLE IF EXISTS `campaign products`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `campaign_products` (
`Campaign_ID` int(10) unsigned NOT NULL,
 `Product_ID` int(10) unsigned NOT NULL,
 PRIMARY KEY ('Campaign_ID', 'Product_ID'),
```

```
KEY `ProdId_idx` (`Product_ID`),
 KEY 'ProductId_idx' ('Product_ID'),
 CONSTRAINT `CampId` FOREIGN KEY (`Campaign_ID`) REFERENCES `campaigns`
('Campaign ID') ON DELETE NO ACTION ON UPDATE NO ACTION,
 CONSTRAINT 'Prod' FOREIGN KEY ('Product_ID') REFERENCES 'products'
('Product ID') ON DELETE NO ACTION ON UPDATE NO ACTION
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
/*!40101 SET character set client = @saved cs client */;
-- Dumping data for table `campaign products`
LOCK TABLES `campaign_products` WRITE;
/*!40000 ALTER TABLE `campaign_products` DISABLE KEYS */;
INSERT INTO `campaign_products` VALUES (1,2),(1,3),(1,4),(2,5),(2,6),(2,7);
/*!40000 ALTER TABLE `campaign products` ENABLE KEYS */;
UNLOCK TABLES;
-- Table structure for table `campaigns`
DROP TABLE IF EXISTS `campaigns`;
/*!40101 SET @saved cs client = @@character set client */;
/*!40101 SET character set client = utf8 */;
CREATE TABLE `campaigns` (
 `Campaign_ID` int(10) unsigned NOT NULL,
 `Campaign_name` varchar(45) NOT NULL,
```

```
`Offer_value` decimal(10,0) unsigned NOT NULL,
 `Start_Date` date NOT NULL,
`End_Date` date NOT NULL,
 PRIMARY KEY (`Campaign_ID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
/*!40101 SET character_set_client = @saved_cs_client */;
-- Dumping data for table `campaigns`
LOCK TABLES `campaigns` WRITE;
/*!40000 ALTER TABLE `campaigns` DISABLE KEYS */;
INSERT INTO 'campaigns' VALUES (1,'Campaign Spring',35,'2018-04-29','2018-05-
14'),(2,'Student Discount',45,'2018-05-07','2018-06-01'),(3,'Summer Sale',10,'2018-04-01','2018-
04-30');
/*!40000 ALTER TABLE `campaigns` ENABLE KEYS */;
UNLOCK TABLES;
-- Table structure for table `categories`
DROP TABLE IF EXISTS `categories`;
/*!40101 SET @saved cs client = @@character set client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `categories` (
 `Category_ID` int(10) unsigned NOT NULL,
 `Category` varchar(45) NOT NULL,
```

```
PRIMARY KEY (`Category_ID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
/*!40101 SET character_set_client = @saved_cs_client */;
-- Dumping data for table `categories`
LOCK TABLES `categories` WRITE;
/*!40000 ALTER TABLE `categories` DISABLE KEYS */;
INSERT INTO `categories` VALUES (301, 'Hoodies'), (302, 'Jackets'), (303, 'Jeans'), (304, 'Polo
Shirts'),(305,'Shorts'),(306,'Dresses'),(307,'Trousers'),(308,'Jumpers'),(309,'Shoes'),(310,'Swimwe
ar'),(311,'Sweatshirts'),(312,'Skirts'),(313,'Bags'),(314,'Scarves'),(315,'Hats');
/*!40000 ALTER TABLE `categories` ENABLE KEYS */;
UNLOCK TABLES;
-- Table structure for table `customer_campaigns`
DROP TABLE IF EXISTS `customer_campaigns`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character set client = utf8 */;
CREATE TABLE `customer_campaigns` (
 `Customer_ID` varchar(10) NOT NULL,
`Campaign_ID` int(10) unsigned NOT NULL,
 `Email_count` int(10) unsigned NOT NULL,
 PRIMARY KEY (`Customer_ID`, `Campaign_ID`),
 KEY `CamId_idx` (`Campaign_ID`),
```

```
CONSTRAINT `CamId` FOREIGN KEY (`Campaign_ID`) REFERENCES `campaigns`
(`Campaign_ID`) ON DELETE NO ACTION ON UPDATE NO ACTION,
 CONSTRAINT `CustomId` FOREIGN KEY (`Customer_ID`) REFERENCES `customers`
('Customer ID') ON DELETE NO ACTION ON UPDATE NO ACTION
) ENGINE=InnoDB DEFAULT CHARSET=utf8:
/*!40101 SET character set client = @saved cs client */;
-- Dumping data for table `customer_campaigns`
LOCK TABLES `customer_campaigns` WRITE;
/*!40000 ALTER TABLE `customer campaigns` DISABLE KEYS */;
INSERT INTO `customer_campaigns` VALUES
('C100',1,3),('C100',2,24),('C102',1,20),('C102',2,15),('C103',1,10);
/*!40000 ALTER TABLE `customer_campaigns` ENABLE KEYS */;
UNLOCK TABLES;
-- Table structure for table `customer payment method`
DROP TABLE IF EXISTS `customer_payment_method`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `customer payment method` (
 `Customer_ID` varchar(10) NOT NULL,
 `Payment_method_ID` int(11) unsigned NOT NULL,
 PRIMARY KEY (`Customer_ID`, `Payment_method_ID`),
```

