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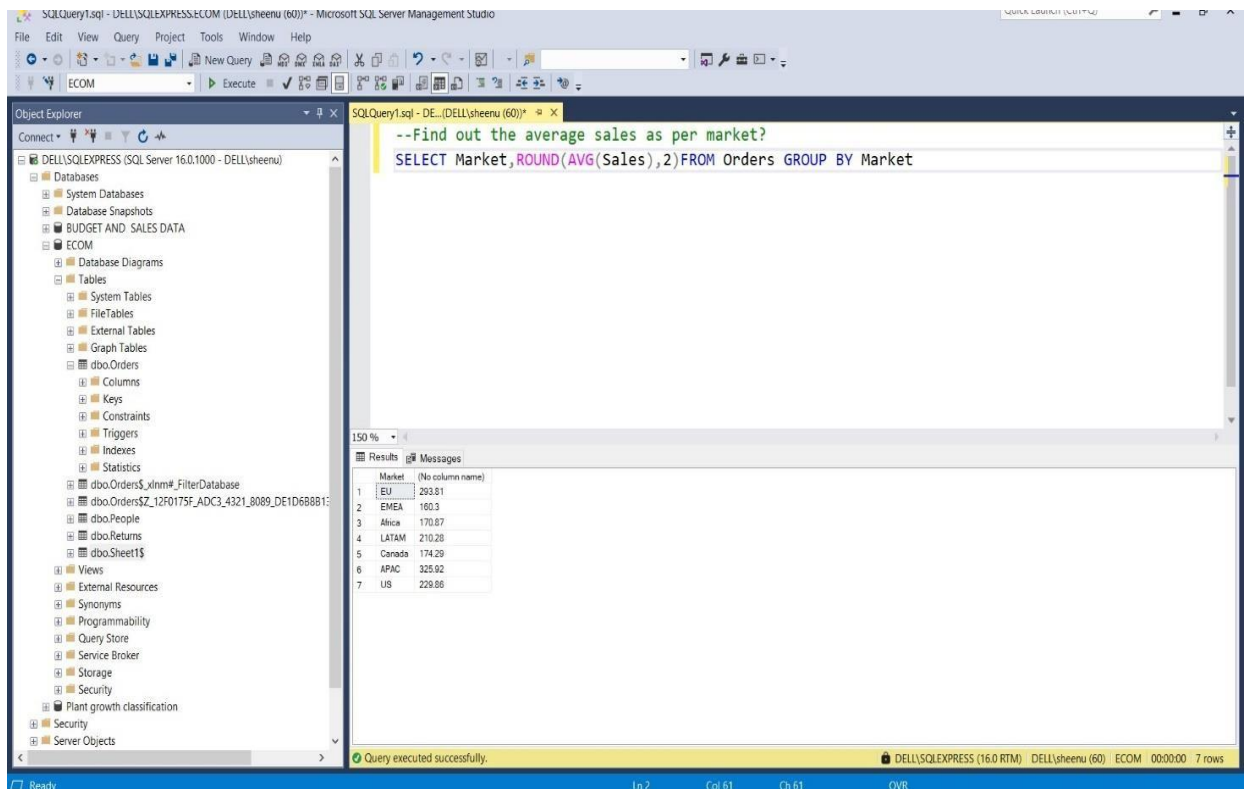
SQL PROJECT

Dataset: Ecom Data

Management Tool: SSMS

Q1. Find out the average sales as per market?

Ans. SELECT Market, ROUND(AVG(Sales),2) FROM Orders GROUP BY Market;



The screenshot displays the Microsoft SQL Server Management Studio (SSMS) interface. The left pane shows the Object Explorer with the 'Ecom' database selected. The central query editor contains the following SQL query:

```
--Find out the average sales as per market?  
SELECT Market,ROUND(AVG(Sales),2)FROM Orders GROUP BY Market
```

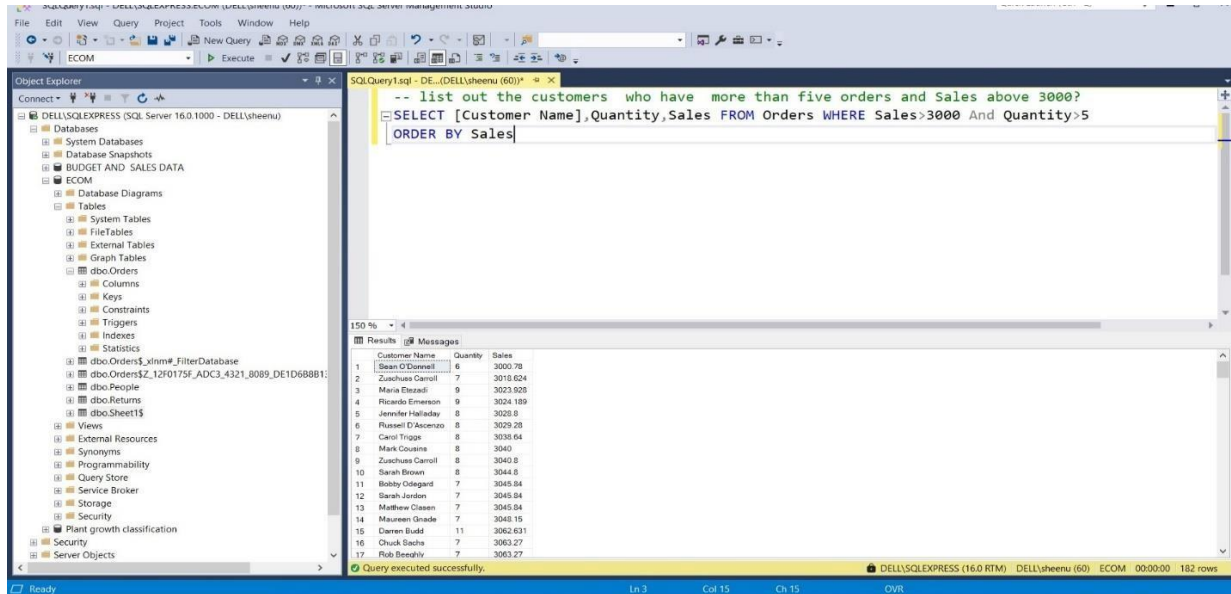
The bottom pane shows the results of the query, which is a table with two columns: 'Market' and 'Sales'. The results are as follows:

