SQL Project

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.

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:

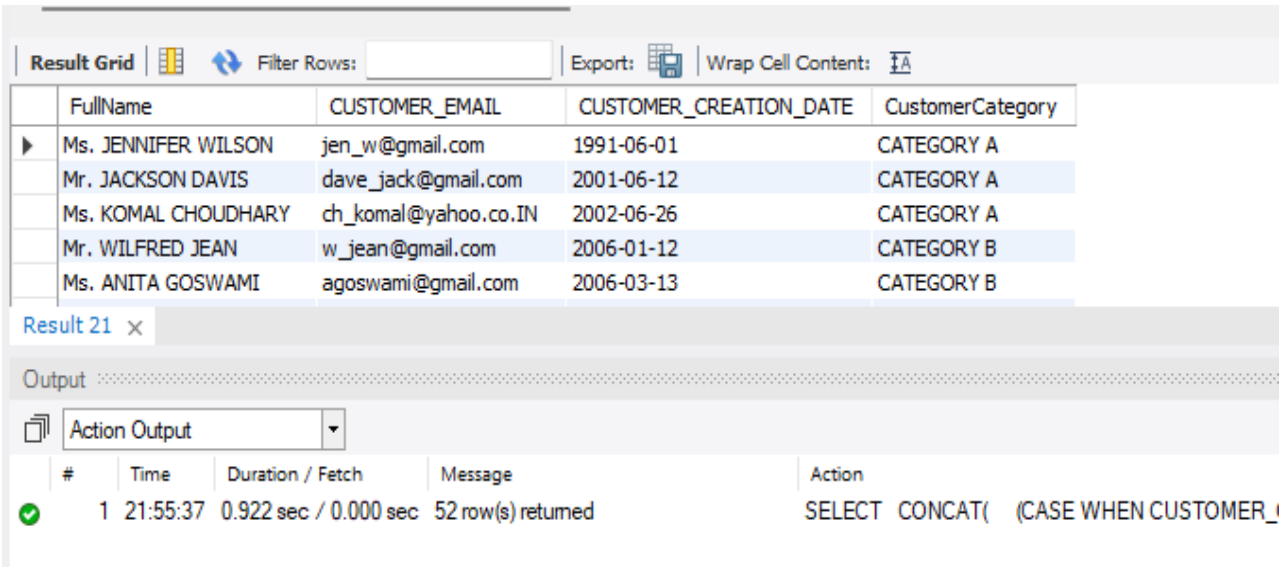
i. If customer creation date year < 2005 then category a

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 No 1 – After the execution of query have received 52 rows as an output.



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.

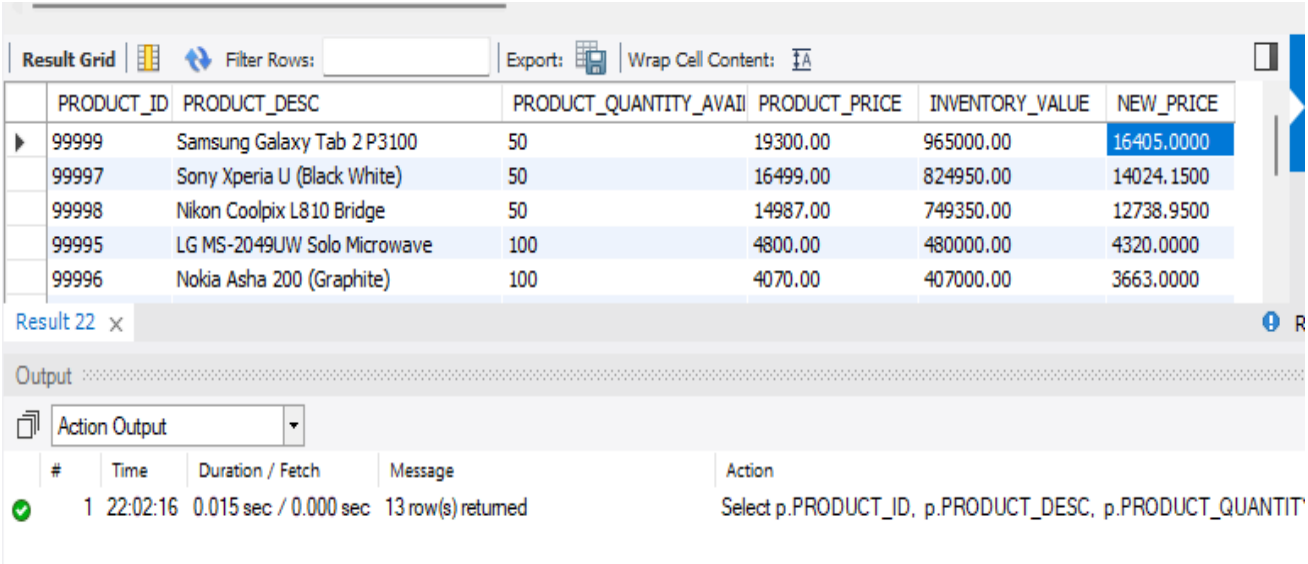
i. If product price > 20,000 then apply 20% discount

