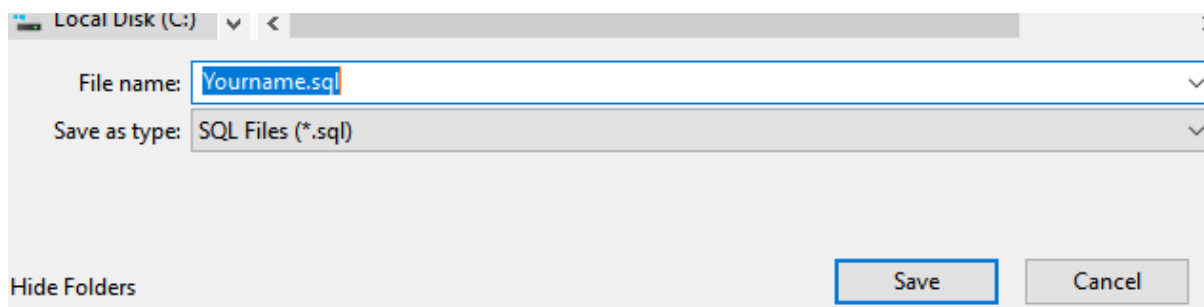


How to save files

MySQL(.SQL): After executing all the commands/answers, click on the file menu on the top left and save as **Yourname.sql**.

As shown below:



Order Management Schema Details

PART 1

This document captures the scenario of simple order management functionality of an online retail store.

Typical purchase scenario: A **customer** places an **order** for N **products** specifying quantity for each line **item** of the order. Every product belongs to a **product class** (or category). All products ordered in one order, are shipped to customer's **address** (in India or outside) by a **shipper** in one shipment. Order can be paid using either Cash, Credit Card or Net Banking.

There can be customers who may not have placed any order. Few customers would have cancelled their orders (As a whole order, no cancellation of individual item allowed). Few orders may be 'In process' status. There can also be products that were never purchased.

Shippers use optimum sized **cartons** (boxes) to ship an order, based on the total volume of all products and their quantities. Dimensions of each product (L, W, H) is also stored in the database. To keep it simple, all products of an order are put in one single appropriately sized carton for shipping.

You are hired by a chain of online retail stores "**Reliant retail limited**". They provided you with "**orders**" database and seek answers to the following queries as the results from these queries will help the company in making data driven decisions that will impact the overall growth of the online retail store.

ER Diagram

online_customer
CUSTOMER_ID INT
CUSTOMER_FNAME VARCHAR(20)
CUSTOMER_LNAME VARCHAR(20)
CUSTOMER_EMAIL VARCHAR(30)
CUSTOMER_PHONE BIGINT
ADDRESS_ID INT
CUSTOMER_CREATION_DATE DATE
CUSTOMER_USERNAME VARCHAR(20)
CUSTOMER_GENDER CHAR(1)
Indexes

address
ADDRESS_ID INT
ADDRESS_LINE1 VARCHAR(50)
ADDRESS_LINE2 VARCHAR(50)
CITY VARCHAR(30)
STATE VARCHAR(30)
PIN CODE INT
COUNTRY VARCHAR(30)
Indexes

shipper
SHIPPER_ID INT
SHIPPER_NAME VARCHAR(30)
SHIPPER_PHONE BIGINT
SHIPPER_ADDRESS INT
Indexes

product
PRODUCT_ID INT
PRODUCT_DESC VARCHAR(60)
PRODUCT_CLASS_CODE INT
PRODUCT_PRICE DECIMAL(12,2)
PRODUCT_QUANTITY_AVAIL INT
LEN INT
WIDTH INT
HEIGHT INT
WEIGHT DECIMAL(10,4)
Indexes

order_header
ORDER_ID INT
CUSTOMER_ID INT
ORDER_DATE DATE
ORDER_STATUS VARCHAR(10)
PAYMENT_MODE VARCHAR(20)
PAYMENT_DATE DATE
ORDER_SHIPMENT_DATE DATE
SHIPPER_ID INT
Indexes

order_items
ORDER_ID INT
PRODUCT_ID INT
PRODUCT_QUANTITY INT
Indexes

carton
CARTON_ID INT
LEN BIGINT
WIDTH BIGINT
HEIGHT BIGINT
Indexes

product_class
PRODUCT_CLASS_CODE INT
PRODUCT_CLASS_DESC VARCHAR(40)
Indexes

- 1 . Write a query to display carton id, (len*width*height) as carton_vol and identify the optimum carton (carton with the least volume whose volume is greater than the total volume of all items (len * width * height * product_quantity)) for a given order whose order id is 10006, Assume all items of an order are packed into one single carton (box). **(1 ROW)**

[NOTE: CARTON TABLE]

(6 marks)

- 2 . Write a query to display details (customer id,customer fullname,order id,product quantity) of customers who bought more than ten (i.e. total order qty) products per shipped order.

(6 marks)

(11 ROWS) [NOTE: TABLES TO BE USED - online_customer, order_header, order_items,]

- 3 . Write a query to display the order_id, customer id and customer full name of customers along with (product_quantity) as total quantity of products shipped for order ids > 10060. (6 ROWS)

(6 marks)

[NOTE: TABLES TO BE USED - online_customer, order_header, order_items]

- 4 . Write a query to display product class description ,total quantity (sum(product_quantity),Total value (product_quantity * product price) and show which class of products have been shipped highest(Quantity) to countries outside India other than USA? Also show the total value of those items.

