SQL Project
Business Report

DSBA

Contents:-

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:

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 ' 9

7. Write a query to display order_id and volume of biggest order (in terms of volume) that can fit in carton id 10.. 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' 11-12

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) 12

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" 13

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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.

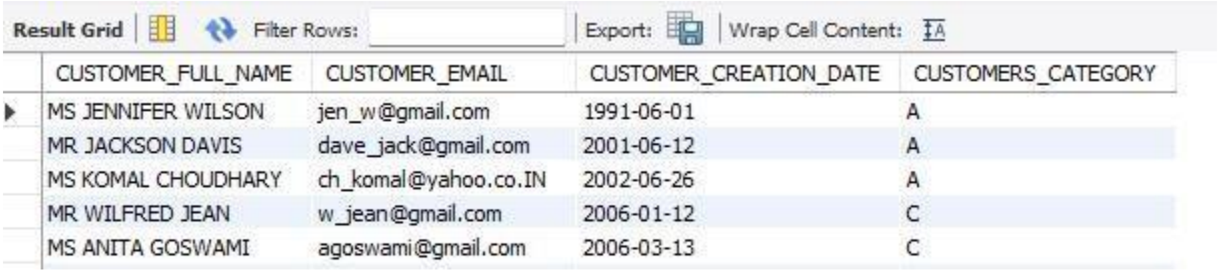
1. Write a query to display customer full name with their title (mr/ms), both first name and last name are in upper case with customer email id, customer creation date and display customer’s category after applying below categorization rules:

i. If customer creation date year <2005 then category a

ii. If customer creation date year >=2005 and <2011 then category b

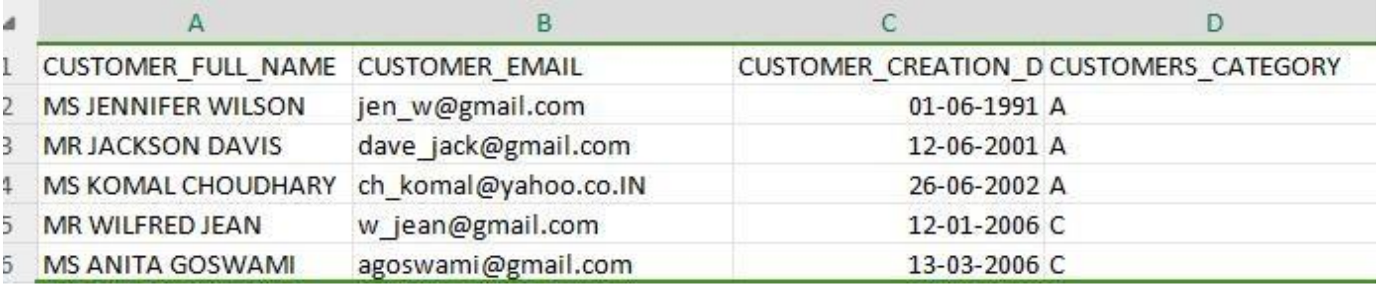
iii. If customer creation date year>= 2011 then category c

Output



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	C
MS ANITA GOSWAMI	agoswami@gmail.com	2006-03-13	C

Fig 1: Top 5 rows of customers showing in MySQL



	A	B	C	D
1	CUSTOMER_FULL_NAME	CUSTOMER_EMAIL	CUSTOMER_CREATION_D	CUSTOMERS_CATEGORY
2	MS JENNIFER WILSON	jen_w@gmail.com	01-06-1991	A
3	MR JACKSON DAVIS	dave_jack@gmail.com	12-06-2001	A
4	MS KOMAL CHOUDHARY	ch_komal@yahoo.co.IN	26-06-2002	A
5	MR WILFRED JEAN	w_jean@gmail.com	12-01-2006	C
6	MS ANITA GOSWAMI	agoswami@gmail.com	13-03-2006	C

Table 1: Top 5 rows of customers showing after exporting data from MySQL

As we can see from the given output their were total 52 rows for the given query out of which only 3 customers were falling in catergory A and 0 in catergory B and rest of 49 custoners were falling in category C

