Problem Statement - SQL Project - Coded

**Project Problem Statement:**

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.

Questions to be answered:

1. Write a query to display customer full name with their title (mr/ms), both first name and last name are in upper case with 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. 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 the below criteria. Sort the output concerning the 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, and inventory value (p.product\_quantity\_avail\*p.product\_price). Information should be displayed for only those product\_class\_code that have more than 1,00,000 inventory value. sort the output concerning the 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, addresss, 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, addresss, order\_header]

 6. 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]

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

 a. For electronics and computer categories,

    i. If sales till date is zero then show 'no sales in past, give discount to reduce inventory',

    ii. If inventory quantity is less than 10% of quantity sold, show 'low inventory, need to add inventory',

    iii. If inventory quantity is less than 50% of quantity sold, show 'medium inventory, need to add some inventory',

    iv. If inventory quantity is more or equal to 50% of quantity sold, show 'sufficient inventory'

 b. For mobiles and watches categories,

    i. If sales till date is zero then show 'no sales in past, give discount to reduce inventory',

    ii. If inventory quantity is less than 20% of quantity sold, show 'low inventory, need to add inventory',

    iii. If inventory quantity is less than 60% of quantity sold, show 'medium inventory, need to add some inventory',

    iv. If inventory quantity is more or equal to 60% of quantity sold, show 'sufficient inventory'

 c. Rest of the categories,

    i. If sales till date is zero then show 'no sales in past, give discount to reduce inventory',

    ii. If inventory quantity is less than 30% of quantity sold, show 'low inventory, need to add inventory',

    iii. If inventory quantity is less than 70% of quantity sold, show 'medium inventory, need to add some inventory',

    iv. If inventory quantity is more or equal to 70% of quantity sold, show 'sufficient inventory'

      [note: tables to be used -product, product\_class, order\_items] (use sub-query)

  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 concerning 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 and 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]