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

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

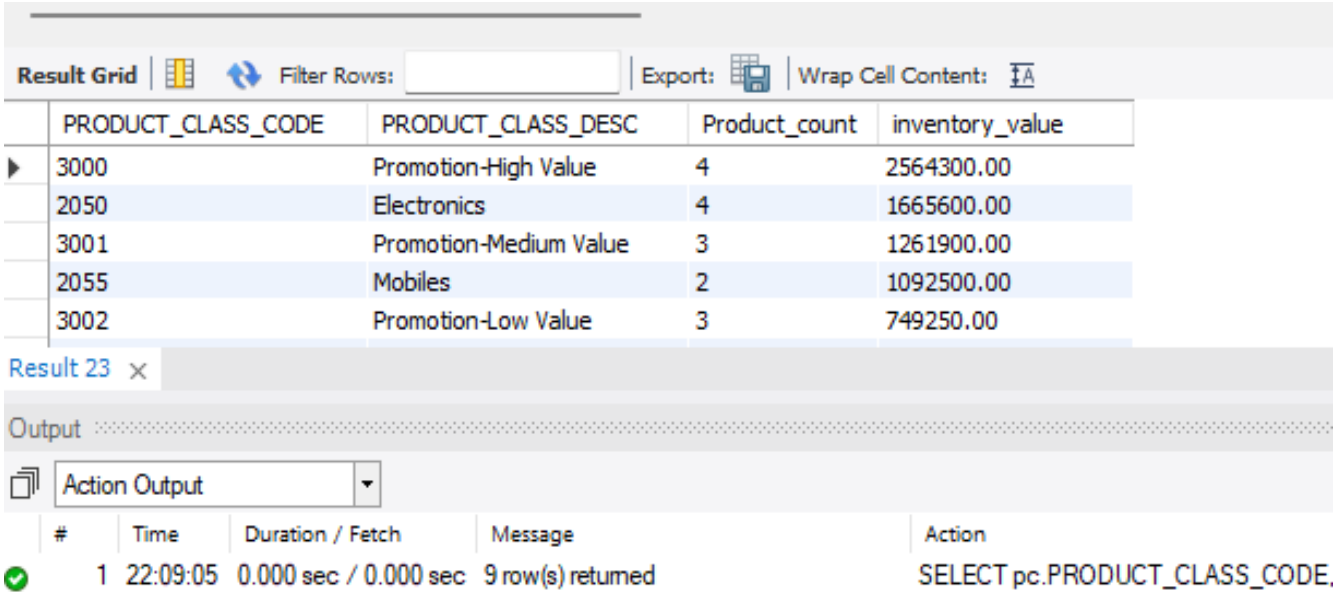
Hint: use case statement, no permanent change in table required. [note: tables to be used -product, order_items table]

Solution No 2 – After the execution of query have received 13 rows in final output.



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 No 3 – After the execution of query 9 rows returned.