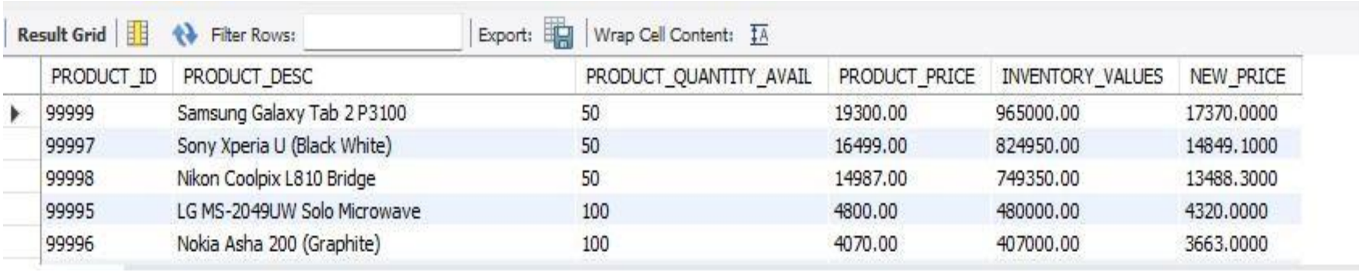
2. Write a query to display the following information for the products, which have not been sold: product_id, product_desc, product_quantity_avail, product_price, inventory values(product_quantity_avail*product_price), new_price after applying discount as per the below criteria. Sort the output concerning the decreasing value of inventory_value.

i. If product price > 20,000 then apply 20% discount

ii. If product price > 10,000 then apply 15% discount

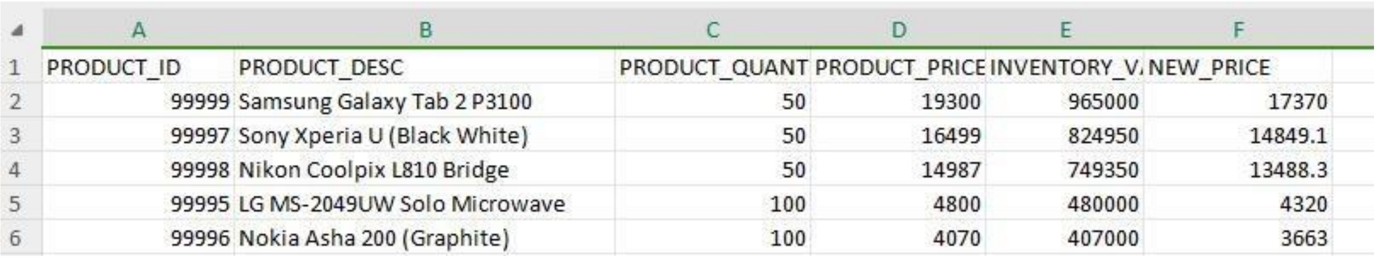
iii. If product price =< 10,000 then apply 10% discount

Output



PRODUCT_ID	PRODUCT_DESC	PRODUCT_QUANTITY_AVAIL	PRODUCT_PRICE	INVENTORY_VALUES	NEW_PRICE
99999	Samsung Galaxy Tab 2 P3100	50	19300.00	965000.00	17370.0000
99997	Sony Xperia U (Black White)	50	16499.00	824950.00	14849.1000
99998	Nikon Coolpix L810 Bridge	50	14987.00	749350.00	13488.3000
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