Market	Sales
EU	293.91
EMEA	160.3
Africa	170.87
LATAM	210.28
Canada	174.29
APAC	325.92
US	228.86

The status bar at the bottom indicates that the query was executed successfully, returning 7 rows.

Q2. List out the customers who have more than five orders and Sales above 3000?

Ans: SELECT [Customer Name], Quantity, Sales FROM Orders WHERE Sales > 3000 AND Quantity > 5 ORDER BY Sales;



The screenshot shows the SQL Server Enterprise Manager interface. The Object Explorer on the left displays the database structure for 'DELL\SQLEXPRESS (SQL Server 16.0.1000 - DELL\sheenu)'. The main window shows a query in the 'SQLQuery1.sql' file:

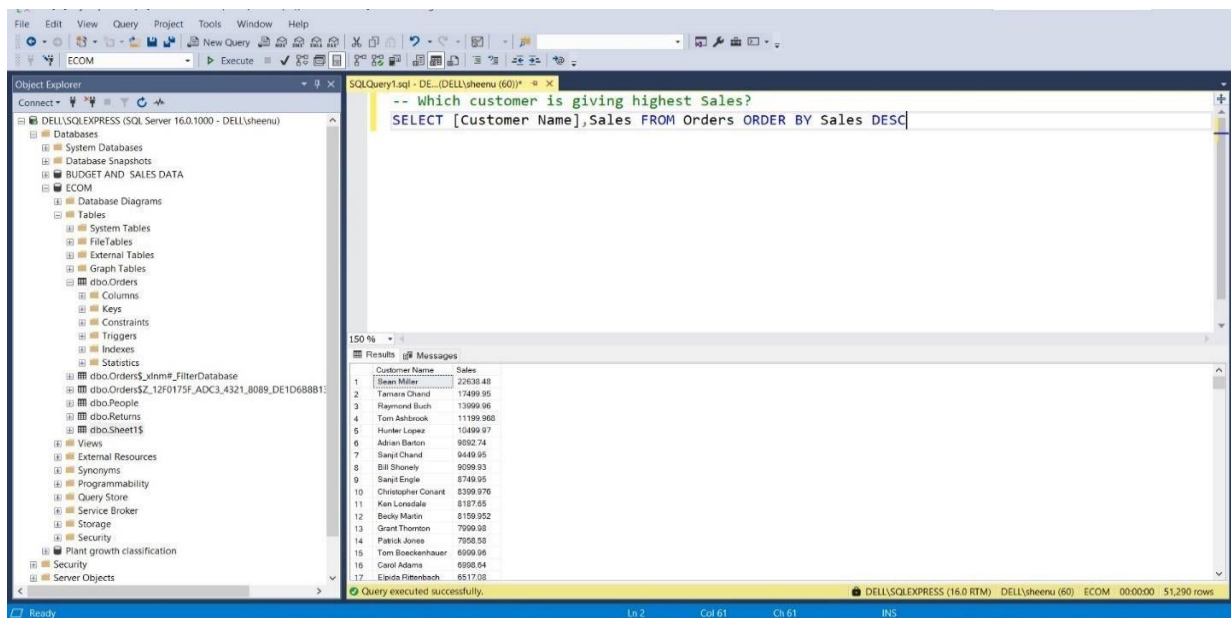
```
-- list out the customers who have more than five orders and Sales above 3000?  
SELECT [Customer Name],Quantity,Sales FROM Orders WHERE Sales>3000 And Quantity>5  
ORDER BY Sales
```

The Results pane shows the following data:

Customer Name	Quantity	Sales
Sean O'Donnell	6	3000.78
Zuschka Carroll	7	3018.824
Maria Diazzi	9	3023.928
Ricardo Emerson	9	3024.189
Jennifer Halladay	8	3028.8
Russell O'Acenoso	8	3029.23
Carol Tringe	8	3036.64
Mark Cousins	8	3040
Zuschka Carroll	8	3040.8
Sarah Brown	8	3044.8
Bobby Odegaard	7	3045.84
Sarah Jordan	7	3045.84
Matthew Clasen	7	3045.84
Maureen Grude	7	3048.15
Darren Budd	11	3062.631
Chuck Bachs	7	3063.27
Rub Boushiv	7	3063.27

Q3: Which customer is giving highest sales?

