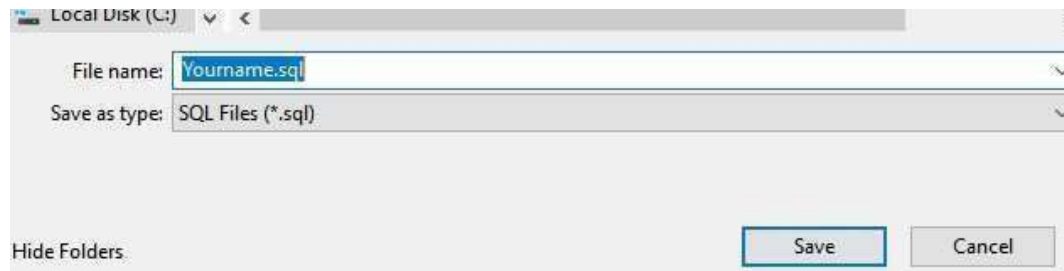


# How to save files

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

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.

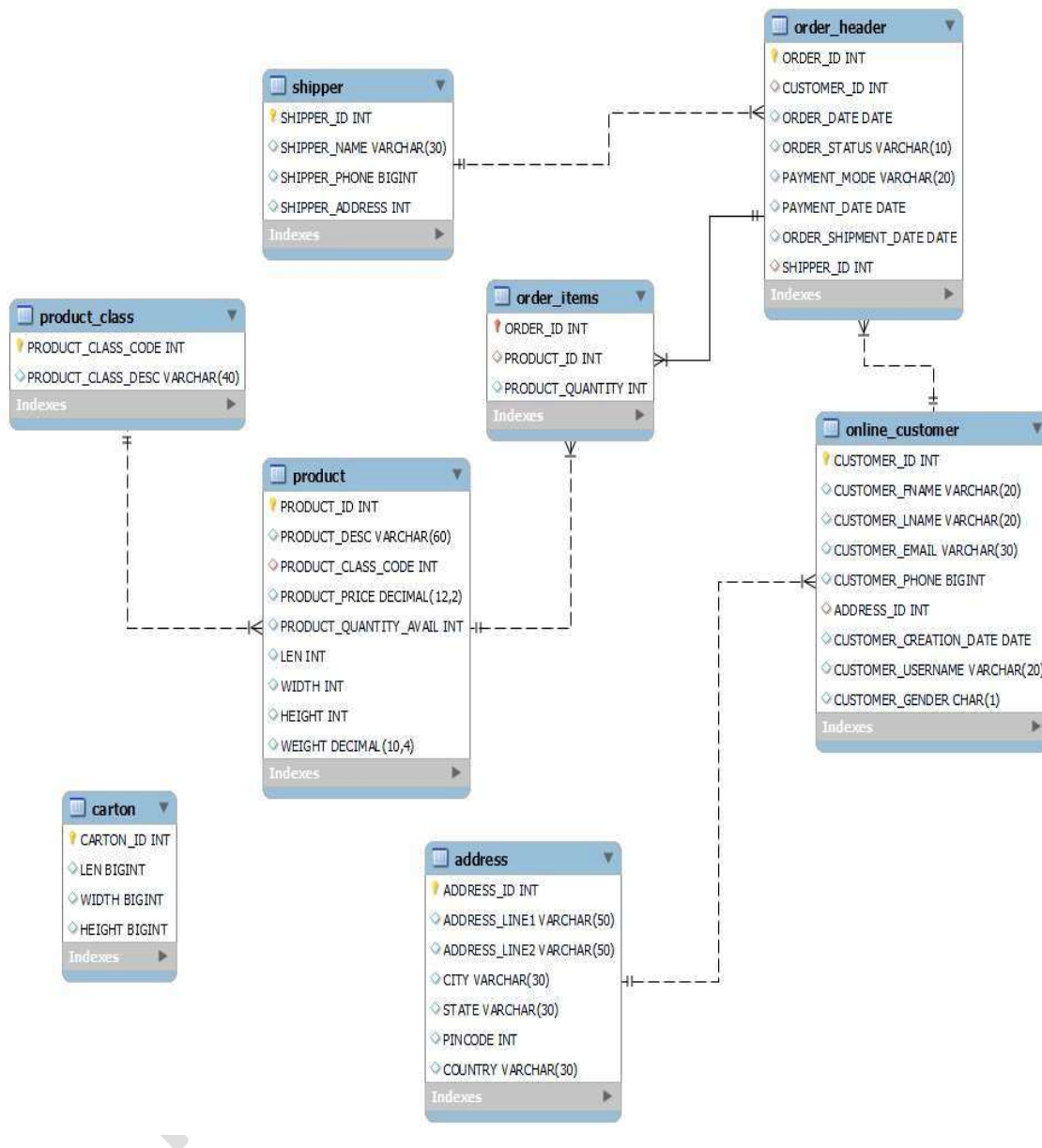
## Project- (MYSQL)

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.

