SQL PROJECT - CODED

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Problem Statement:

Reliant Retail Limited, a leading chain of online retail stores, has entrusted us with the analysis of its "orders" database. This initiative aims to derive insights that will support the company in making informed, data-driven decisions. By addressing specific queries we intend to provide actionable recommendations that will enhance the company's growth and operational efficiency in the competitive online retail landscape.

Key Questions:

Question 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

Answer:

First 5 rows of the output has been displayed below:

FULL_NAME	CUSTOMER_EMAIL	CUSTOMER_CREATION_DATE	CUSTOMER_CATEGORY
Mr/Ms JENNIFER WILSON	jen_w@gmail.com	1991-06-01	Category A
Mr/Ms JACKSON DAVIS	dave_jack@gmail.com	2001-06-12	Category A
Mr/Ms KOMAL CHOUDHARY	ch_komal@yahoo.co.IN	2002-06-26	Category A
Mr/Ms WILFRED JEAN	w_jean@gmail.com	2006-01-12	Category B
Mr/Ms ANITA GOSWAMI	agoswami@gmail.com	2006-03-13	Category B

Question 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

Answer:

First 5 rows of the output has been displayed below:

product_id	product_desc	product_quantity_avail	product_price	inventory_value	new_price
99999	Samsung Galaxy Tab 2 P3100	50	19300.00	965000.00	16405.0000
99997	Sony Xperia U (Black White)	50	16499.00	824950.00	14024.1500
99998	Nikon Coolpix L810 Bridge	50	14987.00	749350.00	12738.9500
99995	LG MS-2049UW Solo Microwave	100	4800.00	480000.00	4320.0000
99996	Nokia Asha 200 (Graphite)	100	4070.00	407000.00	3663.0000

Question 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.

Answer:

First 5 rows of the output has been displayed below:

PRODUCT_CLASS_CODE	PRODUCT_CLASS_DESC	product_count	inventory_value
3000	Promotion-High Value	4	2564300.00
2050	Electronics	4	1665600.00
3001	Promotion-Medium Value	3	1261900.00
2055	Mobiles	2	1092500.00
3002	Promotion-Low Value	3	749250.00

Question 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)

Answer:

Output has been displayed below:

CUSTOMER_ID	Full_Name	CUSTOMER_EMAIL	CUSTOMER_PHONE	COUNTRY
41	THARMAN SHANMUGARATNAM	tharshan@yahoo.co.sg	8572898929	Singapore

Question 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

Answer:

Output has been displayed below:

shipper_name	city_catering	num_customers_catered	num_consignments_delivered
DHL	Abington	1	1
DHL	Amherst	1	1
DHL	Bangalore	3	5
DHL	Birmingham	1	1
DHL	Brooklyn	1	1

Question 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'

Answer:

Output has been displayed below:

customer_id	full_name	total_quantity	total_value
6	ANITA GOSWAMI	25	93237.00
24	BRIAN GRAZER	4	4010.00

Question 7:

Write a query to display order_id and volume of biggest order (in terms of volume) that can fit in carton id 10

Answer:

Output has been displayed below:

ORDER_ID	Total_Volume
10007	954000000

Question 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'

Answer:

Top 5 rows of Output has been displayed below:

PRODUCT_ID	PRODUCT_DESC	PRODUCT_QUANTITY_AVAIL	product_quantity_sold	inventory_status
99999	Samsung Galaxy Tab 2 P3100	50	0	NO SALES IN PAST, GIVE DISCOUNT TO REDUC...
99998	Nikon Coolpix L810 Bridge	50	0	NO SALES IN PAST, GIVE DISCOUNT TO REDUC...
99997	Sony Xperia U (Black White)	50	0	NO SALES IN PAST, GIVE DISCOUNT TO REDUC...
99994	HP Deskjet 2050 All-in-One - J510a Printer	100	0	NO SALES IN PAST, GIVE DISCOUNT TO REDUC...
99995	LG MS-2049UW Solo Microwave	100	0	NO SALES IN PAST, GIVE DISCOUNT TO REDUC...

Question 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)

Answer:

Top 5 rows of Output has been displayed below:

PRODUCT_ID	PRODUCT_DESC	Total_qty
218	Shell Fingertip Ball Pen	20
219	Ruf-n-Tuf Black PU Leather Belt	4
216	External Hard Disk 500 GB	3
233	HP ODC School Bag 2.5'	3
243	Supreme Fusion Cupboard 02TB	2

Question 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"

Answer:

Top 5 rows of Output has been displayed below:

ORDER_ID	CUSTOMER_ID	full_name	total_quantity_shipped
10008	7	Ashwathi Bhatt	25
10022	23	Anna Pinnock	2
10024	32	Hans Zimmer	2
10028	23	Anna Pinnock	2
10030	52	Suchirithaa Ekanayake	2