Fig 2: Top 5 rows of products showing in MySQL



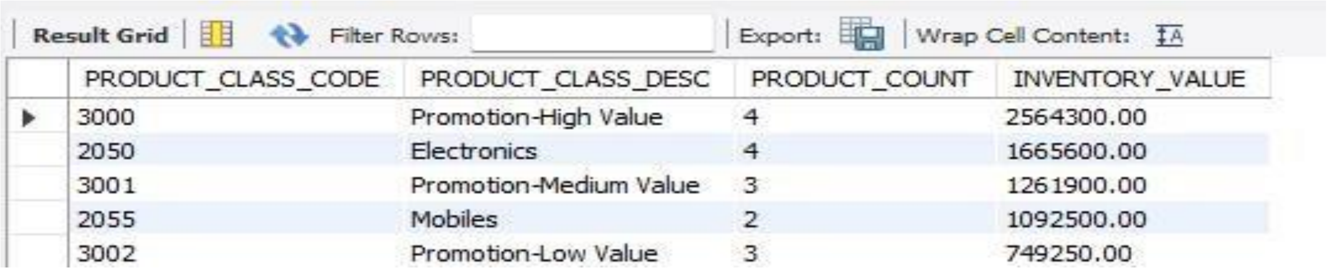
	A	B	C	D	E	F
1	PRODUCT_ID	PRODUCT_DESC	PRODUCT_QUANT	PRODUCT_PRICE	INVENTORY_V.	NEW_PRICE
2	99999	Samsung Galaxy Tab 2 P3100	50	19300	965000	17370
3	99997	Sony Xperia U (Black White)	50	16499	824950	14849.1
4	99998	Nikon Coolpix L810 Bridge	50	14987	749350	13488.3
5	99995	LG MS-2049UW Solo Microwave	100	4800	480000	4320
6	99996	Nokia Asha 200 (Graphite)	100	4070	407000	3663

Table 2: Top 5 rows of products showing after exporting data from MySQL

As we can see from the given output their were total 13 rows for the given query which means only 13 products have not been sold. Hence we have applied discount on the products as mentioned above.

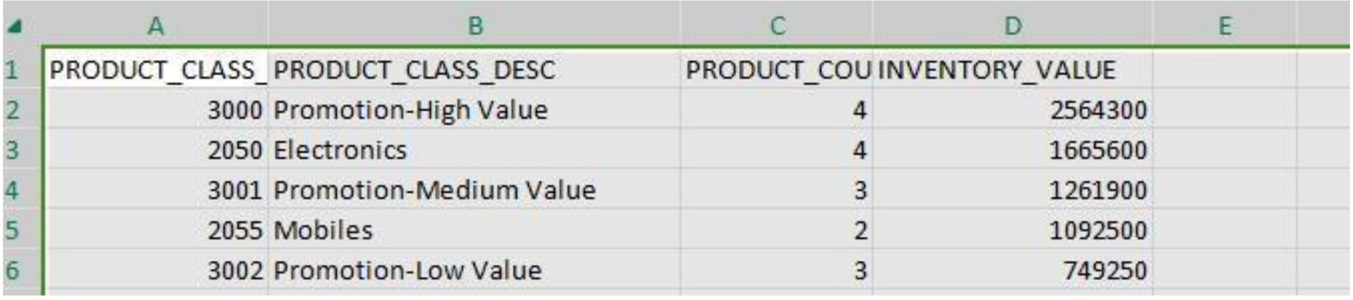
3. write a query to display product_class_code, product_class_description, count of product type in each product class, and inventory value (p.product_quantity_avail*p.product_price). Information should be displayed for only those product_class_code that have more than 1,00,000 inventory value. sort the output concerning the decreasing value of inventory_value

Output



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

Fig 3: Top 5 rows of product_class_code that have more than 1,00,000 inventory value showing in MySQL



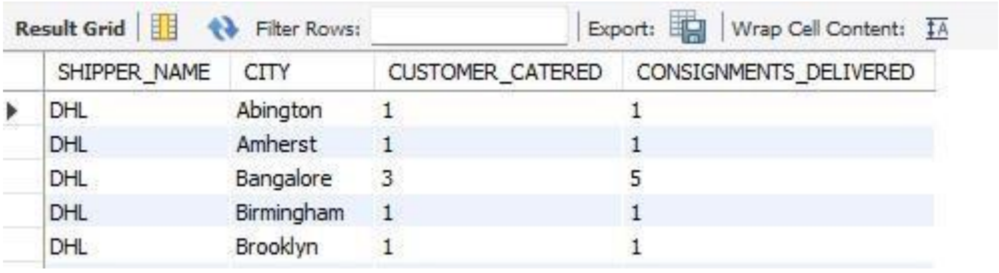
	PRODUCT_CLASS_	PRODUCT_CLASS_DESC	PRODUCT_COU	INVENTORY_VALUE
2	3000	Promotion-High Value	4	2564300
3	2050	Electronics	4	1665600
4	3001	Promotion-Medium Value	3	1261900
5	2055	Mobiles	2	1092500
6	3002	Promotion-Low Value	3	749250

Table 3: Top 5 rows of product_class_code that have more than 1,00,000 inventory value showing after exporting data from MySQL

As we can see from the given output their were total 9 rows for the given query which means their are only 9 product_class_code that have more than 1,00,000 inventory value andwe have calculated the inventory value (p.product_quantity_avail*p.product_price).