```
UNIQUE KEY 'Customer ID UNIQUE' ('Customer ID'),
 KEY `payid_idx` (`Payment_method_ID`),
 CONSTRAINT `custtid` FOREIGN KEY (`Customer ID`) REFERENCES `customers`
('Customer ID') ON DELETE NO ACTION ON UPDATE NO ACTION,
 CONSTRAINT `payid` FOREIGN KEY (`Payment_method_ID`) REFERENCES
'payment method' ('Payment method ID') ON DELETE NO ACTION ON UPDATE NO
ACTION
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
/*!40101 SET character set client = @saved cs client */;
-- Dumping data for table `customer_payment_method`
LOCK TABLES `customer_payment_method` WRITE;
/*!40000 ALTER TABLE `customer_payment_method` DISABLE KEYS */;
INSERT INTO `customer_payment_method` VALUES
('C100',1001),('C106',1001),('C105',1002),('C102',1003),('C104',1003),('C103',1004),('C107',100
4);
/*!40000 ALTER TABLE `customer_payment_method` ENABLE KEYS */;
UNLOCK TABLES:
-- Table structure for table `customers`
DROP TABLE IF EXISTS 'customers';
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `customers` (
```

```
`Customer ID` varchar(10) NOT NULL,
 `First_Name` varchar(45) NOT NULL,
 `Middle_Name` varchar(45) DEFAULT NULL,
 `Last_Name` varchar(45) NOT NULL,
 'Phone Number' varchar(20) NOT NULL,
 `Street` varchar(45) NOT NULL,
 `City` varchar(45) NOT NULL,
 `State` varchar(45) NOT NULL,
 `Country` varchar(45) NOT NULL,
 `Zipcode` varchar(45) NOT NULL,
 `Email_ID` varchar(45) NOT NULL,
 PRIMARY KEY (`Customer_ID`),
 UNIQUE KEY `Customer_ID_UNIQUE` (`Customer_ID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
/*!40101 SET character_set_client = @saved_cs_client */;
-- Dumping data for table `customers`
LOCK TABLES `customers` WRITE;
/*!40000 ALTER TABLE `customers` DISABLE KEYS */;
INSERT INTO `customers` VALUES ('C100', 'Varsha', NULL, 'Srinivas', '8573028064', '75
Peterborough
Street', 'Boston', 'Massachusetts', 'USA', '2115', 'srinivas.v@husky.neu.edu'), ('C101', 'Nikhil', NULL, '
Mirchandani', '6175300754', '1027 Tremont
Street', 'Boston', 'Massachusetts', 'USA', '2111', 'mirchi.n@husky.neu.edu'), ('C102', 'Aksh', NULL, 'Th
akkar', '8578004904', '1027 Tremont
Street', 'Boston', 'Massachusetts', 'USA', '2111', 'thakkar.ak@husky.neu.edu'), ('C103', 'Adarsh', NULL
,'Ravi','8579284227','170 Parker Hill
Avenue', 'Boston', 'Massachusetts', 'USA', '2120', 'ravi.ad@husky.neu.edu'), ('C104', 'Pallav', NULL, 'C
```

