

BUSSINESS REPORT ON RELIANT RETAIL LIMITED



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Project Problem Statement:

We are hired by a chain of online retail stores “Reliant retail limited”. They provide us 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.

Problem 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

Solution:-

	full_name ▲	CUSTOMER_ID	CUSTOMER_EMAIL	CUSTOMER_CREATION_DATE	customer_category
	Mr/Ms JENNIFER WILSON	1	jen_w@gmail.com	1991-06-01	Category A
	Mr/Ms JACKSON DAVIS	2	dave_jack@gmail.com	2001-06-12	Category A
	Mr/Ms KOMAL CHOUDHARY	3	ch_komal@yahoo.co.IN	2002-06-26	Category A
	Mr/Ms WILFRED JEAN	4	w_jean@gmail.com	2006-01-12	Category B
	Mr/Ms RAMYA RAVINDER	5	ramya_r23@gmail.com	2006-02-12	Category B
▶	Mr/Ms ANITA GOSWAMI	6	agoswami@gmail.com	2006-03-13	Category B
	Mr/Ms ASHWATHI BHATT	7	ash_bhat@yahoo.co.IN	2007-04-15	Category B
	Mr/Ms NEETHA CASTELINA	8	neetha20@gmail.com	2011-08-16	Category C
	Mr/Ms DEVIKA SATISH	9	devika_sa@gmail.com	2011-09-01	Category C
	Mr/Ms BIDHAN C.ROY	10	bidhanroy@yahoo.co.in	2011-10-23	Category C
	Mr/Ms VIKAS JHA	11	vikas.jha@gmail.com	2011-11-15	Category C
	Mr/Ms ARUL KUMAR.T	12	arulkumar@gmail.com	2011-12-03	Category C
	Mr/Ms RAVI SRINIVASN	13	r_srinivasn@yahoo.co.in	2012-01-05	Category C
	Mr/Ms AVINASH DUTTA	14	avinash.dutta@yahoo.co.i	2012-01-18	Category C
	Mr/Ms JYOTI SINHA	15	jyotisinha@gmail.com	2012-01-31	Category C
	Mr/Ms VIJAY BOLLINENI	16	vbollineni@gmail.com	2012-02-06	Category C
	Mr/Ms PRASAD SHETTY	17	pshetty@yahoo.co.in	2012-02-26	Category C
	Mr/Ms SURESH BABU	18	sbabu@yahoo.co.in	2012-03-01	Category C
	Mr/Ms BHARTI SUBHASH	19	bhartis@gmail.com	2012-03-28	Category C
	Mr/Ms KESHAV JOG	20	kesjog@yahoo.co.in	2012-04-06	Category C
	Mr/Ms ALAN SILVESTRI	21	alan_silver@msn.com	2016-02-04	Category C
	Mr/Ms ANDREW STANTON	22	andrew_stanton@yahoo.c	2013-05-23	Category C
	Mr/Ms ANNA PINNOCK	23	anna_pinnock@yahoo.com	2013-01-18	Category C
	Mr/Ms BRIAN GRAZER	24	brian_grazer@gmail.com	2009-12-28	Category B
	Mr/Ms BRUNO DELBONNEL	25	bruno_delbonnel@msn.con	2012-08-27	Category C