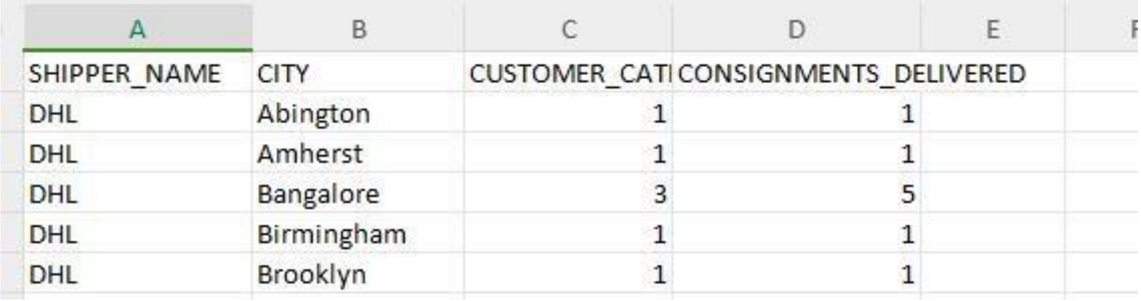
5. Write a query to display shipper name, city to which it is catering, number of customer catered by the shipper in the city and number of consignments delivered to that city for shipper dhl.

Output



SHIPPER_NAME	CITY	CUSTOMER_CATERED	CONSIGNMENTS_DELIVERED
DHL	Abington	1	1
DHL	Amherst	1	1
DHL	Bangalore	3	5
DHL	Birmingham	1	1
DHL	Brooklyn	1	1

Fig 4: Top 5 rows of consignments delivered to that city for shipper dhl showing in MySQL



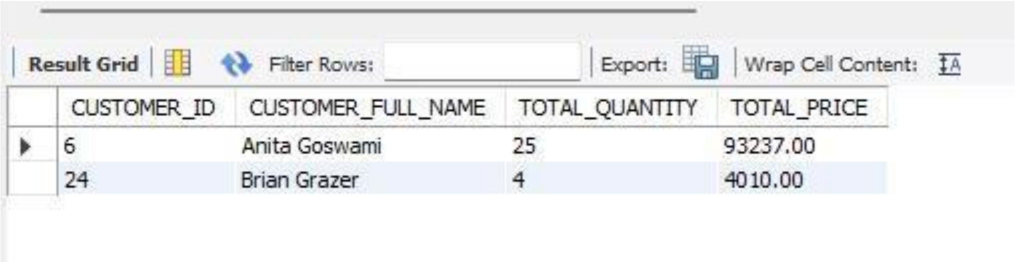
SHIPPER_NAME	CITY	CUSTOMER_CATI	CONSIGNMENTS_DELIVERED
DHL	Abington	1	1
DHL	Amherst	1	1
DHL	Bangalore	3	5
DHL	Birmingham	1	1
DHL	Brooklyn	1	1

Table 4: Top 5 rows of consignments delivered to that city for shipper dhl showing after exporting data from MySQL

As we can see from the given output their were total 9 rows for the given query which means their are only 9 consignments delivered to customers to that city by shipper dhl.

