## **SQL Project**

You are hired by a chain of online retail stores "Reliant retail limited". They provide 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.

## **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 the 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.

File for creating 'ORDER Schema' (.sql file) ORDER SCHEMA

## **SQL Project**

1. Write a query to display the product details (product\_class\_code, product\_id, product\_desc, product\_price) as per the following criteria and sort them descending order of category: i) If the category is 2050, increase the price by 2000 ii) If the category is 2051, increase the price by 500 iii) If the category is 2052, increase the price by 600

Hint: Use CASE statement, no permanent change in table required. (60 rows)[NOTE:PRODUCT TABLE]

2. Write a query to display (product\_class\_desc, product\_id, product\_desc, product\_quantity\_avail ) and Show inventory status of products as below as per their available quantity: a. For Electronics and Computer categories, if available quantity is <= 10, show 'Low stock', 11 <= qty <= 30, show 'In stock', >= 31, show 'Enough stock' b. For Stationery and Clothes categories, if qty <= 20, show 'Low stock', 21 <= qty <= 80, show 'In stock', >=81, show 'Enough stock' c. Rest of the categories, if qty <= 15 - 'Low Stock', 16 <= qty <= 50 - 'In Stock', >= 51 - 'Enough stock' For all categories, if available quantity is 0, show 'Out of stock'.

Hint: Use case statement. (60 ROWS)[NOTE : TABLES TO BE USED – product, product\_class]

- 3. Write a query to Show the count of cities in all countries other than USA & MALAYSIA, with more than 1 city, in the descending order of CITIES. (2 rows)[NOTE :ADDRESS TABLE]
- 4. Write a query to display the customer\_id,customer full name ,city,pincode,and order details (order id, product class desc, product desc, subtotal(product\_quantity \* product\_price)) for orders shipped to cities whose pin codes do not have any 0s in them. Sort the output on customer name, order date and subtotal.

  (52 ROWS) [NOTE: TABLE TO BE USED online\_customer, address, order\_header, order\_items, product, product\_class]
- 5. Write a Query to display product id,product description,totalquantity(sum(product quantity) for a given item whose product id is 201 and which item has been bought along with it maximum no. of times. Display only one record which has the maximum value for total quantity in this scenario.

(USE SUB-QUERY)(1 ROW)[NOTE: ORDER\_ITEMS TABLE,PRODUCT TABLE]

- 6. Write a query to display the customer\_id,customer name, email and order details (order id, product desc,product qty, subtotal(product\_quantity \* product\_price)) for all customers even if they have not ordered any item.(225 ROWS) [NOTE : TABLE TO BE USED online\_customer, order\_header, order\_items, product]
- 7. 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]

## **SQL Project**

- 8. 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 with credit card or net banking as the mode of payment per shipped order. (6 ROWS) [NOTE: TABLES TO BE USED online\_customer, order\_header, order\_items,]
- 9.Write a query to display the order\_id,customer\_id and customer fullname starting with "A" along with (product quantity) as total quantity of products shipped for order ids > 10030 (5 Rows) [NOTE: TABLES to be used-online\_customer,Order\_header, order\_items]
- 10. 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.
- (1 ROWS)[NOTE:PRODUCT TABLE,ADDRESS TABLE,ONLINE\_CUSTOMER TABLE,ORDER\_HEADER TABLE,ORDER\_ITEMS TABLE,PRODUCT\_CLASS TABLE]