

SQL Business Report- Coded Project

Contents

Problem Statement:	3
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Problem Statement:

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 the below categorization rules:

- If customer creation date year <2005 then category a
- If customer creation date year >=2005 and <2011 then category b
- 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]

Result Grid Filter Rows: Export: Wrap Cell Content:				
	CUSTOMER_FULLNAME	CUSTOMER_EMAIL	CUSTOMER_CREATION_DATE	CUSTOMER_CATEGORY
▶	Ms. JENNIFER WILSON	jen_w@gmail.com	1991-06-01	CATEGORY A
	Mr. JACKSON DAVIS	dave_jack@gmail.com	2001-06-12	CATEGORY A
	Ms. KOMAL CHOUDHARY	ch_komal@yahoo.co.IN	2002-06-26	CATEGORY A
	Mr. WILFRED JEAN	w_jean@gmail.com	2006-01-12	CATEGORY B
	Ms. ANITA GOSWAMI	agoswami@gmail.com	2006-03-13	CATEGORY B
	Ms. ASHWATHI BHATT	ash_bhat@yahoo.co.IN	2007-04-15	CATEGORY B
	Ms. NEETHA CASTELINA	neetha20@gmail.com	2011-08-16	CATEGORY C
	Ms. DEVIKA SATISH	devika_sa@gmail.com	2011-09-01	CATEGORY C
	Ms. BIDHAN C.ROY	bidhanroy@yahoo.co.in	2011-10-23	CATEGORY C
	Mr. VIKAS JHA	vikas.jha@gmail.com	2011-11-15	CATEGORY C
	Mr. ARUL KUMAR.T	arulkumar@gmail.com	2011-12-03	CATEGORY C
	Mr. RAVI SRINIVASN	r_srinivasn@yahoo.co.in	2012-01-05	CATEGORY C
	Mr. AVINASH DUTTA	avinash.dutta@yahoo.co.in	2012-01-18	CATEGORY C
	Ms. JYOTI SINHA	jyotisinha@gmail.com	2012-01-31	CATEGORY C
	Mr. VIJAY BOLLINENI	vbollineni@gmail.com	2012-02-06	CATEGORY C
	Mr. PRASAD SHETTY	pshetty@yahoo.co.in	2012-02-26	CATEGORY C

Result Grid Filter Rows: Export: Wrap Cell Content:				
	CUSTOMER_FULLNAME	CUSTOMER_EMAIL	CUSTOMER_CREATION_DATE	CUSTOMER_CATEGORY
	Mr. SURESH BABU	sbabu@yahoo.co.in	2012-03-01	CATEGORY C
	Ms. BHARTI SUBHASH	bhartis@gmail.com	2012-03-28	CATEGORY C
	Mr. KESHAV JOG	kesjog@yahoo.co.in	2012-04-06	CATEGORY C
	Ms. RAMYA RAVINDER	ramya_r23@gmail.com	2006-02-12	CATEGORY B
	Mr. ALAN SILVESTRI	alan_silver@msn.com	2016-02-04	CATEGORY C
	Mr. ANDREW STANTON	andrew_stanton@yahoo.com	2013-05-23	CATEGORY C
	Ms. ANNA PINNOCK	anna_pinnock@yahoo.com	2013-01-18	CATEGORY C
	Mr. BRIAN GRAZER	brian_grazer@gmail.com	2009-12-28	CATEGORY B
	Mr. BRUNO DELBONNEL	bruno_delbonnel@msn.com	2012-08-27	CATEGORY C
	Mr. STEPHEN E. RIVKIN	stephen_e_rivkin@msn.com	2010-03-04	CATEGORY B
	Ms. MALI FINN	mali_finn@yahoo.com	2006-01-14	CATEGORY B
	Mr. SAYYED FARAJ	sayyed_faraj@gmail.com	2009-11-01	CATEGORY B
	Ms. FRANCINE MAISLER	francine_maisler@gmail.com	2013-09-01	CATEGORY C
	Ms. ANITA KOHLI	anita_kohli@yahoo.com	2010-10-24	CATEGORY B
	Mr. THOMAS NEWMAN	thomas_nman@yahoo.com	2015-06-30	CATEGORY C
	Mr. HANS ZIMMER	hans_zimmer@yahoo.com	2016-01-24	CATEGORY C