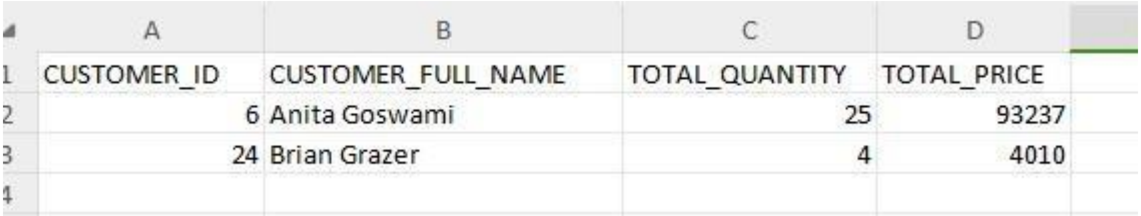
6. Write a query to display customer id, customer full name, total quantity and total value (quantity*price) shipped where mode of payment is cash and customer last name starts with 'g '

Output



CUSTOMER_ID	CUSTOMER_FULL_NAME	TOTAL_QUANTITY	TOTAL_PRICE
6	Anita Goswami	25	93237.00
24	Brian Grazer	4	4010.00

Fig 5: numbers of customers where mode of payment is cash and customer last name starts with 'g showing in MySQL



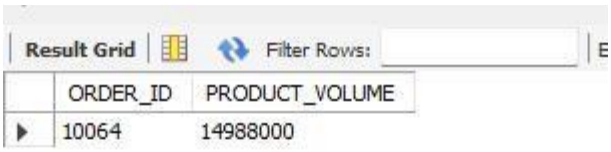
	A	B	C	D
1	CUSTOMER_ID	CUSTOMER_FULL_NAME	TOTAL_QUANTITY	TOTAL_PRICE
2	6	Anita Goswami	25	93237
3	24	Brian Grazer	4	4010
4				

Table 5: numbers of customers numbers of customers where mode of payment is cash and customer last name starts with 'g' after exporting data from MySQL

As we can see from the given output their were total 2 rows for the given query which means their are only 2 **customer shipped where mode of payment is cash and customer last name starts with 'g '.**

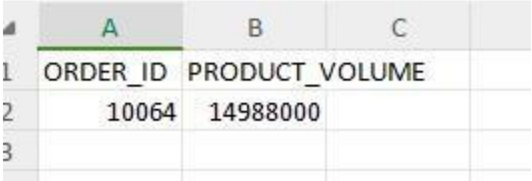
7. Write a query to display order_id and volume of biggest order (in terms of volume) that can fit in carton id 10

Output



ORDER_ID	PRODUCT_VOLUME
10064	14988000

Fig 6: biggest order (in terms of volume) that can fit in carton id 10 showing in MySQL



	A	B	C
1	ORDER_ID	PRODUCT_VOLUME	
2	10064	14988000	
3			

Table 6: biggest order (in terms of volume) that can fit in carton id 10 showing after exporting data from MySQL

As we can see from the given output their were total 1 rows for the given query which means there is only 1 order_id which has biggest product volume order.

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,

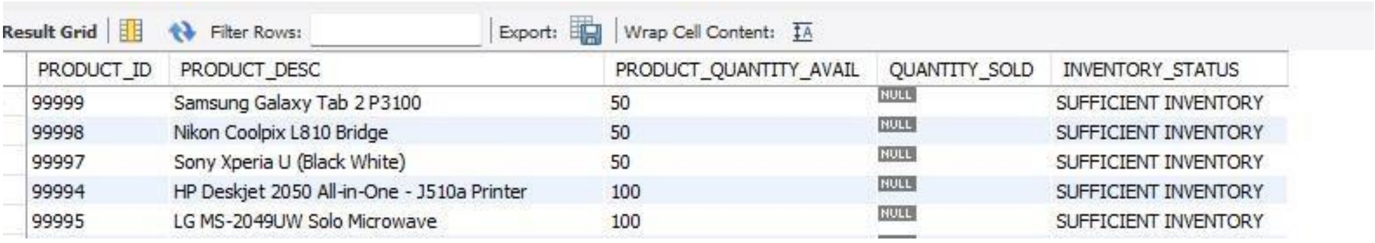
i. If sales till date is zero then show 'no sales in past, give discount to reduce inventory',