Result Grid | Filter Rows: | Export: | Wrap Cell Content:

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

Result 23

Output

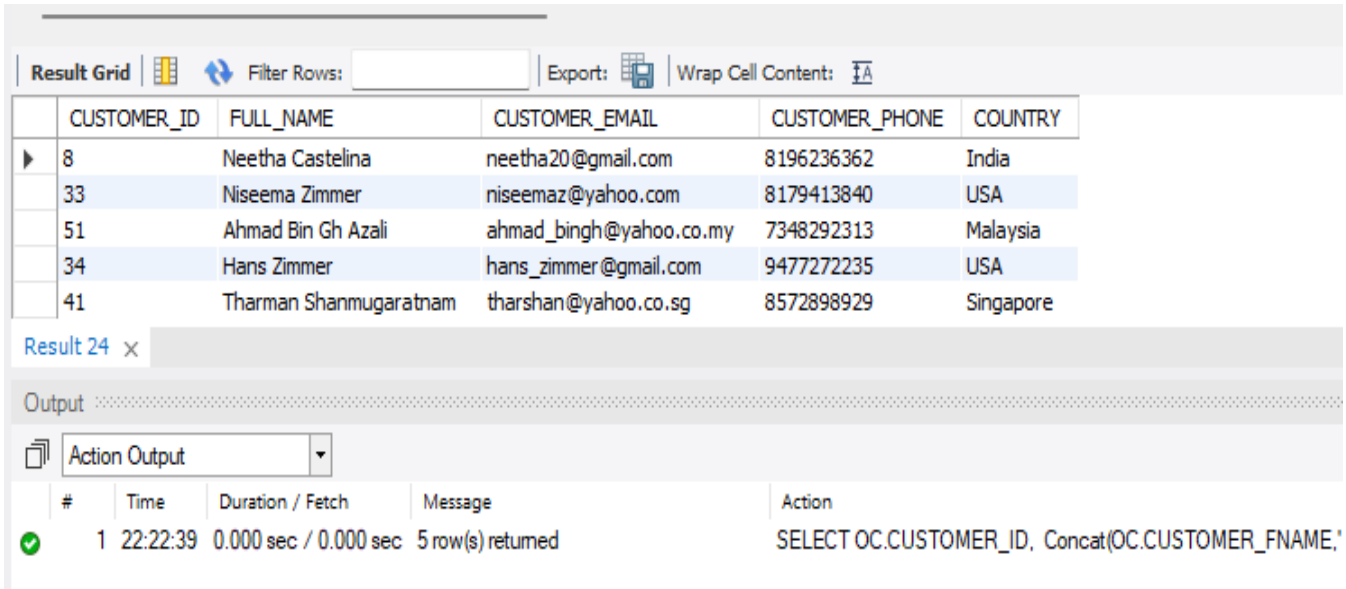
Action Output

#	Time	Duration / Fetch	Message	Action
1	22:09:05	0.000 sec / 0.000 sec	9 row(s) returned	SELECT pc.PRODUCT_CLASS_CODE,

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 No 4 - After the execution of query 5 rows returned.