Result 4 ×

Result Grid				
Filter Rows:		Export:	Wrap Cell Content:	
CUSTOMER_FULLNAME	CUSTOMER_EMAIL	CUSTOMER_CREATION_DATE	CUSTOMER_CATEGORY	
Mr. THOMAS NEWMAN	thomas_newman@gmail.com	2014-01-16	CATEGORY C	
Ms. MICHELLE H. SHORES	howard_shores@yahoo.com	2010-06-24	CATEGORY B	
Mr. JAMES NEWTON HOWARD	james_nhoward@yahoo.com	2012-07-06	CATEGORY C	
Mr. JOHN LASSETER	john_lass@gmail.com	2016-09-02	CATEGORY C	
Ms. LIZ MULLANE	liz_mullane@gmail.com	2006-03-29	CATEGORY B	
Mr. PAUL HAGGIS	paul_haggis@gmail.com	2016-08-31	CATEGORY C	
Mr. THARMAN SHANMUGARATNAM	tharshan@yahoo.co.sg	2009-11-20	CATEGORY B	
Ms. REBECCA LIM	reblim@msn.co.sg	2009-07-31	CATEGORY B	
Mr. RAJIV CHANDRASEKARAN	rajiv_chan@yahoo.co.in	2014-04-14	CATEGORY C	
Ms. TANYA CHUA	tanyac@singers.sg	2014-04-14	CATEGORY C	
Ms. JANVI RAJIV	janvi_jha@msn.co.sg	2015-04-14	CATEGORY C	
Ms. TAN BEE SOO	tanbeesoo@yahoo.co.sg	2016-11-15	CATEGORY C	
Mr. YUN ZHU	yunzho@gmail.com	2016-11-15	CATEGORY C	
Mr. WAJDI BIN ABDUL MAJEED	wajdiabdul@gmail.com	2010-06-25	CATEGORY B	
Ms. ANBARA BINTI MUBARAK	anmubarak@yahoo.co.my	2010-08-27	CATEGORY B	
Ms. SRI BINTI YAAKOB	sribinti@yahoo.co.my	2007-12-18	CATEGORY B	
Mr. AHMAD BIN GH AZALI	ahmad_bingh@yahoo.co.my	2010-05-14	CATEGORY B	
Ms. SUCHIRITHAA EKANAYAKE	suchiritha@msn.com	2016-11-15	CATEGORY C	

From the data, we can see 3 customer in category A, 17 customers in category B and 32 customer in Category C.

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.

- If the product price > 20,000 then apply 20% discount
- If the product price > 10,000 then apply 15% discount
- 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]

Result Grid						
Filter Rows:		Export:	Wrap Cell Content:			
PRODUCT_ID	PRODUCT_DESC	PRODUCT_QUANTITY_AVAIL	PRODUCT_PRICE	INVENTORY_VALUES	NEW_PRICE	
99999	Samsung Galaxy Tab 2 P3100	50	19300.00	965000.00	16405.00	
99997	Sony Xperia U (Black White)	50	16499.00	824950.00	14024.15	
99998	Nikon Coolpix L810 Bridge	50	14987.00	749350.00	12738.95	
99995	LG MS-2049UW Solo Microwave	100	4800.00	480000.00	4320.00	
99996	Nokia Asha 200 (Graphite)	100	4070.00	407000.00	3663.00	
99994	HP Deskjet 2050 All-in-One - J510a Printer	100	3749.00	374900.00	3374.10	
99991	Dell Targus Synergy 2.0 Backpack	250	999.00	249750.00	899.10	
99992	Tom Clancy's Ghost Recon: Future Soldier (PC G...	250	999.00	249750.00	899.10	
99993	Nokia 1280 (Black)	250	999.00	249750.00	899.10	
99990	Quanta 4 Port USB Hub	50	500.00	25000.00	450.00	
230	Esprit Analog Watch	5	3495.00	17475.00	3145.50	
249	All-in-one Board Game	20	450.00	9000.00	405.00	
250	Huwi Wi-Fi Receiver 500Mbps	30	287.00	8610.00	258.30	

None of the product prices is applied a 20% discount, three product prices have been applied with a 15% discount and 10 product prices have been applied with 10% discount.