```
houdhary','8579284248','170 Parker Hill
Avenue', 'Boston', 'Massachusetts', 'USA', '2120', 'chou.pa@husky.neu.edu'), ('C105', 'Anik', NULL, 'B
hattacharya','6179910489','170 Parker Hill
Avenue', 'Boston', 'Massachusetts', 'USA', '2120', 'bhat.anik@husky.neu.edu'), ('C106', 'Dhrumil', NU
LL, 'Shah', '8578004902', '1027 Tremont
Street', 'Boston', 'Massachusetts', 'USA', '2111', 'shah.dhrum@husky.neu.edu'), ('C107', 'Taashi', NUL
L,'Khurana','6175046789','11 Tetlow
Street', 'Boston', 'Massachusetts', 'USA', '2115', 'khurana.t@husky.neu.edu'), ('C108', 'Aishwarya', NU
LL, 'Pisupati', '6176719057', '11 Tetlow
Street', 'Boston', 'Massachusetts', 'USA', '2115', 'pisupati.aish@husky.neu.edu'), ('C109', 'Akash', NUL
L,'Chitrey','617111229','1027 Tremont
Street', 'Boston', 'Massachusetts', 'USA', '2111', 'chitrey.ak@husky.neu.edu'), ('C110', 'Prerna', NULL, '
Sinha', '2098764567', '33 Iroqouis
Street', 'Boston', 'Massachusetts', 'USA', '2113', 'sinha.pr@husky.neu.edu'), ('C111', 'Sanchay', NULL, '
Bhambri', '287654387', '33 Iroqouis
Street', 'Boston', 'Massachusetts', 'USA', '2113', 'bhambri.sa@husky.neu.edu'), ('C112', 'Thejas', NULL
,'Sampath','222354387','23 Allston
Street', 'Boston', 'Massachusetts', 'USA', '1234', 'sampath.thej@husky.neu.edu');
/*!40000 ALTER TABLE `customers` ENABLE KEYS */;
UNLOCK TABLES;
-- Temporary view structure for view `db`
DROP TABLE IF EXISTS `db`;
/*!50001 DROP VIEW IF EXISTS `db`*/;
SET @saved_cs_client = @@character_set_client;
SET character_set_client = utf8;
/*!50001 CREATE VIEW `db` AS SELECT
1 AS `Order_ID`,
1 AS `First_Name`,
1 AS `Last_Name`,
```

1 AS `Product ID`*/;

```
SET character_set_client = @saved_cs_client;
-- Temporary view structure for view `db_retail`
DROP TABLE IF EXISTS `db_retail`;
/*!50001 DROP VIEW IF EXISTS `db_retail`*/;
SET @saved_cs_client = @@character_set_client;
SET character_set_client = utf8;
/*!50001 CREATE VIEW `db_retail` AS SELECT
1 AS `Order_ID`,
1 AS `First_Name`,
1 AS `Last_Name`,
1 AS `Product_ID`*/;
SET character_set_client = @saved_cs_client;
-- Table structure for table `order_status`
DROP TABLE IF EXISTS `order_status`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `order_status` (
 `Order_status_ID` int(10) unsigned NOT NULL AUTO_INCREMENT,
 `Status` varchar(45) NOT NULL,
PRIMARY KEY (`Order_status_ID`)
```

```
) ENGINE=InnoDB AUTO INCREMENT=6 DEFAULT CHARSET=utf8;
/*!40101 SET character_set_client = @saved_cs_client */;
-- Dumping data for table `order status`
LOCK TABLES `order_status` WRITE;
/*!40000 ALTER TABLE `order_status` DISABLE KEYS */;
INSERT INTO `order_status` VALUES (1, 'Order Placed'), (2, 'Order Packed'), (3, 'Shipped'), (4, 'In
Transit'),(5,'Delivered');
/*!40000 ALTER TABLE `order_status` ENABLE KEYS */;
UNLOCK TABLES;
-- Table structure for table `order status log`
DROP TABLE IF EXISTS `order_status_log`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character set client = utf8 */;
CREATE TABLE `order_status_log` (
 `Order_ID` int(10) unsigned NOT NULL,
 `Order_status_ID` int(10) unsigned NOT NULL,
 `Modified_date` datetime NOT NULL,
 PRIMARY KEY ('Order_ID', 'Order_status_ID'),
 KEY `ordstid_idx` (`Order_status_ID`),
 CONSTRAINT `ordid` FOREIGN KEY (`Order_ID`) REFERENCES `orders` (`Order_ID`)
ON DELETE NO ACTION ON UPDATE NO ACTION.
```

```
CONSTRAINT `ordstid` FOREIGN KEY (`Order status ID`) REFERENCES `order status`
(`Order_status_ID`) ON DELETE NO ACTION ON UPDATE NO ACTION
) ENGINE=InnoDB DEFAULT CHARSET=utf8:
/*!40101 SET character set client = @saved cs client */;
-- Dumping data for table `order_status_log`
LOCK TABLES 'order status log' WRITE;
/*!40000 ALTER TABLE `order_status_log` DISABLE KEYS */;
INSERT INTO `order_status_log` VALUES (3,1,'2018-04-25 00:00:00'),(3,2,'2018-04-26
00:00:00'),(4,1,'2018-04-25 11:23:54'),(4,2,'2018-04-26 01:03:34'),(5,2,'2018-04-25
08:23:54'),(5.3,'2018-04-26 03:41:30'),(6.1,'2018-04-11 02:20:54'),(7.1,'2018-04-09
05:20:54'),(8,1,'2018-04-20 07:20:00'),(9,1,'2018-04-13 11:20:54'),(10,1,'2018-04-06
09:20:54'),(10,4,'2018-04-26 05:53:54');
/*!40000 ALTER TABLE `order status log` ENABLE KEYS */;
UNLOCK TABLES;
-- Table structure for table `orders`
DROP TABLE IF EXISTS `orders`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character set client = utf8 */;
CREATE TABLE `orders` (
`Order_ID` int(10) unsigned NOT NULL,
 `Product_ID` int(10) unsigned NOT NULL,
 `Order_Quantity` int(10) unsigned NOT NULL,
```