Ans: SELECT [Customer Name], Sales FROM Orders ORDER BY Sales DESC;



The screenshot shows the SQL Server Enterprise Manager interface. The Object Explorer on the left displays the database structure for 'DELL\SQLEXPRESS (SQL Server 16.0.1000 - DELL\sheenu)'. The main window shows a query in the 'SQLQuery1.sql' file:

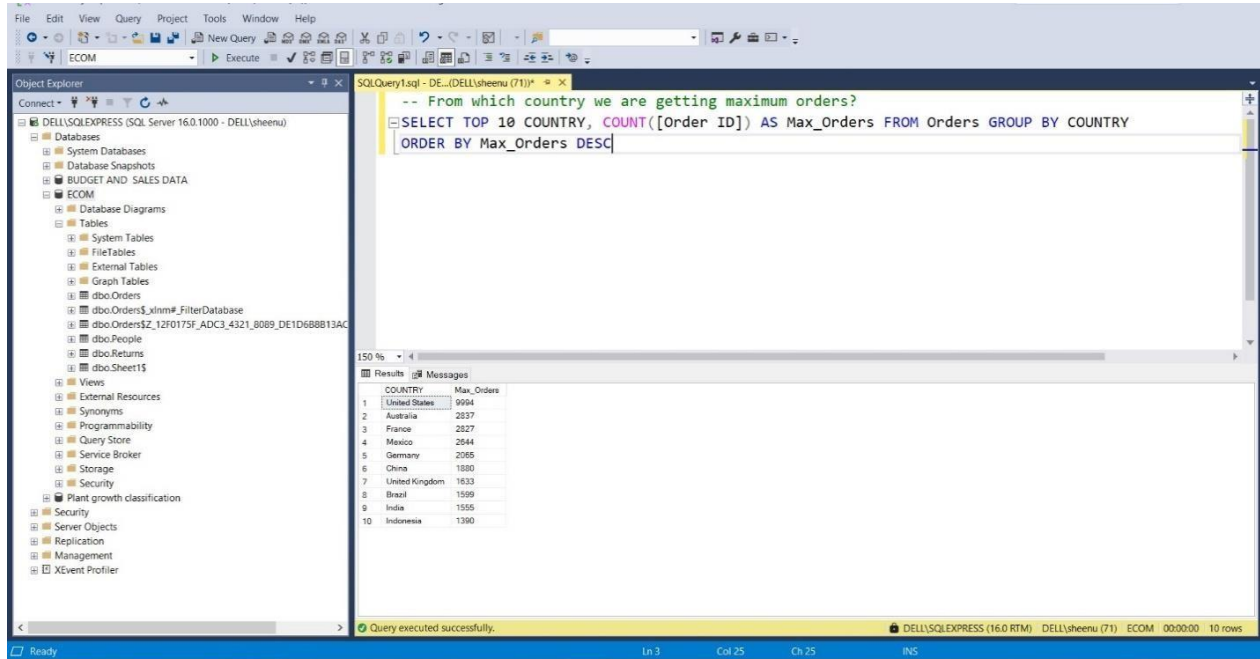
```
-- Which customer is giving highest Sales?  
SELECT [Customer Name],Sales FROM Orders ORDER BY Sales DESC
```

The Results pane shows the following data:

Customer Name	Sales
Sean Miller	22630.48
Tamara Chend	17499.95
Raymond Bush	13099.96
Tom Ashbrook	11199.968
Hunter Lopez	10469.97
Adrian Barton	9882.74
Sany Chaud	9449.95
Bill Shonely	9099.93
Sany Engle	8749.95
Christopher Conant	8399.976
Ken Lonedale	8187.65
Becky Martin	8159.952
Grant Thornton	7999.98
Patrick Jones	7958.55
Tom Boeckenhauer	6999.96
Carol Adams	6998.64
Eloise Fitterbock	6817.08

Q4: From which country we are getting maximum orders?

Ans: SELECT TOP 10 COUNTRY, COUNT [Order ID] AS Max_Orders FROM Orders GROUP BY Country ORDER BY Max_Orders DESC;