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]

Result Grid				
Filter Rows:		Export:		
Wrap Cell Content:				
	PRODUCT_CLASS_CODE	PRODUCT_CLASS_DESC	count(p.PRODUCT_ID)	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
	2052	Clothes	4	410000.00
	2051	Toys	5	194100.00
	2057	Watches	4	178820.00
	2059	Bags	5	115170.00

Result 6 x

4. Write a query to display customer_id, full name, customer_email, customer_phone and country of customers who have canceled all the orders placed by them(use sub-query)

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

Result Grid					
Filter Rows:		Export:			
Wrap Cell Content:					
	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

Result 7 x

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]

Result Grid Filter Rows: <input type="text"/> Export: Wrap Cell Content:				
	shipper_name	city_catering	customers_catered	consignments_delivered
▶	DHL	Abington	1	1
	DHL	Amherst	1	1
	DHL	Bangalore	3	5
	DHL	Birmingham	1	1
	DHL	Brooklyn	1	1
	DHL	Dharmapuri	1	1
	DHL	Hosur	1	1
	DHL	Hyderabad	2	2
	DHL	W. Alibio	1	1

Result 8 x

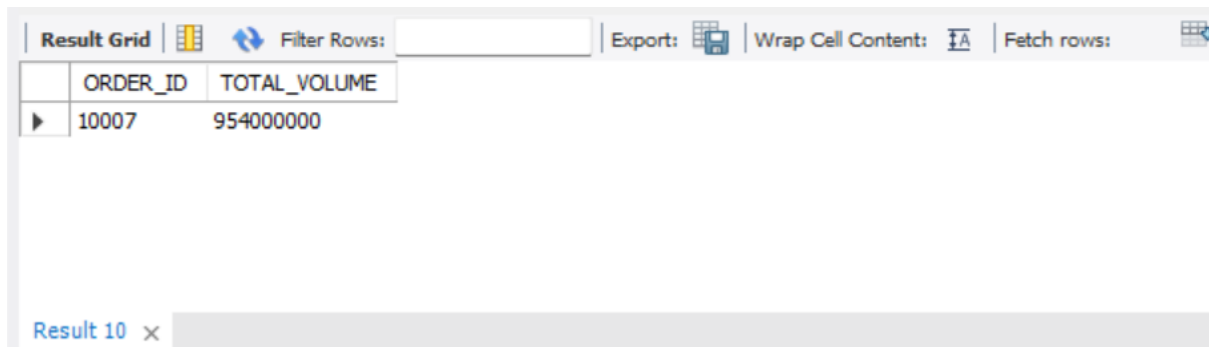
6. Write a query to display customer id, customer full name, total quantity and total value (quantity*price) shipped where mode of payment is cash and customer last name starts with 'g'
[note: tables to be used -online_customer, order_items, product, order_header]

Result Grid Filter Rows: <input type="text"/> Export: Wrap Cell Content:				
	CUSTOMER_ID	FULL_NAME	TOTAL_QUANTITY	TOTAL_VALUE
▶	6	Anita Goswami	25	93237.00
	24	Brian Grazer	4	4010.00

Result 9 x

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

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






The screenshot shows a database query result grid. At the top, there are tabs for 'Result Grid', 'Filter Rows', 'Export', 'Wrap Cell Content', and 'Fetch rows'. Below the tabs is a table with two columns: 'ORDER_ID' and 'TOTAL_VOLUME'. The first row of the table contains the values '10007' and '954000000'. At the bottom left of the grid, there is a label 'Result 10' with a close button 'x'.




ORDER_ID	TOTAL_VOLUME
10007	954000000

Order ID 10007 with total volume of 954000000 is the biggest order (in terms of volume) that can fit in carton id 10.