```
'Order status ID' int(10) unsigned NOT NULL,
 'Modified Date' datetime NOT NULL,
 `Customer_ID` varchar(10) NOT NULL,
 `Order_date_time` datetime NOT NULL,
 'Delivery date time' datetime DEFAULT NULL,
 `Shipping_method_ID` int(10) unsigned NOT NULL,
 `Shipping address ID` int(10) unsigned NOT NULL,
 PRIMARY KEY (`Order_ID`),
 KEY `OrdID_idx` (`Order_ID`),
 KEY 'ProdID_idx' ('Product_ID'),
 KEY `OrderStatID_idx` (`Order_status_ID`),
 KEY `CusID_idx` (`Customer_ID`),
 KEY `ShipID_idx` (`Shipping_method_ID`),
 KEY `ShipAddID_idx` (`Shipping_address_ID`),
 CONSTRAINT `CusID` FOREIGN KEY (`Customer_ID`) REFERENCES `customers`
('Customer ID') ON DELETE NO ACTION ON UPDATE NO ACTION,
 CONSTRAINT `OrderStatID` FOREIGN KEY (`Order status ID`) REFERENCES
`order_status` (`Order_status_ID`) ON DELETE NO ACTION ON UPDATE NO ACTION,
 CONSTRAINT `ProdID` FOREIGN KEY (`Product_ID`) REFERENCES `products`
('Product ID') ON DELETE NO ACTION ON UPDATE NO ACTION,
 CONSTRAINT `ShipAddID` FOREIGN KEY (`Shipping_address_ID`) REFERENCES
`other_address` (`Shipping_address_ID`) ON DELETE NO ACTION ON UPDATE NO
ACTION,
 CONSTRAINT `ShipID` FOREIGN KEY (`Shipping_method_ID`) REFERENCES
`shipping_method` (`Shipping_method_ID`) ON DELETE NO ACTION ON UPDATE NO
ACTION
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
/*!40101 SET character_set_client = @saved_cs_client */;
-- Dumping data for table `orders`
```

--

```
LOCK TABLES `orders` WRITE;
/*!40000 ALTER TABLE `orders` DISABLE KEYS */;
INSERT INTO `orders` VALUES (1,3,4,1,'2018-04-25 00:00:00','C100','2018-04-24
11:23:25', NULL, 2002, 1), (2,10,1,1,'2018-04-20 00:00:00', 'C101', '2018-04-21
10:35:45', NULL, 2001, 2), (3, 10, 1, 2, '2018-04-26 00:35:04', 'C102', '2018-04-29
10:35:45', NULL, 2001, 2), (4,10,1,2,'2018-04-26 01:03:34', 'C102', '2018-04-29
10:35:45', NULL, 2001, 2), (5, 14, 1, 3, '2018-04-26 03:41:30', 'C110', '2018-04-29
11:35:45',NULL,2001,2),(6,8,4,1,'2018-04-11 02:20:54','C105','2018-04-17
08:35:45', NULL, 2004, 2), (7,5,10,1,'2018-04-09 05:20:54', 'C105', '2018-04-11
10:35:45', NULL, 2001, 1), (8,1,2,1,'2018-04-20 07:20:00', 'C108', '2018-04-23
04:54:45', NULL, 2004, 2), (9, 11, 3, 1, '2018-04-13 11:20:54', 'C109', '2018-04-15
01:15:45', NULL, 2002, 2), (10, 12, 6, 4, '2018-04-26 05:53:54', 'C111', '2018-04-15
12:15:45',NULL,2003,2);
/*!40000 ALTER TABLE `orders` ENABLE KEYS */:
UNLOCK TABLES;
/*!50003 SET @saved cs client = @@character set client */;
/*!50003 SET @saved_cs_results = @@character_set_results */;
/*!50003 SET @saved_col_connection = @@collation_connection */;
/*!50003 SET character set client = utf8 */;
/*!50003 SET character set results = utf8 */;
/*!50003 SET collation connection = utf8 general ci */;
/*!50003 SET @saved_sql_mode
                                = @ @ sql mode */;
/*!50003 SET sql mode
'STRICT_TRANS_TABLES,NO_AUTO_CREATE_USER,NO_ENGINE_SUBSTITUTION' */
DELIMITER:
/*!50003 CREATE*/ /*!50017 DEFINER=`root`@`localhost`*/ /*!50003 TRIGGER
`retail`.`orders_AFTER_INSERT` AFTER INSERT ON `orders` FOR EACH ROW
BEGIN
INSERT INTO order_status_log VALUES(new.Order_ID, new.Order_status_ID,
new.Modified date);
```