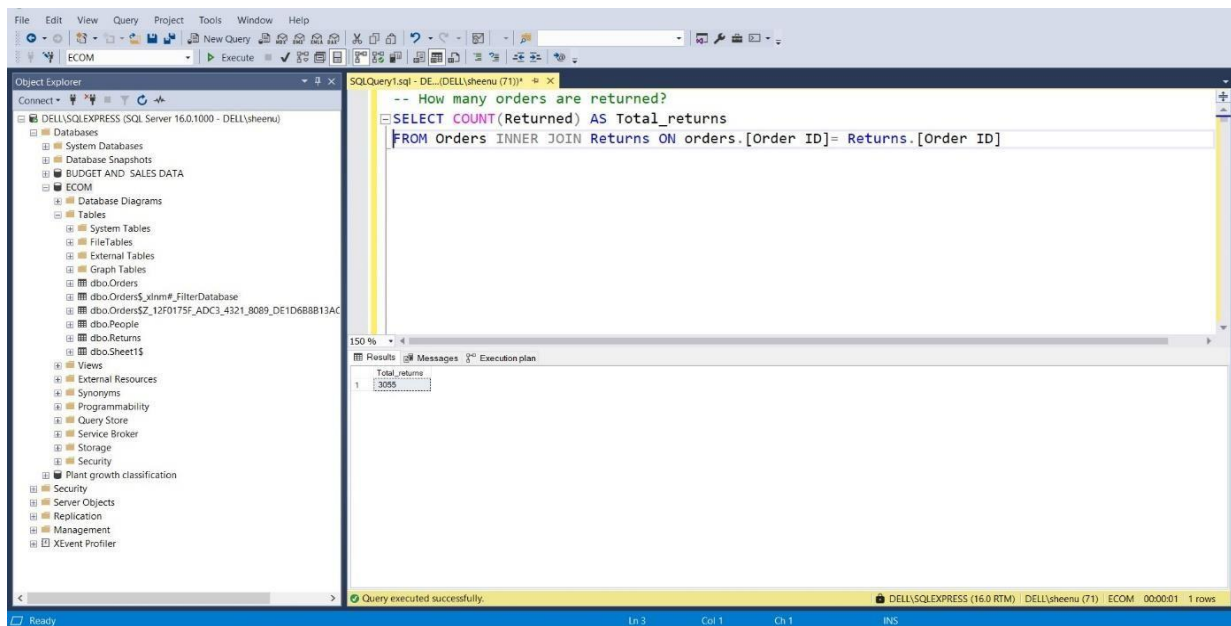


The screenshot shows the SQL Server Enterprise Manager interface. The Object Explorer on the left displays the database structure for 'DELL\SQLEXPRESS (SQL Server 16.0.1000 - DELL\sheenu)'. The main window shows a query titled 'SQLQuery1.sql - DELL\sheenu (71)'. The query is:
`-- From which country we are getting maximum orders?
SELECT TOP 10 COUNTRY, COUNT([Order ID]) AS Max_Orders FROM Orders GROUP BY COUNTRY
ORDER BY Max_Orders DESC`
The Results pane at the bottom shows the output of the query, displaying a table with 10 rows and 2 columns: COUNTRY and Max_Orders. The status bar at the bottom indicates 'Query executed successfully.' and 'DELL\SQLEXPRESS (16.0 RTM) | DELL\sheenu (71) | ECOM | 00:00:00 | 10 rows'.

COUNTRY	Max_Orders
United States	9994
Australia	2837
France	2827
Mexico	2644
Germany	2065
China	1880
United Kingdom	1833
Brazil	1599
India	1555
Indonesia	1390

Q5: How many orders are returned?

Ans: SELECT COUNT(Returned)AS Total_returns FROM Orders INNER JOIN Returns ON Orders. [Order ID] = Returns. [Orders ID];

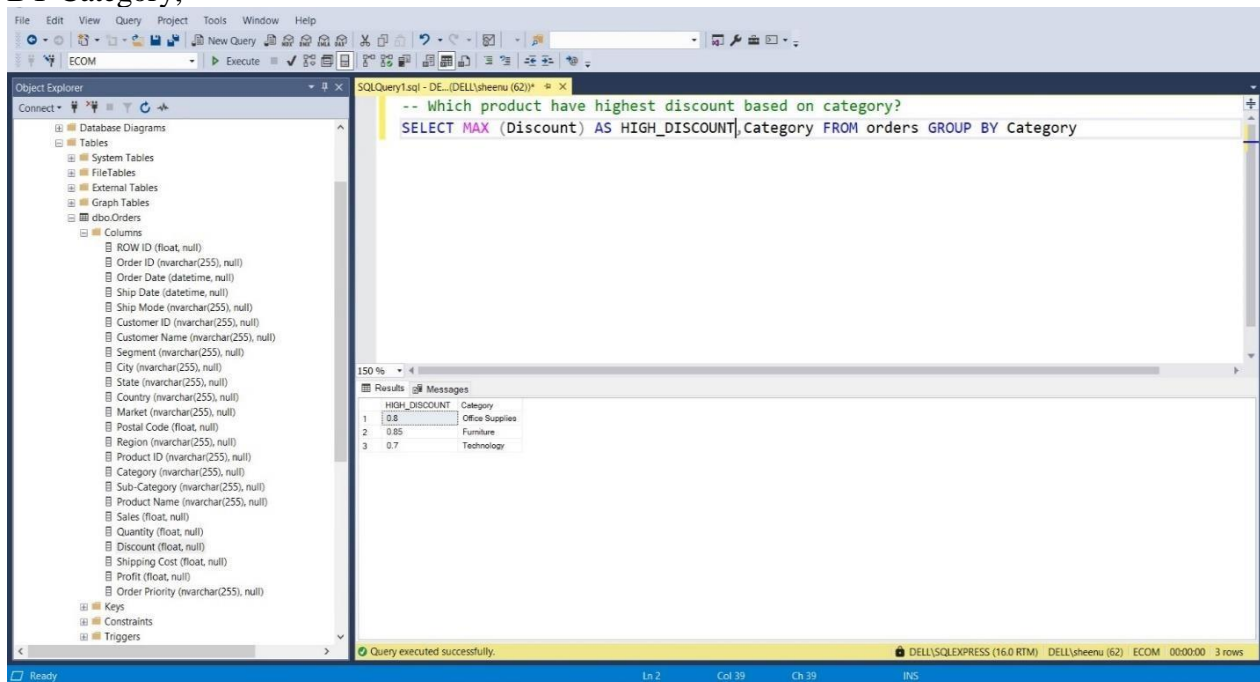


The screenshot shows the SQL Server Enterprise Manager interface. The Object Explorer on the left displays the database structure for 'DELL\SQLEXPRESS (SQL Server 16.0.1000 - DELL\sheenu)'. The main window shows a query titled 'SQLQuery1.sql - DELL\sheenu (71)'. The query is:
`-- How many orders are returned?
SELECT COUNT(Returned) AS Total_returns
FROM Orders INNER JOIN Returns ON orders.[Order ID]= Returns.[Order ID]`
The Results pane at the bottom shows the output of the query, displaying a table with 1 row and 1 column: Total_returns. The status bar at the bottom indicates 'Query executed successfully.' and 'DELL\SQLEXPRESS (16.0 RTM) | DELL\sheenu (71) | ECOM | 00:00:01 | 1 rows'.