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)




Result Grid  Filter Rows: <input type="text"/> Export:  Wrap Cell Content: 				
product_id	product_desc	product_quantity_avail	quantity_sold	inventory_status
99994	HP Deskjet 2050 All-in-One - J510a Printer	100	0	No Sales in past, give discount to reduce inventory
99995	LG MS-2049UW Solo Microwave	100	0	No Sales in past, give discount to reduce inventory
99996	Nokia Asha 200 (Graphite)	100	0	No Sales in past, give discount to reduce inventory
99991	Dell Targus Synergy 2.0 Backpack	250	0	No Sales in past, give discount to reduce inventory
99992	Tom Clancy's Ghost Recon: Future Soldier (PC G...	250	0	No Sales in past, give discount to reduce inventory
99993	Nokia 1280 (Black)	250	0	No Sales in past, give discount to reduce inventory
201	Sky LED 102 CM TV	180	6	Sufficient inventory
202	Sams 192 L4 Single-door Refrigerator	90	6	Sufficient inventory
203	Jocky Speaker Music System HT32	57	3	Sufficient inventory
221	Cybershot DWC-W325 Camera	20	4	Sufficient inventory
204	Cricket Set for Boys	70	10	Sufficient inventory
206	Barbie Fab Gown Doll	160	13	Sufficient inventory
207	Remote Control Car	203	11	Sufficient inventory
208	Doll House	36	4	Sufficient inventory
249	All-in-one Board Game	20	0	No Sales in past, give discount to reduce inventory
205	Infant Sleepwear Blue	150	7	Sufficient inventory
209	Blue Jeans 34	600	12	Sufficient inventory
210	Blossoms Lehenga Choli set	300	10	Sufficient inventory
219	Ruf-n-Tuf Black PU Leather Belt	350	20	Sufficient inventory

Result Grid  Filter Rows: <input type="text"/> Export:  Wrap Cell Content: 				
product_id	product_desc	product_quantity_avail	quantity_sold	inventory_status
210	Blossoms Lehenga Choli set	300	10	Sufficient inventory
219	Ruf-n-Tuf Black PU Leather Belt	350	20	Sufficient inventory
215	Logtech M244 Optical Mouse	50	9	Sufficient inventory
216	External Hard Disk 500 GB	50	7	Sufficient inventory
250	Huwi Wi-Fi Receiver 500Mbps	30	0	No Sales in past, give discount to reduce inventory
213	Alchemist	100	21	Sufficient inventory
214	Harry Potter	150	27	Sufficient inventory
246	Exam Warriors	150	3	Sufficient inventory
247	Small Is Beautiful	40	1	Sufficient inventory
248	To Kill a Mocking Bird	35	1	Sufficient inventory
211	OnePlus 6 Smart Phone	125	5	Sufficient inventory
212	Samsung Galaxy On6	160	9	Sufficient inventory
218	Shell Fingertip Ball Pen	900	67	Sufficient inventory
236	Solo Exam SB-01 Writing Pad	180	21	Sufficient inventory
238	Kasyo DJ-2100 Desktop Calculator	60	10	Sufficient inventory
239	TRANS 2D A4 Size Box File	6	5	Sufficient inventory
240	4M Post It Pad 3.5	56	29	Sufficient inventory
235	Cindy HMPOC Pencil Box (Multicolor)	60	40	Sufficient inventory
237	Zamark Color Pencil Art Set	20	3	Sufficient inventory