All the questions come under MYSQL and the queries should be executed in MYSQL. (SQL Script – new+Orders\_ver2.sql)

All Questions carry 8 marks. Total Marks (6 x 10) = 60

## ER Diagram



## SQL Graded Project Questions

1. Write a query to display customer full name with their title (Mr/Ms), both first name and last name are in upper case, customer email id, customer creation date and display customer's category after applying below categorization rules:

- i. IF customer creation date Year <2005 Then Category A
- ii. IF customer creation date Year >=2005 and <2011 Then Category B
- iii. iii)IF customer creation date Year>= 2011 Then Category C

Hint: Use CASE statement, no permanent change in table required.

[NOTE: TABLES to be used - ONLINE\_CUSTOMER TABLE]

#2. Write a query to display the following information for the products, which have not been sold: product\_id, product\_desc, product\_quantity\_avail, product\_price, inventory values (product\_quantity\_avail\*product\_price), New\_Price after applying discount as per below criteria. Sort the output with respect to decreasing value of Inventory\_Value.

- i) IF Product Price > 20,000 then apply 20% discount
- ii) IF Product Price > 10,000 then apply 15% discount
- iii) IF Product Price <= 10,000 then apply 10% discount

# Hint: Use CASE statement, no permanent change in table required.

[NOTE: TABLES to be used - PRODUCT, ORDER\_ITEMS TABLE]

3. Write a query to display Product\_class\_code, Product\_class\_description, Count of Product type in each product class, Inventory Value (product\_quantity\_avail\*product\_price).

Information should be displayed for only those product\_class\_code which have more than 1,00,000. Inventory Value. Sort the output with respect to decreasing value of Inventory\_Value.

[NOTE: TABLES to be used - PRODUCT, PRODUCT\_CLASS]

4. Write a query to display customer\_id, full name, customer\_email, customer\_phone and country of customers who have cancelled all the orders placed by them (USE SUB-QUERY)

[NOTE: TABLES to be used - ONLINE\_CUSTOMER, ADDRESSSS, ORDER\_HEADER]

5. Write a query to display Shipper name, City to which it is catering, number of customer catered by the shipper in the city and number of consignments delivered to that city for Shipper DHL

[NOTE: TABLES to be used - SHIPPER, ONLINE\_CUSTOMER, ADDRESSSS, ORDER\_HEADER]

6. Write a query to display product\_id, product\_desc, product\_quantity\_avail, quantity sold and show inventory Status of products as below as per below condition:

- i. For Electronics and Computer categories, if sales till date is Zero then show 'No Sales in past, give discount to reduce inventory', if inventory quantity is less than 10% of quantity sold, show 'Low inventory, need to add inventory', if inventory quantity is less than 50% of quantity sold, show 'Medium inventory, need to add some inventory', if inventory quantity is more or equal to 50% of quantity sold, show 'Sufficient inventory'
- ii. For Mobiles and Watches categories, if sales till date is Zero then show 'No Sales in past, give discount to reduce inventory', if inventory quantity is less than 20% of quantity sold, show 'Low inventory, need to add inventory', if inventory quantity is less than 60% of quantity sold, show 'Medium inventory, need to add some inventory', if inventory quantity is more or equal to 60% of quantity sold, show 'Sufficient inventory'
- iii. Rest of the categories, if sales till date is Zero then show 'No Sales in past, give discount to reduce inventory', if inventory quantity is less than 30% of quantity sold, show 'Low inventory, need to add inventory', if inventory quantity is less than 70% of quantity sold, show 'Medium inventory, need to add some inventory', if

inventory quantity is more or equal to 70% of quantity sold, show 'Sufficient inventory'

(USE SUB-QUERY)

[NOTE: TABLES to be used - PRODUCT, PRODUCT\_CLASS, ORDER\_ITEMS]

7. Write a query to display order\_id and volume of the biggest order (in terms of volume) that can fit in carton id 10

[NOTE: TABLES to be used - CARTON, ORDER\_ITEMS, PRODUCT]

8. Write a query to display customer id, customer full name, total quantity and total value (quantity\*price) shipped where mode of payment is Cash and customer last name starts with 'G'

[NOTE: TABLES to be used - ONLINE\_CUSTOMER, ORDER\_ITEMS, PRODUCT, ORDER\_HEADER]

9. Write a query to display product\_id, product\_desc and total quantity of products which are sold together with product id 201 and are not shipped to city Bangalore and New Delhi. Display the output in descending order with respect to the tot\_qty.

(USE SUB-QUERY)

[NOTE: TABLES to be used – ORDER\_ITEMS, PRODUCT, ORDER\_HEADER, ONLINE\_CUSTOMER, ADDRESS]

10. Write a query to display the order\_id, customer\_id and customer fullname, total quantity of products shipped for order ids which are even and shipped to address where pincode is not starting with "5"

[NOTE: TABLES to be used – ONLINE\_CUSTOMER, ORDER\_HEADER, ORDER\_ITEMS, ADDRESS]