```
END */;;
DELIMITER;
/*!50003 SET sql_mode
                            = @ saved_sql_mode */;
/*!50003 SET character_set_client = @saved_cs_client */;
/*!50003 SET character set results = @saved cs results */;
/*!50003 SET collation_connection = @saved_col_connection */;
/*!50003 SET @saved cs client = @@character set client */;
/*!50003 SET @saved_cs_results = @@character_set_results */;
/*!50003 SET @saved_col_connection = @@collation_connection */;
/*!50003 SET character_set_client = utf8 */;
/*!50003 SET character_set_results = utf8 */;
/*!50003 SET collation_connection = utf8_general_ci */;
/*!50003 SET @saved sql mode
                                = @ @ sql mode */;
/*!50003 SET sql_mode
'STRICT_TRANS_TABLES,NO_AUTO_CREATE_USER,NO_ENGINE_SUBSTITUTION' */
DELIMITER;;
/*!50003 CREATE*/ /*!50017 DEFINER=`root`@`localhost`*/ /*!50003 TRIGGER
`retail`.`orders_AFTER_UPDATE` AFTER UPDATE ON `orders` FOR EACH ROW
BEGIN
INSERT INTO order_status_log VALUES(new.Order_ID, new.Order_status_ID,
new.Modified date);
END */;;
DELIMITER:
/*!50003 SET sql mode
                            = @saved sql mode */;
/*!50003 SET character_set_client = @saved_cs_client */;
/*!50003 SET character_set_results = @saved_cs_results */;
/*!50003 SET collation_connection = @saved_col_connection */;
```

--

```
-- Table structure for table `other address`
DROP TABLE IF EXISTS `other_address`;
/*!40101 SET @saved cs client = @@character set client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `other_address` (
 `Shipping_address_ID` int(10) unsigned NOT NULL,
 `Customer_ID` varchar(10) NOT NULL,
`Address_type_ID` int(11) unsigned NOT NULL,
 `Street` varchar(45) NOT NULL,
 'City' varchar(45) NOT NULL,
 `State` varchar(45) NOT NULL,
 `Country` varchar(45) NOT NULL,
 `Zipcode` varchar(45) NOT NULL,
 PRIMARY KEY (`Shipping_address_ID`),
 KEY `CustID_idx` (`Customer_ID`),
 KEY `AddTypeId_idx` (`Address_type_ID`),
 CONSTRAINT `AddTypeId` FOREIGN KEY (`Address_type_ID`) REFERENCES
`address_types` (`Address_type_ID`) ON DELETE NO ACTION ON UPDATE NO ACTION,
 CONSTRAINT `CustID` FOREIGN KEY (`Customer ID`) REFERENCES `customers`
(`Customer_ID`) ON DELETE NO ACTION ON UPDATE NO ACTION
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
/*!40101 SET character_set_client = @saved_cs_client */;
-- Dumping data for table `other_address`
```

```
LOCK TABLES `other address` WRITE;
/*!40000 ALTER TABLE `other_address` DISABLE KEYS */;
INSERT INTO `other_address` VALUES (1,'C101',1,'1027 Tremont
Street', 'Boston', 'Massachusetts', 'USA', '2111'), (2, 'C101', 2, '1027 Tremont
Street', 'Boston', 'Massachusetts', 'USA', '2111'), (3, 'C102', 2, '170 Parker Hill
Avenue', 'Boston', 'Massachusetts', 'USA', '2213'), (4, 'C102', 2, '11 Tetlow
Street', 'Boston', 'Massachusetts', 'USA', '2115');
/*!40000 ALTER TABLE `other_address` ENABLE KEYS */;
UNLOCK TABLES;
-- Table structure for table `payment method`
DROP TABLE IF EXISTS `payment_method`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `payment_method` (
 `Payment_method_ID` int(11) unsigned NOT NULL AUTO_INCREMENT,
`Payment_method` varchar(45) NOT NULL,
 PRIMARY KEY (`Payment_method_ID`)
) ENGINE=InnoDB AUTO_INCREMENT=1005 DEFAULT CHARSET=utf8;
/*!40101 SET character set client = @saved cs client */;
-- Dumping data for table `payment_method`
LOCK TABLES `payment_method` WRITE;
/*!40000 ALTER TABLE `payment_method` DISABLE KEYS */;
```