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 24

Output

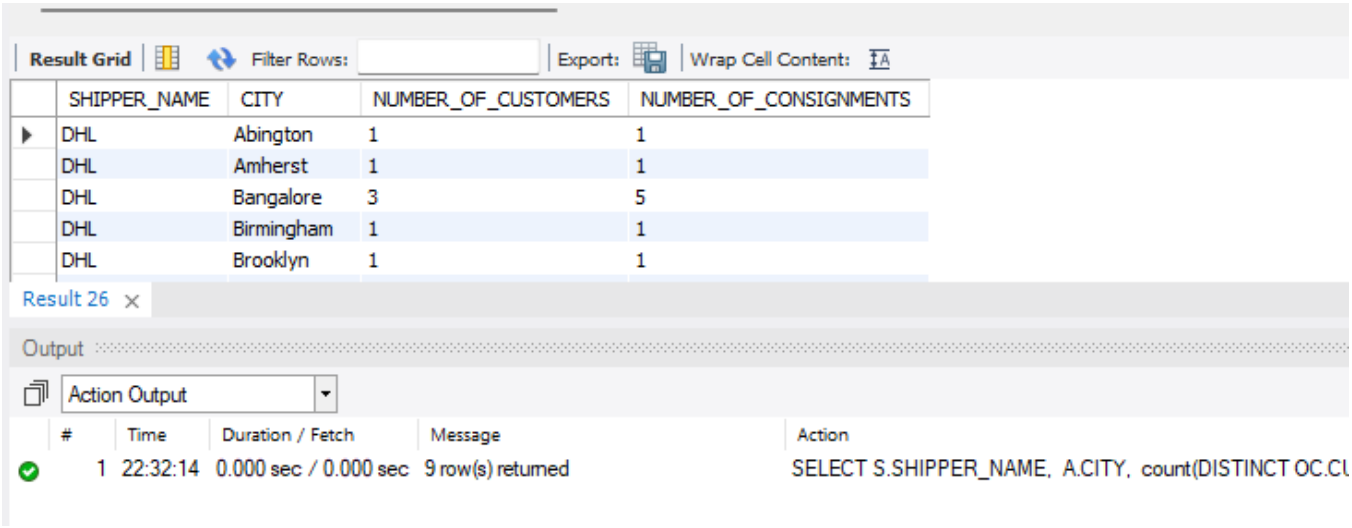
Action Output

#	Time	Duration / Fetch	Message	Action
1	22:22:39	0.000 sec / 0.000 sec	5 row(s) returned	SELECT OC.CUSTOMER_ID, Concat(OC.CUSTOMER_FNAME,'

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 (9 Rows).

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

Solution No 5 - After the execution of query 9 rows returned.



Result Grid | Filter Rows: | Export: | Wrap Cell Content:

SHIPPER_NAME	CITY	NUMBER_OF_CUSTOMERS	NUMBER_OF_CONSIGNMENTS
DHL	Abington	1	1
DHL	Amherst	1	1
DHL	Bangalore	3	5
DHL	Birmingham	1	1
DHL	Brooklyn	1	1

Result 26

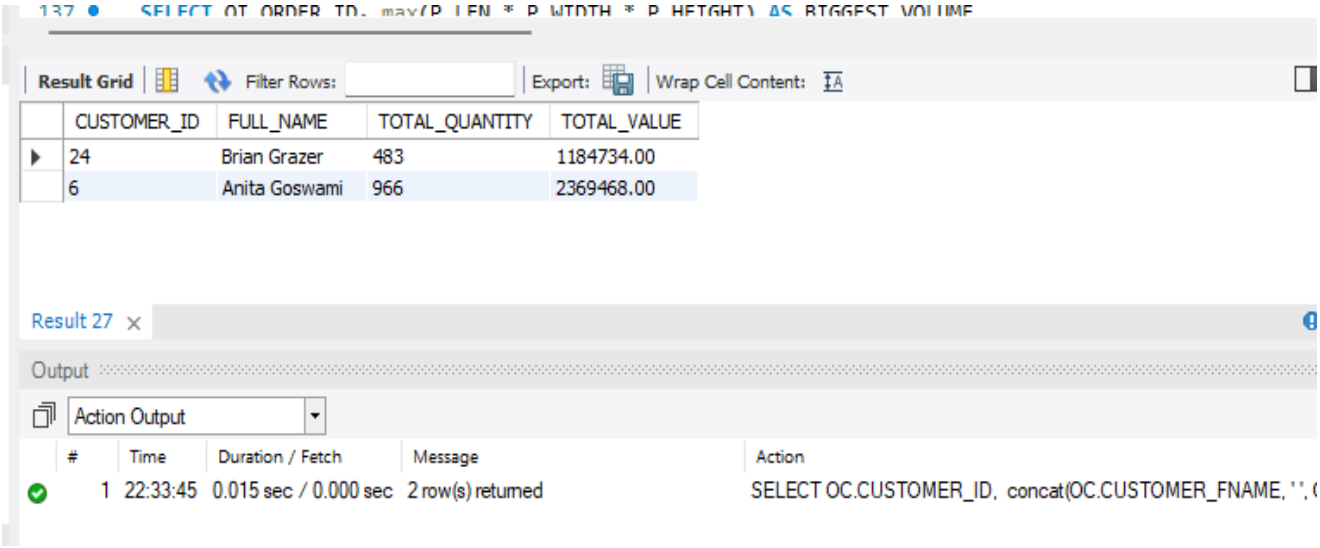
Output

Action Output

#	Time	Duration / Fetch	Message	Action
1	22:32:14	0.000 sec / 0.000 sec	9 row(s) returned	SELECT S.SHIPPER_NAME, A.CITY, count(DISTINCT OC.CU

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 No 6 - After the execution of query 2 rows returned.