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',

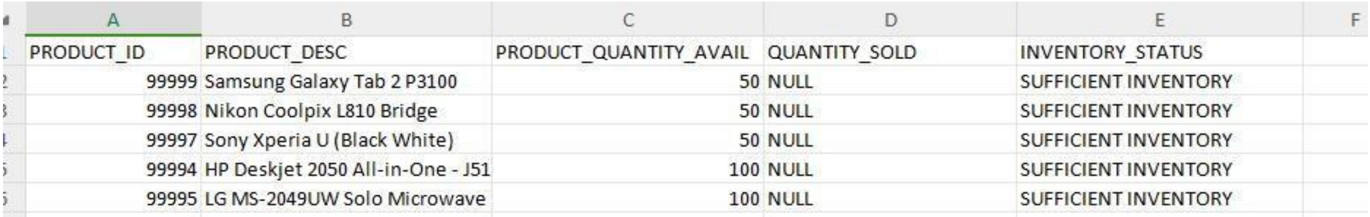
iv. If inventory quantity is more or equal to 70% of quantity sold, show 'sufficient inventory'

Output



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

Fig 7: Top 5 rows of **product_id** showing in MySQL



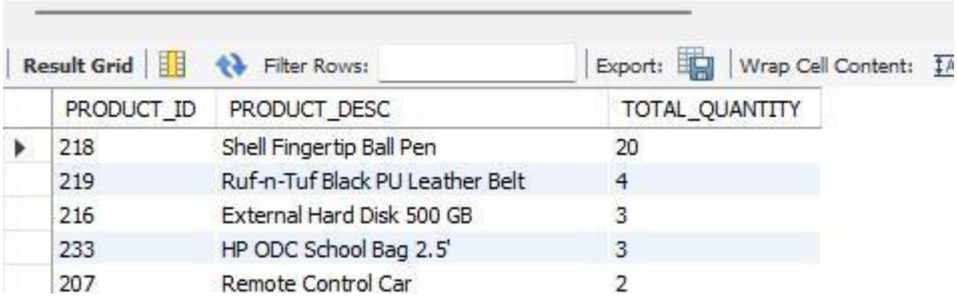
PRODUCT_ID	PRODUCT_DESC	PRODUCT_QUANTITY_AVAIL	QUANTITY_SOLD	INVENTORY_STATUS
99999	Samsung Galaxy Tab 2 P3100	50	NULL	SUFFICIENT INVENTORY
99998	Nikon Coolpix L810 Bridge	50	NULL	SUFFICIENT INVENTORY
99997	Sony Xperia U (Black White)	50	NULL	SUFFICIENT INVENTORY
99994	HP Deskjet 2050 All-in-One - J51	100	NULL	SUFFICIENT INVENTORY
99995	LG MS-2049UW Solo Microwave	100	NULL	SUFFICIENT INVENTORY

Table 7: Top 5 rows **product_id** showing after exporting data from MySQL

As we can see from the given output their were total 60 rows for the given query which means their are 60 products out of which 54 products has sufficient inventory , 2 product has medium inventory which need to add some inventory and 4 has low inventory which need to add inventory.

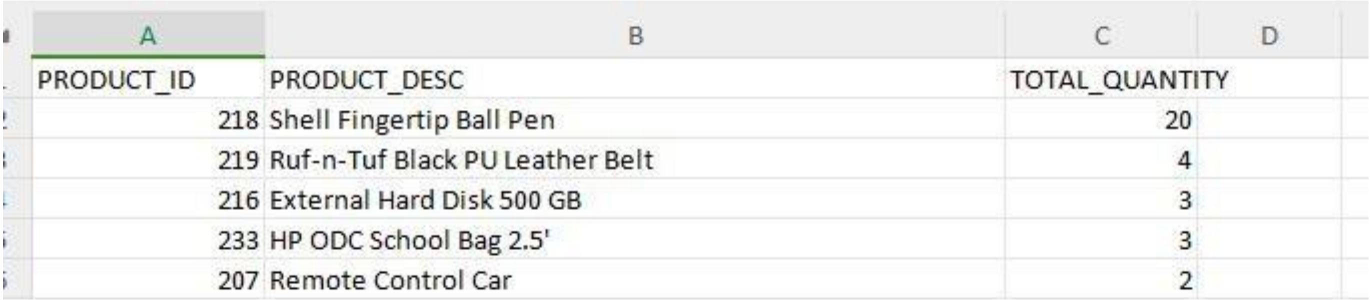
9. Write a query to display product_id, product_desc and total quantity of products which are sold together with product id 201 and are not shipped to city bangalore and new delhi. Display the output in descending order concerning tot_qty.(use sub-query

