SQL Project - Coded

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Tables:

DATA DESCRIPTION OF TABLES

ADDRESS:

ADDRESS_ID: Unique identifier for each address.
ADDRESS_LINE1: First line of the address.
ADDRESS_LINE2: Second line of the address.
CITY: Name of the city.
STATE: Name of the state.
PINCODE: Postal code or ZIP code.
COUNTRY: Name of the country.

CARTON:

CARTON_ID: Unique identifier for each carton.
LEN: Length of the carton.
WIDTH: Width of the carton.
HEIGHT: Height of the carton.

ONLINE_CUSTOMER:

CUSTOMER_ID: Unique identifier for each customer.
CUSTOMER_FNAME: First name of the customer.
CUSTOMER_LNAME: Last name of the customer.
CUSTOMER_EMAIL: Email address of the customer.
CUSTOMER_PHONE: Phone number of the customer.
ADDRESS_ID: Identifier referencing the address of the customer.
CUSTOMER_CREATION_DATE: Date when the customer account was created.
CUSTOMER_USERNAME: Username of the customer.
CUSTOMER_GENDER: Gender of the customer.

ORDER_HEADER:

ORDER_ID: Unique identifier for each order.
CUSTOMER_ID: Identifier referencing the customer who placed the order.
ORDER_DATE: Date when the order was placed.
ORDER_STATUS: Status of the order (e.g., pending, shipped, delivered).
PAYMENT_MODE: Mode of payment for the order.
PAYMENT_DATE: Date when the payment was made.
ORDER_SHIPMENT_DATE: Date when the order was shipped.
SHIPPER_ID: Identifier referencing the shipper responsible for shipping the order.

ORDER_ITEMS:

ORDER_ID: Identifier referencing the order.
PRODUCT_ID: Identifier referencing the product in the order.
PRODUCT_QUANTITY: Quantity of the product ordered.

PRODUCT:

PRODUCT_ID: Unique identifier for each product.
PRODUCT_DESC: Description of the product.
PRODUCT_CLASS_CODE: Code referencing the class of the product.
PRODUCT_PRICE: Price of the product.
PRODUCT_QUANTITY_AVAIL: Quantity of the product available in stock.
LEN: Length of the product.
WIDTH: Width of the product.
HEIGHT: Height of the product.
WEIGHT: Weight of the product.

PRODUCT_CLASS:

PRODUCT_CLASS_CODE: Unique identifier for each product class.
PRODUCT_CLASS_DESC: Description of the product class.

SHIPPER:

SHIPPER_ID: Unique identifier for each shipper.
SHIPPER_NAME: Name of the shipper.
SHIPPER_PHONE: Phone number of the shipper.
SHIPPER_ADDRESS: Identifier referencing the address of the shipper.

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:

QUESTION:1

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]

ANSWER

Total 52 rows , first 5 rows

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

Table-1-first 5 rows_1st_Ans

QUESTION:2

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]

ANSWER

Total 13 rows

PRODUCT_ID	PRODUCT_DESC	PRODUCT_QUANTITY_AVAIL	PRODUCT_PRICE	INVENTORY_VALUES	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
99994	HP Deskjet 2050 All-in-One - J510a Printer	100	3749.00	374900.00	3374.1000

Table-2-first 5 rows_2nd_Ans

QUESTION:3

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]

ANSWER

Total 9 rows

	PRODUCT_CLASS_CODE	PRODUCT_CLASS_DESC	PRODUCT_TYPE_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

Table-3-first 5 rows_3rd_Ans

QUESTION:4

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]

ANSWER

Total 1 row

	CUSTOMER_ID	FULL_NAME	CUSTOMER_EMAIL	CUSTOMER_PHONE	COUNTRY
	41	Tharman Shanmugaratnam	tharshan@yahoo.co.sg	8572898929	Singapore

Table-4-first 5 rows_4th_Ans

QUESTION:5

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]

ANSWER

Total 9 row

	SHIPPER_NAME	CATERING_CITY	CUSTOMERS_CATERED	CONSIGNMENTS_DELIVERED
	DHL	Abington	1	1
	DHL	Amherst	1	1
	DHL	Bangalore	3	5
	DHL	Birmingham	1	1
	DHL	Brooklyn	1	1

Table-5-first 5 rows_5th_Ans

QUESTION:6

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]

ANSWER

Total 2 row

	CUSTOMER_ID	FULL_NAME	TOTAL_QUANTITY	TOTAL_VALUE
	6	Anita Goswami	25	1463380.00
	24	Brian Grazer	4	46300.00

Table-6-Table_6th_Ans

QUESTION:7

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]

ANSWER

Biggest order(in terms of volume) is 10001 order_id

	ORDER_ID	PRODUCT_VOLUME
	10001	17880000

Table-7-Table_7th_Ans

QUESTION:8

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)

ANSWER

Total 60 rows

	PRODUCT_ID	PRODUCT_DESC	PRODUCT_QUANTITY_AVAIL	QUANTITY_SOLD	INVENTORY_STATUS
	99999	Samsung Galaxy Tab 2 P3100	50		SUFFICIENT INVENTORY
	99998	Nikon Coolpix L810 Bridge	50		SUFFICIENT INVENTORY
	99997	Sony Xperia U (Black White)	50		SUFFICIENT INVENTORY
	99994	HP Deskjet 2050 All-in-One - J510a Printer	100		SUFFICIENT INVENTORY
	99995	LG MS-2049UW Solo Microwave	100		SUFFICIENT INVENTORY

Table-8-first 5 rows_8th_Ans

QUESTION:9

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]

ANSWER

Total 6 rows

	PRODUCT_ID	PRODUCT_DESC	TOTAL_QUANTITY
	216	External Hard Disk 500 GB	3
	201	Sky LED 102 CM TV	2
	207	Remote Control Car	2
	202	Sams 192 L4 Single-door Refrigerator	1
	212	Samsung Galaxy On6	1
	214	Harry Potter	1

Table-9-first 5 rows_9th_Ans

QUESTION:10

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]

ANSWER

	ORDER_ID	CUSTOMER_ID	FULL_NAME	TOTAL_QUANTITY
	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

Table-10-first 5 rows_10th_Ans