Total_returns
3055

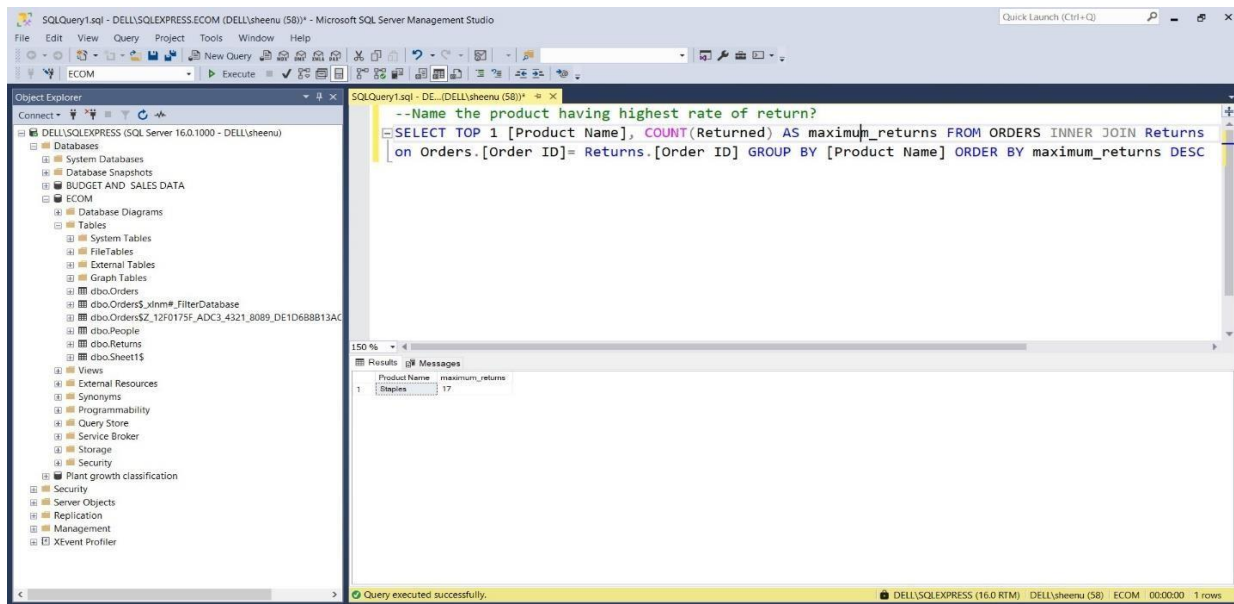
Q6: Which product have highest discount based on category?

Ans: SELECT MAX(DISCOUNT) AS HIGH_DISCOUNT, Category FROM Orders GROUP BY Category;



Q7: Name the product having the highest rate of return?

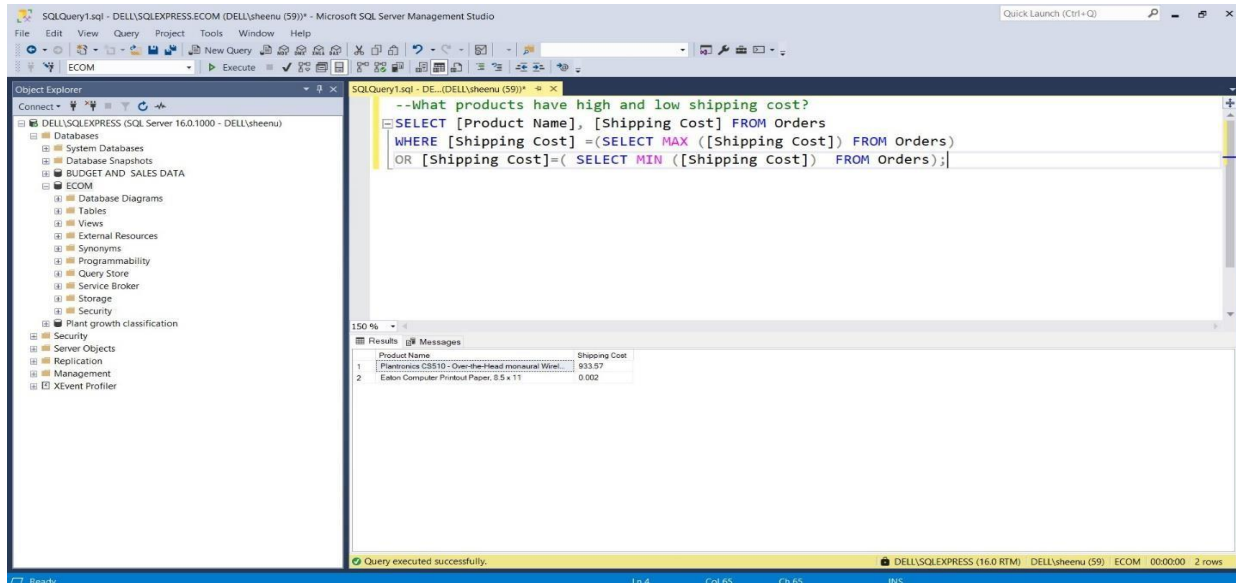
Ans: SELECT TOP 1[Product Name], (Returned) AS maximum_returns FROM Orders INNER JOIN Returns ON Orders. [Order Id] =Returns. [Order Id] GROUP BY [Product Name] ORDER BY maximum_returns DESC



Q8: What products have high and low shipping cost?