```
INSERT INTO 'payment_method' VALUES (1001, 'Credit Card'), (1002, 'Debit
Card'),(1003,'Cash'),(1004,'Bank Account');
/*!40000 ALTER TABLE `payment_method` ENABLE KEYS */;
UNLOCK TABLES;
-- Table structure for table `products`
DROP TABLE IF EXISTS 'products';
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `products` (
 `Product ID` int(10) unsigned NOT NULL AUTO INCREMENT,
 'Price' decimal(10,0) unsigned NOT NULL,
 `Brand ID` int(10) unsigned NOT NULL,
 `Product_name` varchar(45) NOT NULL,
 `Category_ID` int(10) unsigned NOT NULL,
 `Description` varchar(45) NOT NULL,
 PRIMARY KEY (`Product_ID`),
 KEY `CatID idx` (`Category ID`),
 KEY `BranID_idx` (`Brand_ID`),
 CONSTRAINT `BranID` FOREIGN KEY (`Brand_ID`) REFERENCES `brand` (`Brand_ID`)
ON DELETE NO ACTION ON UPDATE NO ACTION.
 CONSTRAINT `CatID` FOREIGN KEY (`Category_ID`) REFERENCES `categories`
('Category ID') ON DELETE NO ACTION ON UPDATE NO ACTION
) ENGINE=InnoDB AUTO_INCREMENT=16 DEFAULT CHARSET=utf8;
/*!40101 SET character set client = @saved cs client */;
```

```
-- Dumping data for table `products`
LOCK TABLES `products` WRITE;
/*!40000 ALTER TABLE `products` DISABLE KEYS */;
INSERT INTO 'products' VALUES (1,20,12, 'Knee length shorts',305, 'Patterned knee length
shorts'),(2,24,9,'Shoulder Bag',313,'Suede Hobo Bag'),(3,50,3,'Skater Dress',306,'Floral Skater
Dress'),(4,30,11,'Pumps',309,'Patterned Pumps'),(5,40,14,'Captioned Tee',304,'Heart Crop
Tee'),(6,15,5,'Skater Dress',301,'Floral Skater Dress'),(7,65,6,'Trench',302,'Knee-Length
Trenchcoat'),(8,55,7,' Bootcut Jeans',303, 'Patchwork Jeans'),(9,28,8, 'Jumper',308, 'Embellished
Jumper'),(10,70,9,'Sweats',311,'Back Ribbed Sweatshirt'),(11,70,9,'Swimsuit',310,'Polka Dot
Swimsuit'),(12,10,4,'Scarves',314,'Satin Scarf'),(13,10,9,'Wedges',309,'Embellished
wedges'),(14,100,6,'Duster',302,'Belted Duster with Fluted Sleeves'),(15,70,11,'Skirts',312,'Maxi
Skirt');
/*!40000 ALTER TABLE `products` ENABLE KEYS */;
UNLOCK TABLES;
-- Temporary view structure for view `retail`
DROP TABLE IF EXISTS 'retail';
/*!50001 DROP VIEW IF EXISTS `retail`*/;
SET @saved_cs_client = @ @character_set_client;
SET character_set_client = utf8;
/*!50001 CREATE VIEW `retail` AS SELECT
1 AS 'Order_ID',
1 AS `First_Name`,
1 AS `Last_Name`,
```

1 AS `Order_date_time`*/;

```
SET character_set_client = @saved_cs_client;
-- Temporary view structure for view `retail_db`
DROP TABLE IF EXISTS `retail_db`;
/*!50001 DROP VIEW IF EXISTS `retail_db`*/;
SET @saved_cs_client = @@character_set_client;
SET character_set_client = utf8;
/*!50001 CREATE VIEW `retail_db` AS SELECT
1 AS `Order_ID`,
1 AS `First_Name`,
1 AS `Last_Name`,
1 AS `Order_date_time`*/;
SET character_set_client = @saved_cs_client;
-- Table structure for table `shipping_method`
DROP TABLE IF EXISTS `shipping_method`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `shipping_method` (
 `Shipping_method_ID` int(10) unsigned NOT NULL,
 `Shipping_type` varchar(45) NOT NULL,
 PRIMARY KEY (`Shipping_method_ID`)
```

```
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
/*!40101 SET character_set_client = @saved_cs_client */;
-- Dumping data for table 'shipping method'
LOCK TABLES `shipping_method` WRITE;
/*!40000 ALTER TABLE `shipping_method` DISABLE KEYS */;
INSERT INTO `shipping_method` VALUES
(2001, 'FedEx'), (2002, 'BlueDart'), (2003, 'DHL'), (2004, 'USPS'), (2005, 'RoyalMail');
/*!40000 ALTER TABLE `shipping_method` ENABLE KEYS */;
UNLOCK TABLES;
-- Dumping events for database 'retail'
-- Dumping routines for database 'retail'
/*!50003 DROP PROCEDURE IF EXISTS `camp_cust_count` */;
/*!50003 SET @saved_cs_client = @@character_set_client */;
/*!50003 SET @saved_cs_results = @@character_set_results */;
/*!50003 SET @saved_col_connection = @@collation_connection */;
/*!50003 SET character_set_client = utf8 */;
/*!50003 SET character set results = utf8 */;
/*!50003 SET collation_connection = utf8_general_ci */;
/*!50003 SET @saved_sql_mode = @@sql_mode */;
```