137 • SELECT OT.ORDER_ID, max(P.LEN * P.WIDTH * P.HEIGHT) AS BIGGEST_VOLUME

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

CUSTOMER_ID	FULL_NAME	TOTAL_QUANTITY	TOTAL_VALUE
24	Brian Grazer	483	1184734.00
6	Anita Goswami	966	2369468.00

Result 27

Output

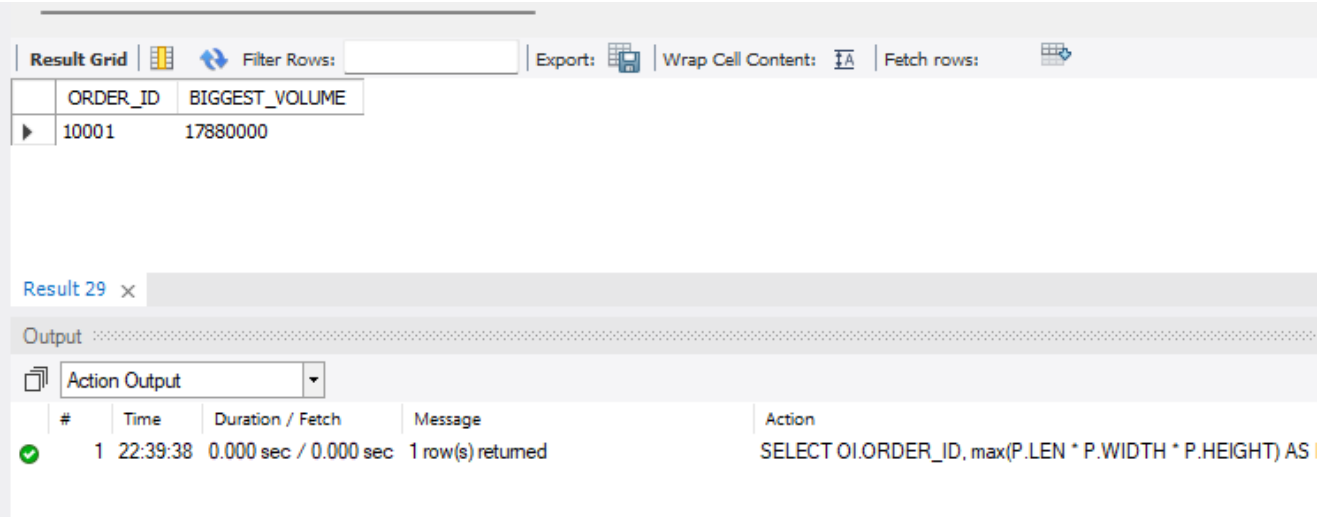
Action Output

#	Time	Duration / Fetch	Message	Action
1	22:33:45	0.015 sec / 0.000 sec	2 row(s) returned	SELECT OC.CUSTOMER_ID, concat(OC.CUSTOMER_FNAME, ' ',

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 No 7 – After the execution of query 1 rows returned.