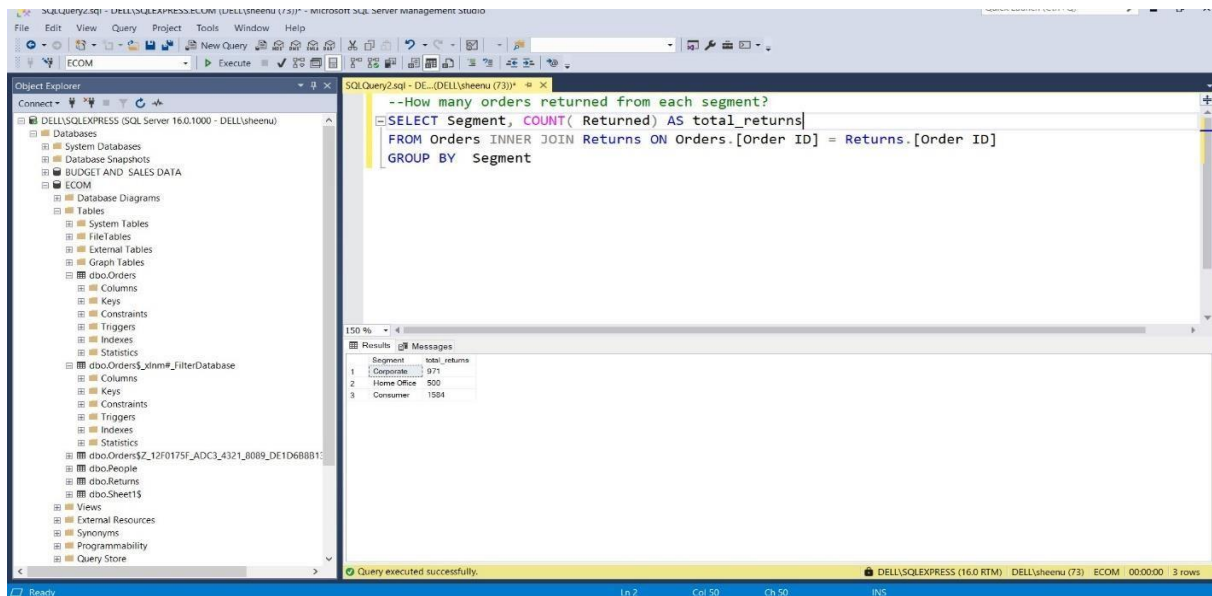
Ans: SELECT [Product Name], [Shipping Cost] FROM Orders
WHERE [Shipping Cost] = (SELECT MAX ([Shipping Cost]) FROM Orders)

OR [Shipping Cost] = (SELECT MIN ([Shipping Cost]) FROM Orders);



Q9: How many orders returned from each segment?

Ans: SELECT Segment, COUNT(Returned) AS Total_returns FROM Orders INNER JOIN
Returns ON orders. [order Id] = Returns. [order ID] GROUP BY Segment;



Q10: Top 15 countries having maximum profit?

ANS: SELECT TOP 15 Country, ROUND(SUM(Profit),2) AS total_profit FROM orders GROUP BY Country ORDER BY total_profit DESC;

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left displays the database structure for 'DELL\SQLEXPRESS (SQL Server 16.0.1000 - DELL\sheenu)'. The main query window contains the following SQL code:

```
-- TOP 15 countries giving maximum profit?
SELECT TOP 15 Country, ROUND(SUM(Profit),2) as total_profit FROM Orders GROUP BY Country
ORDER BY total_profit DESC
```

The Results pane at the bottom shows the output of the query, listing the top 15 countries by total profit. The status bar at the bottom indicates 'Query executed successfully.' and 'DELL\SQLEXPRESS (16.0 RTM) DELL\sheenu (60) ECOM 00:00:00 15 rows'.

Country	total_profit
United States	208397.02
China	150683.09
India	129071.84
United Kingdom	111900.15
France	109029
Germany	107322.82
Australia	102907.43
Mexico	102818.1
Spain	54390.12
El Salvador	42023.24
Cuba	38889.22
Nicaragua	33401.44
Brazil	30090.5
Guatemala	27944.89
Iran	26858.24

Q11: Find out the average sales as per market?

Ans: SELECT Market, ROUND(AVG(Sales), 2) FROM Orders GROUP BY Market;

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left displays the database structure for 'DELL\SQLEXPRESS (SQL Server 16.0.1000 - DELL\sheenu)'. The main query window contains the following SQL code:

```
--Find out the average sales as per market?
SELECT Market, ROUND(AVG(Sales), 2) FROM Orders GROUP BY Market
```

The Results pane at the bottom shows the output of the query, listing the average sales for each market. The status bar at the bottom indicates 'Query executed successfully.' and 'DELL\SQLEXPRESS (16.0 RTM) DELL\sheenu (60) ECOM 00:00:00 7 rows'.