Mr/Ms STEPHEN E. RIVKIN	26	stephen_e. rivkin@msn.com	2010-03-04	Category B
Mr/Ms MALI FINN	27	mali_finn@yahoo.com	2006-01-14	Category B
Mr/Ms SAYYED FARAJ	28	sayyed_faraj@gmail.com	2009-11-01	Category B
Mr/Ms FRANCINE MAISLER	29	francine_maisler@gmail.com	2013-09-01	Category C
Mr/Ms ANITA KOHLI	30	anita_kohli@yahoo.com	2010-10-24	Category B
Mr/Ms THOMAS NEWMAN	31	thomas_nman@yahoo.com	2015-06-30	Category C
Mr/Ms HANS ZIMMER	32	hans_zimmer@yahoo.com	2016-01-24	Category C
Mr/Ms NISEEMA ZIMMER	33	niseemaz@yahoo.com	2014-12-29	Category C
Mr/Ms HANS ZIMMER	34	hans_zimmer@gmail.com	2015-09-27	Category C
Mr/Ms THOMAS NEWMAN	35	thomas_newman@gmail.com	2014-01-16	Category C
Mr/Ms MICHELLE H. SHORES	36	howard_shores@yahoo.co	2010-06-24	Category B
Mr/Ms JAMES NEWTON HOWARD	37	james_nhoward@yahoo.cc	2012-07-06	Category C
Mr/Ms JOHN LASSETER	38	john_lass@gmail.com	2016-09-02	Category C
Mr/Ms LIZ MULLANE	39	liz_mullane@gmail.com	2006-03-29	Category B
Mr/Ms PAUL HAGGIS	40	paul_haggis@gmail.com	2016-08-31	Category C
Mr/Ms THARMAN SHANMUGARATNAM	41	tharshan@yahoo.co.sg	2009-11-20	Category B
Mr/Ms REBECCA LIM	42	reblim@msn.co.sg	2009-07-31	Category B
Mr/Ms RAJIV CHANDRASEKARAN	43	rajiv_chan@yahoo.co.in	2014-04-14	Category C
Mr/Ms TANYA CHUA	44	tanyac@singers.sg	2014-04-14	Category C
Mr/Ms JANVI RAJIV	45	janvi_jha@msn.co.sg	2015-04-14	Category C
Mr/Ms TAN BEE SOO	46	tanbeesoo@yahoo.co.sg	2016-11-15	Category C
Mr/Ms YUN ZHU	47	yunzho@gmail.com	2016-11-15	Category C
Mr/Ms WAJDI BIN ABDUL MAJEED	48	wajdiabdul@gmail.com	2010-06-25	Category B
Mr/Ms ANBARA BINTI MUBARAK	49	anmubarak@yahoo.co.my	2010-08-27	Category B
Mr/Ms SRI BINTI YAAKOB	50	sribinti@yahoo.co.my	2007-12-18	Category B
Mr/Ms AHMAD BIN GH AZALI	51	ahmad_bingh@yahoo.co.m	2010-05-14	Category B
Mr/Ms SUCHIRITHAA EKANAYAKE	52	suchiritha@msn.com	2016-11-15	Category C

According to this data, Only 3 Customers are come under Category A, 17 Customers are come under Category B and remains 32 Customers are under Category C.

Problem 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 product price > 20,000 then apply 20% discount
- If product price > 10,000 then apply 15% discount
- If product price ≤ 10,000 then apply 10% discount

Solution:-

	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
	99994	HP Deskjet 2050 All-in-One - J510a Printer	100	3749.00	374900.00	3374.1000
	99991	Dell Targus Synergy 2.0 Backpack	250	999.00	249750.00	899.1000
	99992	Tom Clancy's Ghost Recon: Future Soldier (PC G...	250	999.00	249750.00	899.1000
	99993	Nokia 1280 (Black)	250	999.00	249750.00	899.1000
	99990	Quanta 4 Port USB Hub	50	500.00	25000.00	450.0000
	230	Esprit Analog Watch	5	3495.00	17475.00	3145.5000
	249	All-in-one Board Game	20	450.00	9000.00	405.0000
	250	Huwi Wi-Fi Receiver 500Mbps	30	287.00	8610.00	258.3000

Here, Zero product get 20% discount because none product_descs price is greater than 20,000. Only 3 product_descs get 15% discount and remains gets 10% discount (which are 10 product_descs).

Problem 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.

Solution:-

	product_class_code	product_class_desc	count_product_type	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

Problem 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)

Solution:-

	customer_id	full_name	customer_email	customer_phone	country
▶	41	Tharman Shanmugaratnam	tharshan@yahoo.co.sg	8572898929	Singapore

Problem 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.