Result 11 x

Result Grid  Filter Rows: <input type="text"/> Export:  Wrap Cell Content: 				
product_id	product_desc	product_quantity_avail	quantity_sold	inventory_status
241	PK Copier A4 75 GSM White Paper Ream	8	18	Medium inventory, need to add some inventory
217	Titan Karishma Watch	70	2	Sufficient inventory
228	Adidas Analog Watch	40	7	Sufficient inventory
229	Disney Analog Watch	20	2	Sufficient inventory
230	Esprit Analog Watch	5	0	No Sales in past, give discount to reduce inventory
242	GreenWud CT-NO-PR Coffee Table	24	7	Sufficient inventory
243	Supreme Fusion Cupboard 02TB	12	5	Sufficient inventory
244	Foldable Premium Chair	30	16	Sufficient inventory
245	GreenWud Nova Pedestal Unit	15	3	Sufficient inventory
220	Hello Kitti Lunch Bag	60	5	Sufficient inventory
231	HP ODC Laptop Bag 15.5	60	7	Sufficient inventory
232	Women Hand Bag	60	4	Sufficient inventory
233	HP ODC School Bag 2.5'	280	13	Sufficient inventory
234	FLUFF Tote Travel Bag 35LTR	32	4	Sufficient inventory
222	KitchAsst Siphon Coffee Maker 500 ml	30	3	Sufficient inventory
223	Sams 21L Microwave Oven	20	4	Sufficient inventory
224	Phils HL 7430 Mixer Grinder 750W	6	2	Sufficient inventory
225	Solmo Non-stick Sandwich Maker 750 W	30	3	Sufficient inventory
226	Solmo Hand Blender Fibre	36	7	Sufficient inventory

Result 11 x

Result Grid  Filter Rows: <input type="text"/> Export:  Wrap Cell Content: 				
product_id	product_desc	product_quantity_avail	quantity_sold	inventory_status
243	Supreme Fusion Cupboard 02TB	12	5	Sufficient inventory
244	Foldable Premium Chair	30	16	Sufficient inventory
245	GreenWud Nova Pedestal Unit	15	3	Sufficient inventory
220	Hello Kitti Lunch Bag	60	5	Sufficient inventory
231	HP ODC Laptop Bag 15.5	60	7	Sufficient inventory
232	Women Hand Bag	60	4	Sufficient inventory
233	HP ODC School Bag 2.5'	280	13	Sufficient inventory
234	FLUFF Tote Travel Bag 35LTR	32	4	Sufficient inventory
222	KitchAsst Siphon Coffee Maker 500 ml	30	3	Sufficient inventory
223	Sams 21L Microwave Oven	20	4	Sufficient inventory
224	Phils HL 7430 Mixer Grinder 750W	6	2	Sufficient inventory
225	Solmo Non-stick Sandwich Maker 750 W	30	3	Sufficient inventory
226	Solmo Hand Blender Fibre	36	7	Sufficient inventory
227	Phils Wah Collection Juicer JM12	12	7	Sufficient inventory
99999	Samsung Galaxy Tab 2 P3100	50	0	No Sales in past, give discount to reduce inventory
99998	Nikon Coolpix L810 Bridge	50	0	No Sales in past, give discount to reduce inventory
99997	Sony Xperia U (Black White)	50	0	No Sales in past, give discount to reduce inventory
99990	Quanta 4 Port USB Hub	50	0	No Sales in past, give discount to reduce inventory

Result 11 x

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]

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
PRODUCT_ID	PRODUCT_DESC	TOTAL_QUANTITY_OF_PRODUCTS	
201	Sky LED 102 CM TV	3	

The output gives the product Id (201), product description (Sky led TV) and total quantity of products (3 Nos) sold together with product is 201 and are not shipped to city bangalore and new delhi.

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 EVENAND SHIPPED TO ADDRESS WHERE PINCODE IS NOT STARTING WITH "5"

-- [NOTE: TABLES TO BE USED - ONLINE_CUSTOMER,ORDER_HEADER, ORDER_ITEMS, ADDRESS]

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
ORDER_ID	CUSTOMER_ID	FULLNAME	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
10032	7	Ashwathi Bhatt	7
10034	19	Bharti Subhash	2
10036	24	Brian Grazer	4
10040	3	Komal Choudhary	2
10042	26	Stephen E. Rivkin	2
10044	39	Liz Mullane	3
10046	3	Komal Choudhary	1
10048	33	Niseema Zimmer	1
10052	17	Prasad Shetty	1
10054	19	Bharti Subhash	3
10058	28	Sayyed Faraj	2
10064	35	Thomas Newman	3
10068	51	Ahmad Bin Gh Azali	3
10070	10	Bidhan C.Roy	3