Market	(No column name)
EU	293.81
EMEA	160.3
Africa	170.87
LATAM	210.28
Canada	174.29
APAC	325.92
US	229.86

Q12: Which sub category have minimum orders?

Ans: SELECT [Sub-Category], COUNT ([Order ID]) AS TOTAL_ORDERS FROM Orders GROUP BY [Sub-Category] ORDER BY TOTAL_ORDERS

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor contains the following SQL code:

```
--Which sub-category have minimum orders?
SELECT [Sub-Category], COUNT([Order ID]) AS TOTAL_ORDERS
FROM Orders GROUP BY [Sub-Category] ORDER BY TOTAL_ORDERS
```

The Results pane displays the following data:

Sub-Category	TOTAL_ORDERS
Tables	861
Machines	1485
Appliances	1755
Copiers	2223
Bookcases	2411
Fasteners	2420
Supplies	2425
Envelopes	2435
Labels	2605
Accessories	3075
Furnishings	3170
Phones	3357
Chairs	3434
Paper	3538
Art	4883
Storage	5059
Binders	6152

Q13: How many customers have sales more than average?

Ans: SELECT AVG (Sales) FROM ORDERS;

SELECT COUNT ([Customer Name]) AS TOTAL_CUSTOMERS FROM Orders WHERE Sales >=246.49

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor contains the following SQL code:

```
--How many customers have sales more than average?
--SELECT AVG(Sales) FROM Orders
SELECT COUNT([Customer Name]) AS TOTAL_CUSTOMERS FROM Orders WHERE Sales >=246.49
```

The Results pane displays the following data:

TOTAL_CUSTOMERS
13055

Q14: Which 10 products have maximum sales based on profit?

Ans: SELECT TOP 10 [Product ID], [Product Name], Sales FROM Orders ORDER BY Sales DESC;

The screenshot shows the Microsoft SQL Server Enterprise Manager interface. The left pane displays the 'Object Explorer' with the 'dbo.Orders' table selected. The right pane shows a query window with the following SQL code:

```
-- Which 10 products have maximum sales based on the profit?
SELECT Top 10 [Product ID], [Product Name], Sales FROM Orders ORDER BY Sales DESC
```

The 'Results' pane displays the following data:

Product ID	Product Name	Sales
TEC-MA-10002412	Cisco TelePresence System EX90 Videoconferencing ..	22038.48
TEC-CO-10004722	Canon imageCLASS 2200 Advanced Copier	17699.85
TEC-CO-10004722	Canon imageCLASS 2200 Advanced Copier	13999.96
TEC-CO-10004722	Canon imageCLASS 2200 Advanced Copier	11199.968
TEC-CO-10004722	Canon imageCLASS 2200 Advanced Copier	10499.97
OFF-BI-10000645	GBC Inmaner 500 Manual ProClick Binding System	9892.74
OFF-BI-10001120	Bico EPK-21 Electric Binding System	9449.95
TEC-MA-10001047	3D Systems Cube Printer, 2nd Generation, Magenta	9099.93
TEC-MA-10001127	HP DesignJet T520 Inkjet Large Format Printer - 24" C...	8749.95
TEC-CO-10004722	Canon imageCLASS 2200 Advanced Copier	8399.976

Q15: Review the categories having maximum return orders?

ANS: SELECT COUNT(Returned)AS TOTAL, Category FROM Orders INNER JOIN Returns ON Orders.[Order ID] = Returns.[Order ID] GROUP BY Category;

The screenshot shows the Microsoft SQL Server Enterprise Manager interface. The left pane displays the 'Object Explorer' with the 'dbo>Returns' table selected. The right pane shows a query window with the following SQL code:

```
-- Review the Categories having maximum return orders?
SELECT COUNT( Returned) AS Total , Category FROM Orders INNER JOIN Returns
ON Orders.[Order ID]= Returns.[Order ID]
group by Category
```

The 'Results' pane displays the following data:

Total	Category
1790	Office Supplies
639	Furniture
626	Technology

Q16: Which Category have minimum Sales in APAC market?

Ans: SELECT TOP 1 Category, Market, Sales FROM Orders WHERE Market = 'APAC' ORDER BY Sales;

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor contains the following SQL code:

```
-- Which Category have minimum sales in APAC Market?  
SELECT top 1 Category ,Market, Sales FROM Orders where Market = 'APAC' order by Sales
```

The Results pane shows the following data:

Category	Market	Sales
Office Supplies	APAC	2.88

The status bar at the bottom indicates "Query executed successfully." and "DELL\SQLEXPRESS (16.0 RTM) - DELL\sheenu (67) - ECOM - 000000 - 1 rows".

Q17: Which category is giving minimum Sales?