Output



PRODUCT_ID	PRODUCT_DESC	TOTAL_QUANTITY
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
207	Remote Control Car	2

Fig 8: Top 5 rows of product_id descending order concerning tot_qty showing in MySQL



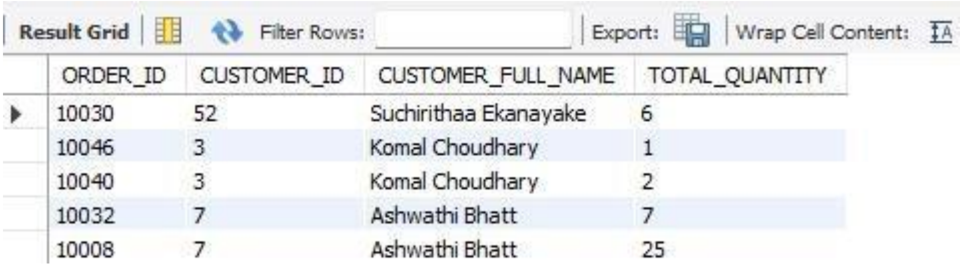
PRODUCT_ID	PRODUCT_DESC	TOTAL_QUANTITY
218	Shell Fingertip Ball Pen	20
219	Ruf-n-Tuf Black PU Leather Belt	4
216	External Hard Disk 500 GB	3
233	HP ODC School Bag 2.5'	3
207	Remote Control Car	2

Table 8:Top 5 rows of product_id descending order concerning tot_qty showing after exporting data from MySQL

As we can see from the given output their were total 13 rows for the given query which means their are 13 product id 201 which are not shipped to city bangalore and new delhi.

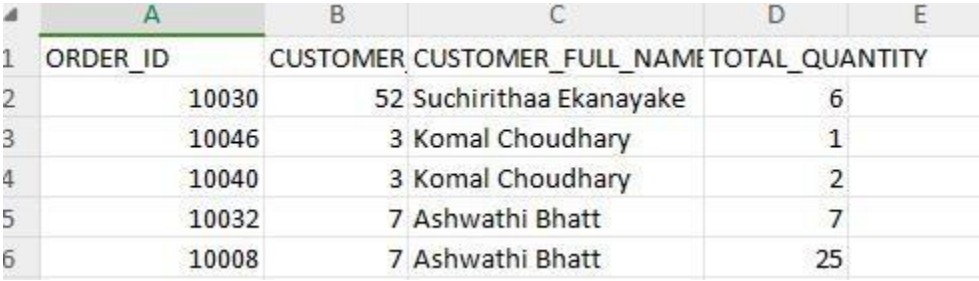
10. Write a query to display the order_id,customer_id and customer fullname and total quantity of products shipped for order ids which are even and shipped to address where pincode is not starting with "5"

Output



ORDER_ID	CUSTOMER_ID	CUSTOMER_FULL_NAME	TOTAL_QUANTITY
10030	52	Suchirithaa Ekanayake	6
10046	3	Komal Choudhary	1
10040	3	Komal Choudhary	2
10032	7	Ashwathi Bhatt	7
10008	7	Ashwathi Bhatt	25

Fig 9: Top 5 rows of order_id which are even and shipped to address where pincode is not starting with "5" showing in MySQL



	A	B	C	D	E
1	ORDER_ID	CUSTOMER	CUSTOMER_FULL_NAMI	TOTAL_QUANTITY	
2	10030	52	Suchirithaa Ekanayake	6	
3	10046	3	Komal Choudhary	1	
4	10040	3	Komal Choudhary	2	
5	10032	7	Ashwathi Bhatt	7	
6	10008	7	Ashwathi Bhatt	25	

Table 9 : Top 5 rows of order_id which are even and shipped to address where pincode is not starting with "5" showing after exporting data from MySQL

As we can see from the given output their were total 15 rows for the given query which means their are 15 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"