```
/*!50003 SET sql mode
'STRICT_TRANS_TABLES,NO_AUTO_CREATE_USER,NO_ENGINE_SUBSTITUTION' */
DELIMITER;;
CREATE DEFINER='root'@'localhost' PROCEDURE 'camp_cust_count'(CampaignID int)
begin
Select count(*)as count from customer_campaigns where Campaign_ID= CampaignID;
end;;
DELIMITER;
/*!50003 SET sql_mode
                            = @ saved_sql_mode */;
/*!50003 SET character set client = @saved cs client */;
/*!50003 SET character_set_results = @saved_cs_results */;
/*!50003 SET collation connection = @saved col connection */;
/*!50003 DROP PROCEDURE IF EXISTS `camp_cus_count` */;
/*!50003 SET @saved_cs_client = @@character_set_client */;
/*!50003 SET @saved_cs_results = @@character_set_results */;
/*!50003 SET @saved col connection = @@collation connection */;
/*!50003 SET character_set_client = utf8 */;
/*!50003 SET character set results = utf8 */;
/*!50003 SET collation_connection = utf8_general_ci */;
/*!50003 SET @saved_sql_mode
                                = @ @ sql mode */;
/*!50003 SET sql_mode
'STRICT_TRANS_TABLES,NO_AUTO_CREATE_USER,NO_ENGINE_SUBSTITUTION' */
DELIMITER;;
CREATE DEFINER=`root`@`localhost` PROCEDURE `camp_cus_count`(CampaignID int)
begin
Select count(*)as count from customer_campaigns where Campaign_ID= CampaignID;
end;;
DELIMITER;
```

```
/*!50003 SET sql mode
                             = @saved sql mode */;
/*!50003 SET character_set_client = @saved_cs_client */;
/*!50003 SET character_set_results = @saved_cs_results */;
/*!50003 SET collation_connection = @saved_col_connection */;
/*!50003 DROP PROCEDURE IF EXISTS `count brand` */;
/*!50003 SET @saved_cs_client = @@character_set_client */;
/*!50003 SET @saved cs results = @@character set results */;
/*!50003 SET @saved_col_connection = @@collation_connection */;
/*!50003 SET character_set_client = utf8 */;
/*!50003 SET character_set_results = utf8 */;
/*!50003 SET collation_connection = utf8_general_ci */;
/*!50003 SET @saved sql mode
                                 = @ @ sql mode */;
/*!50003 SET sql mode
'STRICT TRANS TABLES,NO AUTO CREATE USER,NO ENGINE SUBSTITUTION' */
DELIMITER;;
CREATE DEFINER=`root`@`localhost` PROCEDURE `count brand`()
begin
select Brand, Count(Brand) as count from products p
inner join brand b on p.Brand_ID = b.Brand_ID
inner join orders o on p.Product_ID = o.Product_ID
group by Brand;
end ;;
DELIMITER:
                             = @saved sql mode */;
/*!50003 SET sql mode
/*!50003 SET character set client = @saved cs client */;
/*!50003 SET character_set_results = @saved_cs_results */;
/*!50003 SET collation_connection = @saved_col_connection */;
/*!50003 DROP PROCEDURE IF EXISTS `Customers_information` */;
```

```
/*!50003 SET @saved cs client = @@character set client */;
/*!50003 SET @saved_cs_results = @@character_set_results */;
/*!50003 SET @saved_col_connection = @@collation_connection */;
/*!50003 SET character_set_client = utf8 */;
/*!50003 SET character set results = utf8 */;
/*!50003 SET collation_connection = utf8_general_ci */;
/*!50003 SET @saved sql mode = @@sql mode */;
/*!50003 SET sql_mode
'STRICT_TRANS_TABLES,NO_AUTO_CREATE_USER,NO_ENGINE_SUBSTITUTION' */
DELIMITER;
CREATE DEFINER=`root`@`localhost` PROCEDURE `Customers information` (Customer ID
varchar(10), First_Name varchar(45), Middle_Name varchar(45),
      Last_Name varchar(45), Phone_Number varchar(20),
      Street varchar(45), City varchar(45), State varchar(45), Country varchar(45), Zipcode
varchar(45),
      Email ID varchar(45))
BEGIN
insert into customers values (Customer_ID, First_Name, Middle_Name,
      Last_Name, Phone_Number,
      Street, City, State, Country, Zipcode,
      Email ID);
END;;
DELIMITER;
/*!50003 SET sql mode
                             = @ saved sql mode */;
/*!50003 SET character_set_client = @saved_cs_client */;
/*!50003 SET character_set_results = @saved_cs_results */;
/*!50003 SET collation_connection = @saved_col_connection */;
```

