

SQL PROJECT REPORT

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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.

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

Hint: Use case statement, no permanent change in table required. [note: tables to be used - online_customer table]

SOLUTION

Customer_full_name	CUSTOMER_EMAIL	CUSTOMER_CREATION_DATE	Customers_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

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

Hint: use case statement, no permanent change in table required. [note: tables to be used -*product*, *order_items* table]

SOLUTION

<i>product_id</i>	<i>product_desc</i>	<i>product_quantity_avail</i>	<i>product_price</i>	<i>inventory_values</i>	<i>New_price</i>
201	"Sky LED 102 CM TV"	30	35000.00	1050000.00	7000.000000
99999	"Samsung Galaxy Tab 2 P3100"	50	19300.00	965000.00	2895.000000
99997	"Sony Xperia U (Black White)"	50	16499.00	824950.00	2474.850000
211	"OnePlus 6 Smart Phone"	25	32500.00	812500.00	6500.000000
99998	"Nikon Coolpix L810 Bridge"	50	14987.00	749350.00	2248.050000

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*.

[note: tables to be used -*product*, *product_class*]

SOLUTION

<i>product_class_code</i>	<i>product_class_desc</i>	<i>PRODUCT_TYPE_COUNT</i>	<i>INVENTORY_VALUE</i>
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)

[note: tables to be used - online_customer, addresss, order_header]

SOLUTION

customer_id	Full_Name	customer_email	customer_phone	country
8	"NEETHA CASTELINA"	neetha20@gmail.com	8196236362	India
33	"NISEEMA ZIMMER"	niseemaz@yahoo.com	8179413840	USA
51	"AHMAD BIN GH AZALI"	ahmad_bingh@yahoo.co.my	7348292313	Malaysia
34	"HANS ZIMMER"	hans_zimmer@gmail.com	9477272235	USA
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

[note: tables to be used -shipper, online_customer, addresss, order_header]

SOLUTION

shipper_name	city	customers_ount	number_of_consignments
DHL	Bangalore	5	5
DHL	Hyderabad	2	2
DHL	"W. Alibio"	1	1
DHL	Brooklyn	1	1
DHL	Dharmapuri	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'

[note: tables to be used -online_customer, order_items, product, order_header]

SOLUTION

customer_id	Full_Name	total_quantity	total_value
6	"Anita Goswami"	11	93237.00
24	"Brian Grazer"	3	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

-- [note: tables to be used -carton, order_items, product]

SOLUTION

order_id	volume	total_qty
10003	1013625000	5

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'
- [note: tables to be used -product, product_class, order_items] (use sub-query)

SOLUTION

product_id	product_desc	product_quantity_avail	QUANTITY_SOLD	INVENTORY_STATUS
99999	"Samsung Galaxy Tab 2 P3100"	50	NULL	"SUFFICIENT INVENTORY"
99998	"Nikon Coolpix L810 Bridge"	50	NULL	"SUFFICIENT INVENTORY"

99997	"Sony Xperia U (Black White)"	50	NULL	"SUFFICIENT INVENTORY"
99994	"HP Deskjet 2050 ALL-in-One - J510a Printer"	100	NULL	"SUFFICIENT INVENTORY"
99995	"LG MS-2049UW Solo Microwave"	100	NULL	"SUFFICIENT INVENTORY"

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)

[note: tables to be used -order_items,product,order_header, online_customer, address]

SOLUTION

product_id	product_desc	tot_qty
218	"Shell Fingertip Ball Pen"	20
219	"Ruf-n-Tuf Black PU Leather Belt"	4
201	"Sky LED 102 CM TV"	3
216	"External Hard Disk 500 GB"	3
233	"HP ODC School Bag 2.5' "	3

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"

[note: tables to be used - online_customer,order_header, order_items, address]

SOLUTION

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