Ans: SELECT TOP 10 Category, Sales FROM Orders ORDER BY Sales;

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor contains the following SQL code:

```
-- Which category is giving minimum sales ?  
SELECT top 10 Category , Sales FROM Orders order by Sales
```

The Results pane shows the following data:

Category	Sales
Office Supplies	0.444
Office Supplies	0.556
Office Supplies	0.626
Office Supplies	0.852
Office Supplies	0.876
Office Supplies	0.888
Office Supplies	0.904
Technology	0.99
Office Supplies	1.044
Office Supplies	1.08

The status bar at the bottom indicates "Query executed successfully." and "DELL\SQLEXPRESS (16.0 RTM) - DELL\sheenu (67) - ECOM - 000000 - 10 rows".

Q18: Which category have the highest discount?

Ans: SELECT MAX (Discount) AS HIGH_Discount, Category FROM Orders GROUP BY Category;

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor contains the following SQL query:

```
--which category have the highest discount?
SELECT MAX(Discount) AS HIGH_Discount, Category FROM Orders GROUP BY Category
```

The Results pane shows the following data:

Row	HIGH_Discount	Category
1	0.8	Office Supplies
2	0.85	Furniture
3	0.7	Technology

The status bar at the bottom indicates "Query executed successfully." and "DELL\SQLEXPRESS (16.0 RTM) - DELL\sheenu (62) - ECOM 00:00:00 3 rows".

Q19: Which products have highest discount?

Ans: SELECT TOP 10 [Product Name] , MAX (Discount) AS HIGHEST_DISCOUNT FROM Orders GROUP BY [Product Name];

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor contains the following SQL query:

```
--Which Products have the highest discount?
SELECT TOP 10 [Product Name], MAX(Discount) AS HIGHEST_DISCOUNT FROM Orders
GROUP BY [Product Name]
```

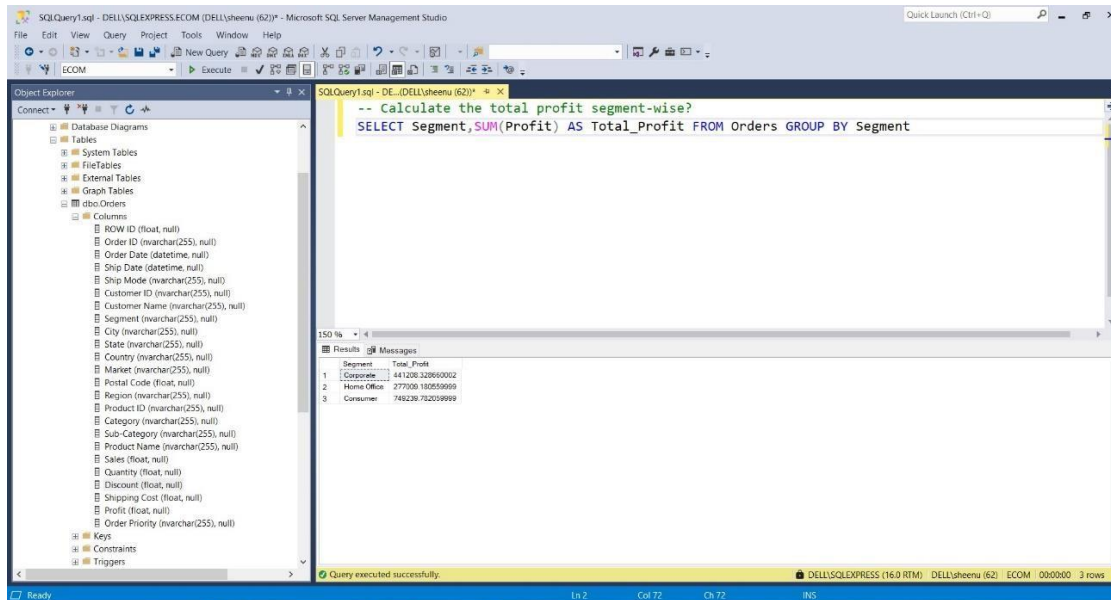
The Results pane shows the following data:

Row	Product Name	HIGHEST_DISCOUNT
1	Hewlett Pack and Copier, Color	0.402
2	Tenex Trans, Single Width	0.6
3	Fellowes Trans, Industrial	0.7
4	C-Line Cubicle Keepers Polypropylene Holder With	0.6
5	Jilly Peel and Seal, Recycled	0.7
6	Konica Card Printer, White	0.6
7	Avery 510	0.2
8	SAPOO Swivel Stool, Set of Two	0.5
9	Cuisinart Refrigerator, White	0.17
10	StarTech Card Printer, Wireless	0.7

The status bar at the bottom indicates "Query executed successfully." and "DELL\SQLEXPRESS (16.0 RTM) - DELL\sheenu (62) - ECOM 00:00:00 10 rows".

Q20: Calculate the total profit segment-wise?

Ans: SELECT Segment, SUM(Profit) AS Total_Profit FROM Orders Group BY Segment;



The screenshot displays the Microsoft SQL Server Management Studio interface. The 'Object Explorer' on the left shows the database structure, including tables like 'Orders' and 'Customers'. The 'Query Editor' in the center contains the following SQL query:

```
-- Calculate the total profit segment-wise?  
SELECT Segment, SUM(Profit) AS Total_Profit FROM Orders GROUP BY Segment
```

The 'Results' pane at the bottom shows the output of the query, which is a table with two columns: 'Segment' and 'Total_Profit'. The results are as follows:

Segment	Total_Profit
Corporate	441200.220640002
Home Office	277000.180559009
Consumer	748239.722039999

The status bar at the bottom indicates that the query was executed successfully and returned 3 rows.