```
-- Final view structure for view 'db'
/*!50001 DROP VIEW IF EXISTS `db`*/;
/*!50001 SET @saved cs client
                                   = @@character set client */;
/*!50001 SET @saved cs results
                                   = @ @character_set_results */;
/*!50001 SET @saved col connection = @@collation connection */;
/*!50001 SET character_set_client
                                  = utf8 */;
/*!50001 SET character_set_results = utf8 */;
/*!50001 SET collation_connection
                                   = utf8_general_ci */;
/*!50001 CREATE ALGORITHM=UNDEFINED */
/*!50013 DEFINER=`root`@`localhost` SOL SECURITY DEFINER */
/*!50001 VIEW `db` AS select `orders`.`Order_ID` AS `Order_ID`, `customers`.`First_Name`
AS `First Name`, `customers`.`Last Name` AS `Last Name`, `orders`.`Product ID` AS
`Product ID` from (`orders` join `customers` on((`orders`.`Customer ID` =
`customers`.`Customer_ID`))) */;
/*!50001 SET character_set_client = @saved_cs_client */;
/*!50001 SET character_set_results = @saved_cs_results */;
/*!50001 SET collation_connection = @saved_col_connection */;
-- Final view structure for view `db_retail`
/*!50001 DROP VIEW IF EXISTS `db_retail`*/;
/*!50001 SET @saved cs client
                                   = @@character set client */;
/*!50001 SET @saved_cs_results = @@character_set_results */;
/*!50001 SET @saved col connection = @@collation connection */;
/*!50001 SET character_set_client
                                  = utf8 */;
```

```
/*!50001 SET character set results = utf8 */;
/*!50001 SET collation_connection = utf8_general_ci */;
/*!50001 CREATE ALGORITHM=UNDEFINED */
/*!50013 DEFINER=`root`@`localhost` SQL SECURITY DEFINER */
/*!50001 VIEW `db retail` AS select `orders`.`Order ID` AS
`Order_ID`,`customers`.`First_Name` AS `First_Name`,`customers`.`Last_Name` AS
`Last_Name`,`orders`.`Product_ID` AS `Product_ID` from (`orders` join `customers`
on(('orders'.'Customer ID' = 'customers'.'Customer ID'))) */;
/*!50001 SET character set client = @saved cs client */;
/*!50001 SET character_set_results = @saved_cs_results */;
/*!50001 SET collation connection = @saved col connection */;
-- Final view structure for view `retail`
/*!50001 DROP VIEW IF EXISTS `retail`*/;
/*!50001 SET @saved_cs_client = @@character_set_client */;
/*!50001 SET @saved_cs_results
                                   = @ @character_set_results */;
/*!50001 SET @saved col connection = @@collation connection */;
/*!50001 SET character_set_client = utf8 */;
/*!50001 SET character set results = utf8 */;
/*!50001 SET collation_connection
                                   = utf8_general_ci */;
/*!50001 CREATE ALGORITHM=UNDEFINED */
/*!50013 DEFINER=`root`@`localhost` SQL SECURITY DEFINER */
/*!50001 VIEW `retail` AS select `orders`.`Order ID` AS `Order ID`, `customers`.`First Name`
AS `First_Name`, `customers`.`Last_Name` AS `Last_Name`, `orders`.`Order_date_time` AS
`Order_date_time` from (`orders` join `customers` on((`orders`.`Customer_ID` =
`customers`.`Customer ID`))) */;
/*!50001 SET character set client = @saved cs client */;
```

```
/*!50001 SET character set results = @saved cs results */;
/*!50001 SET collation_connection = @saved_col_connection */;
-- Final view structure for view 'retail db'
/*!50001 DROP VIEW IF EXISTS `retail_db`*/;
/*!50001 SET @saved_cs_client
                                 = @ @character set client */;
/*!50001 SET @saved_cs_results = @@character_set_results */;
/*!50001 SET @saved col connection = @@collation connection */;
/*!50001 SET character set client
                                = utf8 */;
/*!50001 SET character_set_results = utf8 */;
/*!50001 SET collation_connection = utf8_general_ci */;
/*!50001 CREATE ALGORITHM=UNDEFINED */
/*!50013 DEFINER=`root`@`localhost` SQL SECURITY DEFINER */
/*!50001 VIEW `retail_db` AS select `orders`.`Order_ID` AS
`Order_ID`,`customers`.`First_Name` AS `First_Name`,`customers`.`Last_Name` AS
`Last Name`,`orders`.`Order date time` AS `Order date time` from (`orders` join `customers`
on(('orders'.'Customer_ID' = 'customers'.'Customer_ID'))) */;
/*!50001 SET character_set_client = @saved_cs_client */;
/*!50001 SET character set results = @saved cs results */;
/*!50001 SET collation_connection = @saved_col_connection */;
/*!40103 SET TIME ZONE=@OLD TIME ZONE */;
/*!40101 SET SQL MODE=@OLD SQL MODE */;
/*!40014 SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS */;
/*!40014 SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS */;
/*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;
```