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',

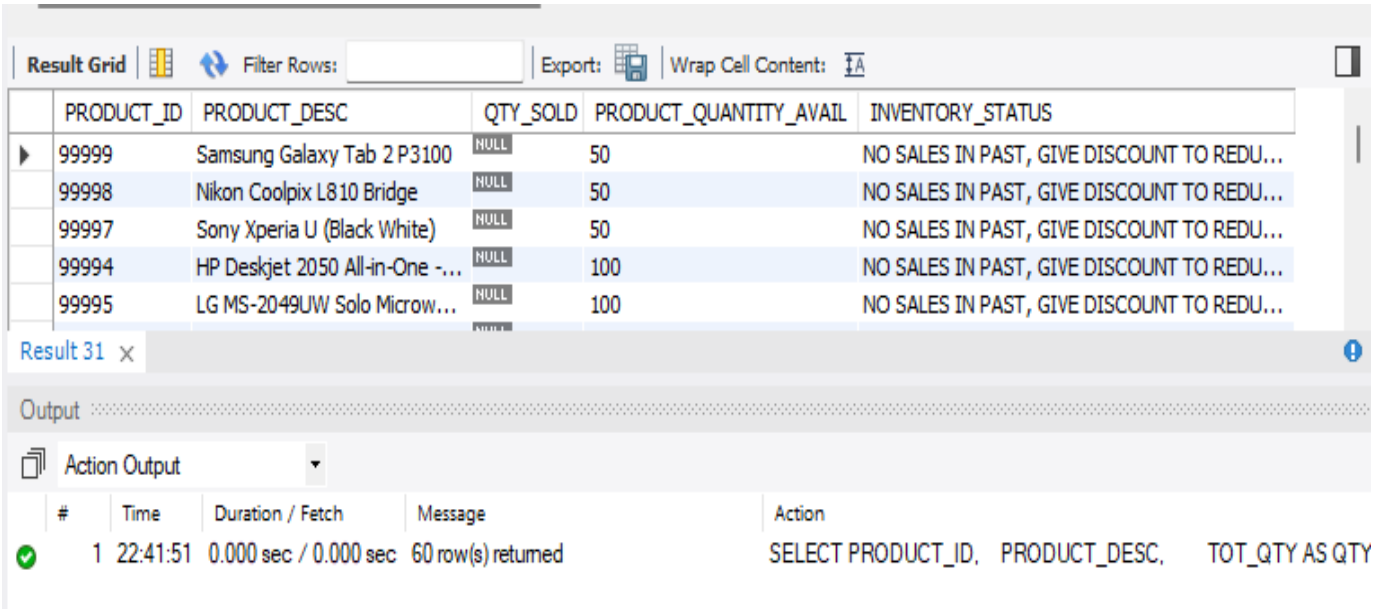
ii. If inventory quantity is less than 30% of quantity sold, show 'low inventory, need to add inventory',

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)

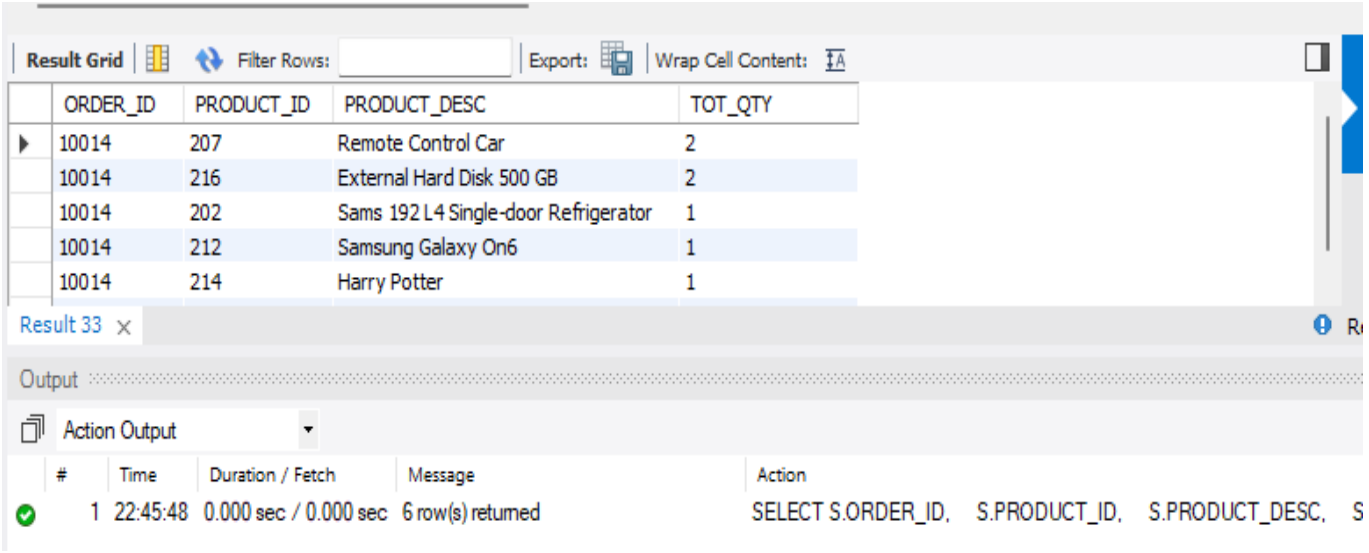
Solution No 8 – After the execution of query have received 60 rows as an output.