Solution:-

	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
	DHL	Dharmapuri	1	1
	DHL	Hosur	1	1
	DHL	Hyderabad	2	2
	DHL	W. Alibio	1	1

Problem 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'.

Solution:-

	customer_id	full_name	total_quantity	total_value
▶	6	Anita Goswami	25	93237.00
	24	Brian Grazer	4	4010.00

Problem 7.

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

Solution:-

	order_id	total_volume
▶	10007	954000000

Problem 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'

Solution:-

	PRODUCT_ID	PRODUCT_DESC	PRODUCT_QUANTITY_AVAIL	product_quantity_sold	inventory_status
▶	227	Phils Wah Collection Juicer JM12	2	7	Low inventory, need to add inventory
	240	4M Post It Pad 3.5	8	29	Low inventory, need to add inventory
	235	Cindy HMPOC Pencil Box (Multicolor)	10	40	Low inventory, need to add inventory
	241	PK Copier A4 75 GSM White Paper Ream	2	18	Low inventory, need to add inventory
	243	Supreme Fusion Cupboard 02TB	3	5	Medium inventory, need to add some inventory
	244	Foldable Premium Chair	6	16	Medium inventory, need to add some inventory
	99999	Samsung Galaxy Tab 2 P3100	50	0	No sales in past, give discount to reduce invent...
	99998	Nikon Coolpix L810 Bridge	50	0	No sales in past, give discount to reduce invent...
	99997	Sony Xperia U (Black White)	50	0	No sales in past, give discount to reduce invent...
	99994	HP Deskjet 2050 All-in-One - J510a Printer	100	0	No sales in past, give discount to reduce invent...
	99995	LG MS-2049UW Solo Microwave	100	0	No sales in past, give discount to reduce invent...
	99996	Nokia Asha 200 (Graphite)	100	0	No sales in past, give discount to reduce invent...
	99991	Dell Targus Synergy 2.0 Backpack	250	0	No sales in past, give discount to reduce invent...
	99992	Tom Clancy's Ghost Recon: Future Soldier (PC G...	250	0	No sales in past, give discount to reduce invent...
	99993	Nokia 1280 (Black)	250	0	No sales in past, give discount to reduce invent...
	230	Esprit Analog Watch	5	0	No sales in past, give discount to reduce invent...
	249	All-in-one Board Game	20	0	No sales in past, give discount to reduce invent...
	250	Huwi Wi-Fi Receiver 500Mbps	30	0	No sales in past, give discount to reduce invent...
	99990	Quanta 4 Port USB Hub	50	0	No sales in past, give discount to reduce invent...
	201	Sky LED 102 CM TV	30	6	Sufficient inventory
	202	Sams 192 L4 Single-door Refrigerator	15	6	Sufficient inventory
	203	Jocky Speaker Music System HT32	19	3	Sufficient inventory
	204	Cricket Set for Boys	10	10	Sufficient inventory
	205	Infant Sleepwear Blue	50	7	Sufficient inventory
	206	Barbie Fab Gown Doll	20	13	Sufficient inventory
	207	Remote Control Car	29	11	Sufficient inventory
	208	Doll House	12	4	Sufficient inventory
	209	Blue Jeans 34	100	12	Sufficient inventory
	210	Blossoms Lehenga Choli set	100	10	Sufficient inventory
	211	OnePlus 6 Smart Phone	25	5	Sufficient inventory