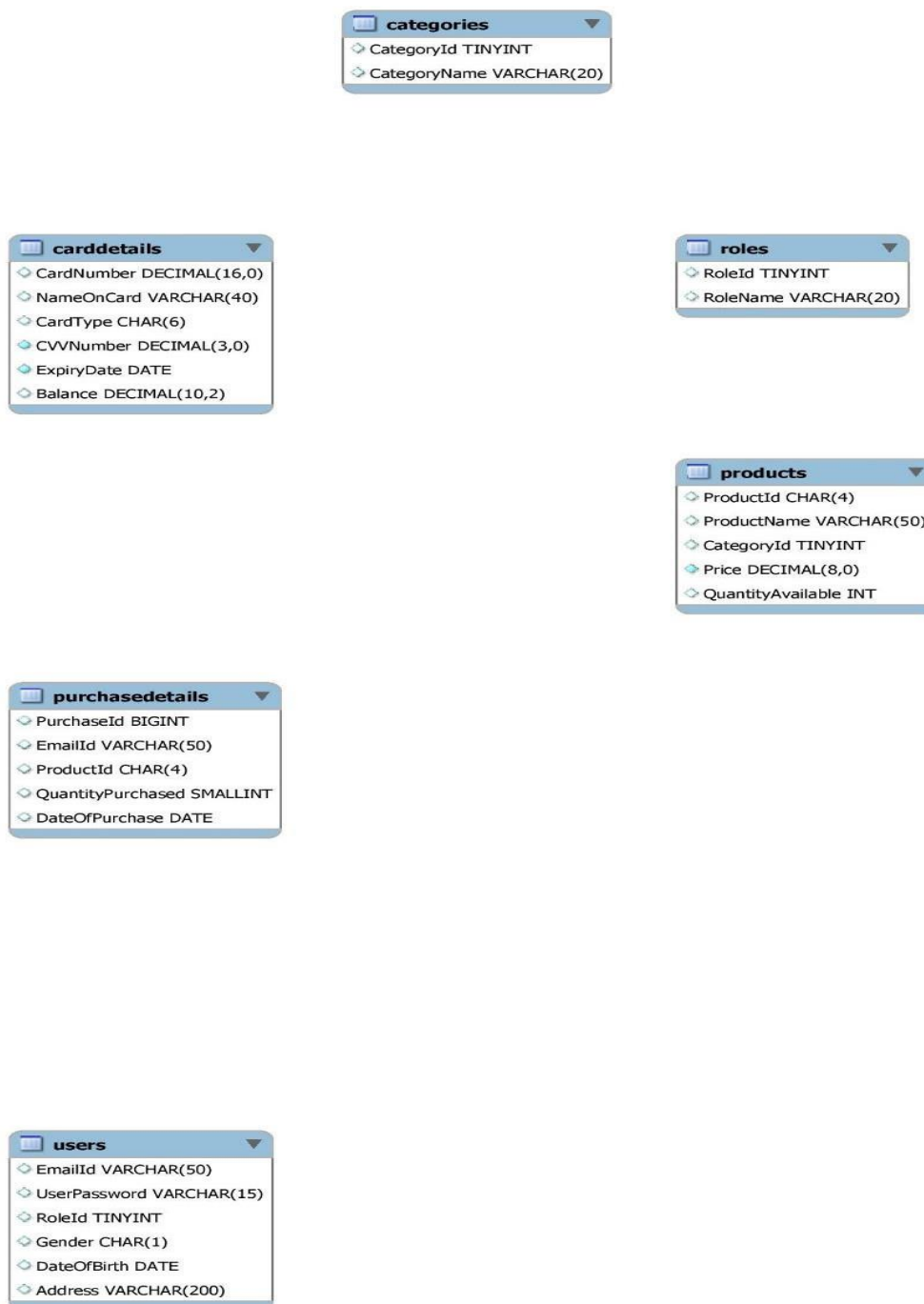
(6 marks)

(1 ROWS)[NOTE:PRODUCT TABLE,ADDRESS TABLE,ONLINE_CUSTOMER TABLE,ORDER_HEADER TABLE,ORDER_ITEMS TABLE,PRODUCT_CLASS TABLE]

PART 2:

You are hired by a chain of online retail stores “Fastkart”. They have provided you with “Fastkart” database and seek answers to the following queries as the results from these queries will help the company in making data driven decisions that will impact the overall growth of the online retail stores.

ER Diagram



5. Write a query to display ProductId, ProductName, CategoryName, Old_Price(price) and New_Price as per the following criteria

- a. If the category is “**Motors**”, decrease the price by 3000
- b. If the category is “**Electronics**”, increase the price by 50
- c. If the category is “**Fashion**”, increase the price by 150

For the rest of the categories price remains same.

Hint: Use case statement, there should be no permanent change done in table/DB.

(57 Rows)

(6 marks)

[Note: products, categories]

6. Display the percentage of females present among all Users. (Round up to 2 decimal places) Add “%” sign while displaying the percentage.

(6 marks)

(1 Row) [Note:

users]

7. Display the average balance for both card types for those records only where CVVNumber > 333 and NameOnCard ends with the alphabet “e”.

(2 Rows) [Note: carddetails]

(7 marks)

8. What is the 2nd most valuable item available which does not belong to the “Motor” category.

Value of an item = Price * QuantityAvailable. Display ProductName, CategoryName, value.

(1 Row)

(7 marks)

[Note: products, categories]