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 No 9 - After the execution of query have received 6 rows as an output.



Result Grid | Filter Rows: | Export: | Wrap Cell Content:

ORDER_ID	PRODUCT_ID	PRODUCT_DESC	TOT_QTY
10014	207	Remote Control Car	2
10014	216	External Hard Disk 500 GB	2
10014	202	Sams 192 L4 Single-door Refrigerator	1
10014	212	Samsung Galaxy On6	1
10014	214	Harry Potter	1

Result 33

Output

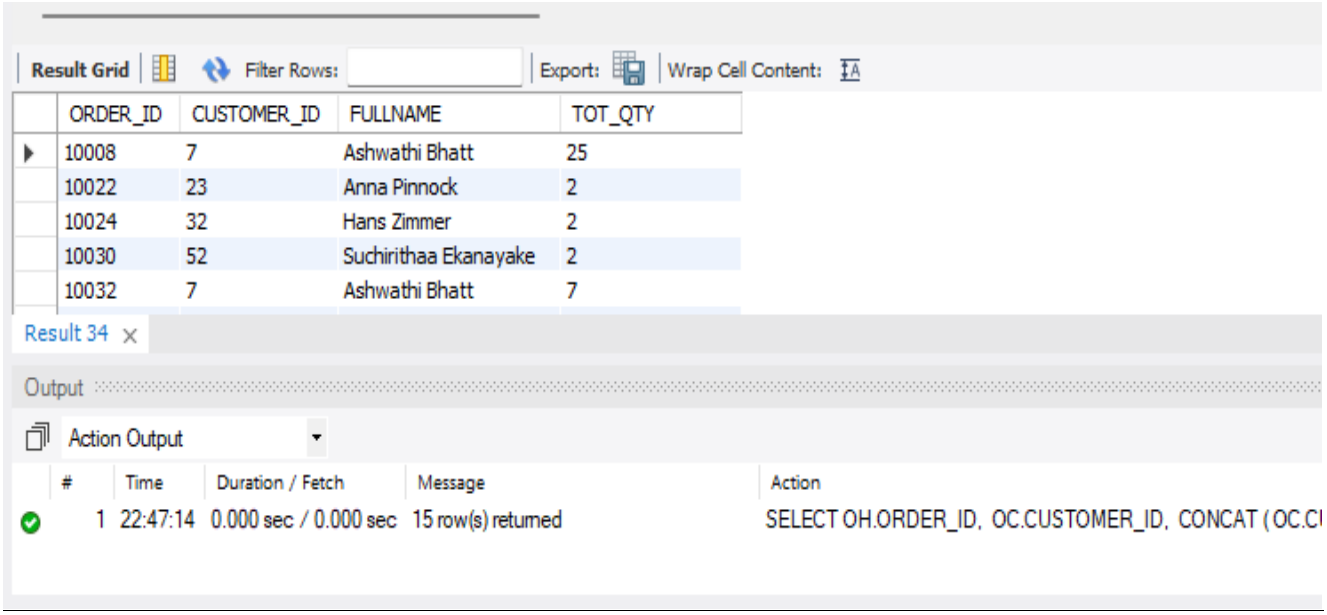
Action Output

#	Time	Duration / Fetch	Message	Action
1	22:45:48	0.000 sec / 0.000 sec	6 row(s) returned	SELECT S.ORDER_ID, S.PRODUCT_ID, S.PRODUCT_DESC, S

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 No 10 - After the execution of query have received 15 rows as an output.



Result Grid | Filter Rows: | Export: | Wrap Cell Content:

ORDER_ID	CUSTOMER_ID	FULLNAME	TOT_QTY
10008	7	Ashwathi Bhatt	25
10022	23	Anna Pinnock	2
10024	32	Hans Zimmer	2
10030	52	Suchirithaa Ekanayake	2
10032	7	Ashwathi Bhatt	7

Result 34

Output

Action Output

#	Time	Duration / Fetch	Message	Action
1	22:47:14	0.000 sec / 0.000 sec	15 row(s) returned	SELECT OH.ORDER_ID, OC.CUSTOMER_ID, CONCAT (OC.CI