212	Samsung Galaxy On6	20	9	Sufficient inventory
213	Alchemist	50	21	Sufficient inventory
214	Harry Potter	50	27	Sufficient inventory
215	Logtech M244 Optical Mouse	10	9	Sufficient inventory
216	External Hard Disk 500 GB	10	7	Sufficient inventory
217	Titan Karishma Watch	35	2	Sufficient inventory
218	Shell Fingertip Ball Pen	150	67	Sufficient inventory
219	Ruf-n-Tuf Black PU Leather Belt	50	20	Sufficient inventory
220	Hello Kitti Lunch Bag	15	5	Sufficient inventory
221	Cybershot DWC-W325 Camera	5	4	Sufficient inventory
222	KitchAsst Siphon Coffee Maker 500 ml	10	3	Sufficient inventory
223	Sams 21L Microwave Oven	5	4	Sufficient inventory
224	Phils HL 7430 Mixer Grinder 750W	3	2	Sufficient inventory
225	Solmo Non-stick Sandwich Maker 750 W	10	3	Sufficient inventory
226	Solmo Hand Blender Fibre	12	7	Sufficient inventory
228	Adidas Analog Watch	10	7	Sufficient inventory
229	Disney Analog Watch	10	2	Sufficient inventory
231	HP ODC Laptop Bag 15.5	10	7	Sufficient inventory
232	Women Hand Bag	15	4	Sufficient inventory
233	HP ODC School Bag 2.5'	35	13	Sufficient inventory
234	FLUFF Tote Travel Bag 35LTR	8	4	Sufficient inventory
236	Solo Exam SB-01 Writing Pad	30	21	Sufficient inventory
238	Kasyo DJ-2100 Desktop Calculator	10	10	Sufficient inventory
239	TRANS 2D A4 Size Box File	6	5	Sufficient inventory
242	GreenWud CT-NO-PR Coffee Table	6	7	Sufficient inventory
245	GreenWud Nova Pedestal Unit	5	3	Sufficient inventory
237	Zamark Color Pencil Art Set	10	3	Sufficient inventory
246	Exam Warriors	50	3	Sufficient inventory
247	Small Is Beautiful	40	1	Sufficient inventory
248	To Kill a Mocking Bird	35	1	Sufficient inventory

Problem 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.

Solution:-

	PRODUCT_ID	PRODUCT_DESC	tot_qty
▶	218	Shell Fingertip Ball Pen	45
	235	Cindy HMPOC Pencil Box (Multicolor)	25
	240	4M Post It Pad 3.5	19
	236	Solo Exam SB-01 Writing Pad	18
	241	PK Copier A4 75 GSM White Paper Ream	16
	244	Foldable Premium Chair	15
	219	Ruf-n-Tuf Black PU Leather Belt	11
	206	Barbie Fab Gown Doll	9
	233	HP ODC School Bag 2.5'	8
	207	Remote Control Car	7
	242	GreenWud CT-NO-PR Coffee Table	7
	216	External Hard Disk 500 GB	6
	209	Blue Jeans 34	6
	238	Kasyo DJ-2100 Desktop Calculator	5
	243	Supreme Fusion Cupboard 02TB	5
	228	Adidas Analog Watch	5
	204	Cricket Set for Boys	5
	231	HP ODC Laptop Bag 15.5	5
	202	Sams 192 L4 Single-door Refrigerator	5
	239	TRANS 2D A4 Size Box File	5
	212	Samsung Galaxy On6	4
	232	Women Hand Bag	4
	227	Phils Wah Collection Juicer JM12	4
	220	Hello Kitti Lunch Bag	4
	211	OnePlus 6 Smart Phone	4
	205	Infant Sleepwear Blue	4
	221	Cybershot DWC-W325 Camera	3
	246	Exam Warriors	3
	215	Logtech M244 Optical Mouse	3
	237	Zamark Color Pencil Art Set	3

225	Solmo Non-stick Sandwich Maker 750 W	2
203	Jocky Speaker Music System HT32	2
226	Solmo Hand Blender Fibre	2
208	Doll House	2
245	GreenWud Nova Pedestal Unit	2
223	Sams 21L Microwave Oven	2
224	Phils HL 7430 Mixer Grinder 750W	1
214	Harry Potter	1
222	KitchAsst Siphon Coffee Maker 500 ml	1
217	Titan Karishma Watch	1
229	Disney Analog Watch	1
213	Alchemist	1
234	FLUFF Tote Travel Bag 35LTR	1

Problem 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".

Solution:-

	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
	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