Created a privet Pizza sales Dataset by adding random values, amounts, names by using Excel.

Then Analyzed key indicators for pizza sales data to gain insights into a Business Performance.

KPI's requirements

1. Import the data file

2. Find out total revenue

3. Average order Value

4. Total pizza sold

5. Total Orders placed

6. Average Pizza Per Order

Chart requirement

7. Find daily trend of total order

8. Find monthly trend of total order

9. Find monthly trend of total Pizza sold

10. Find percentage of sales by pizza category

11. Find percentage of sales by size

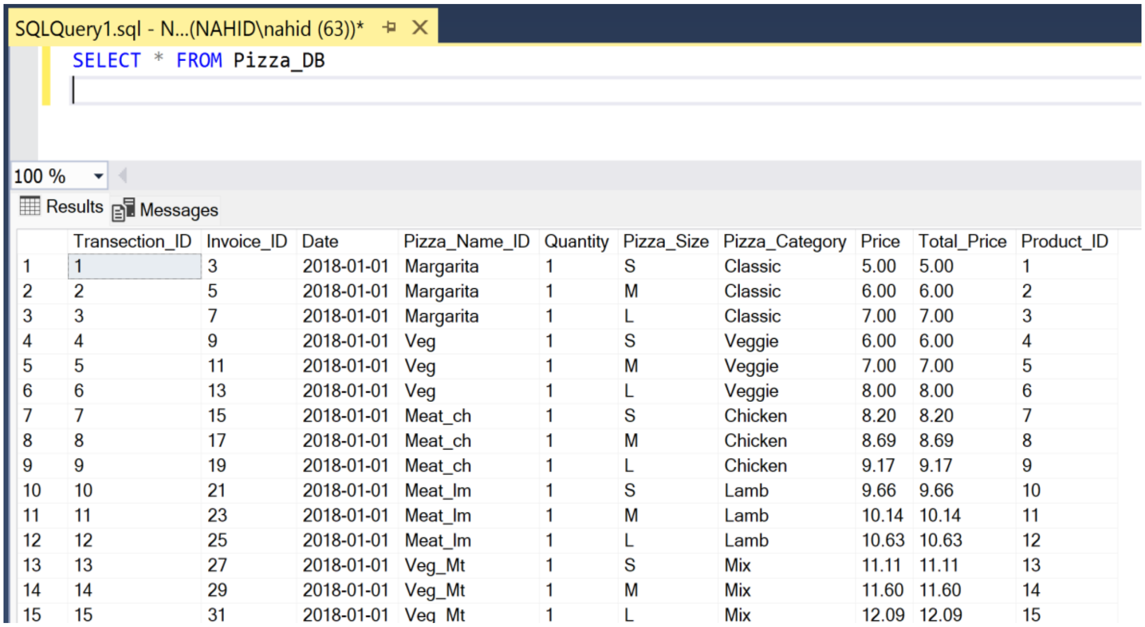
12. Find total pizza sold by category

13. Find top 3 Best seller Total pizza sold (By Revenue & Quantity)

14. Find the worst 3 seller Total Pizza Sold (By Revenue & Quantity)

Pizza Sales Data

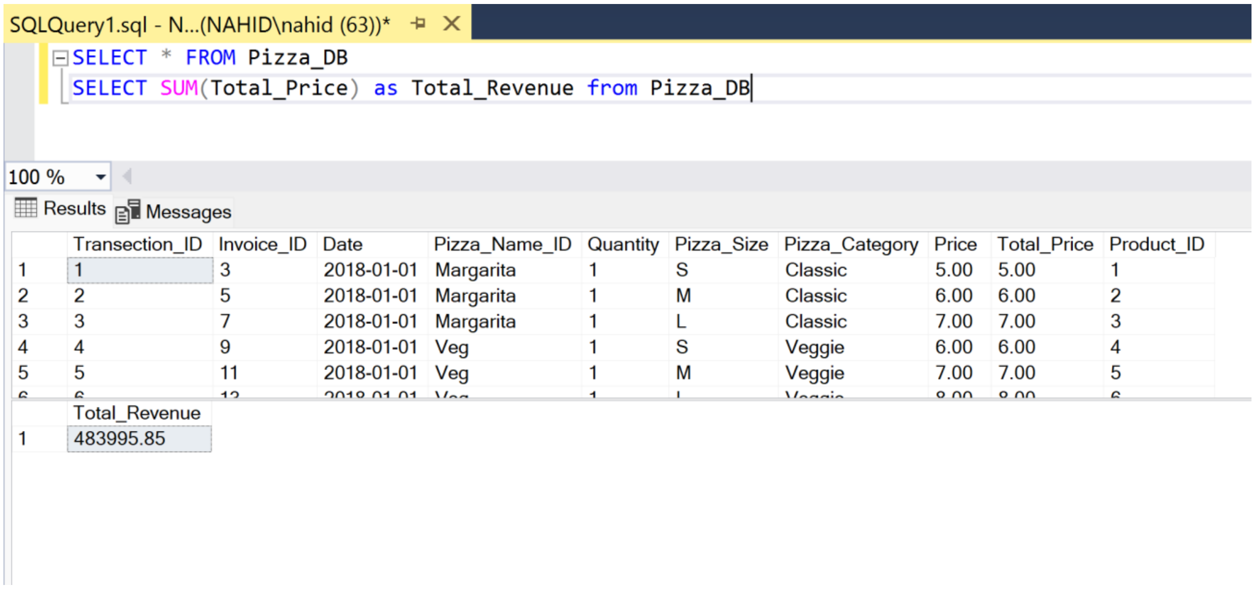
1. Import data



```sql
SELECT * FROM Pizza_DB
```

	Transection_ID	Invoice_ID	Date	Pizza_Name_ID	Quantity	Pizza_Size	Pizza_Category	Price	Total_Price	Product_ID
1	1	3	2018-01-01	Margarita	1	S	Classic	5.00	5.00	1
2	2	5	2018-01-01	Margarita	1	M	Classic	6.00	6.00	2
3	3	7	2018-01-01	Margarita	1	L	Classic	7.00	7.00	3
4	4	9	2018-01-01	Veg	1	S	Veggie	6.00	6.00	4
5	5	11	2018-01-01	Veg	1	M	Veggie	7.00	7.00	5
6	6	13	2018-01-01	Veg	1	L	Veggie	8.00	8.00	6
7	7	15	2018-01-01	Meat_ch	1	S	Chicken	8.20	8.20	7
8	8	17	2018-01-01	Meat_ch	1	M	Chicken	8.69	8.69	8
9	9	19	2018-01-01	Meat_ch	1	L	Chicken	9.17	9.17	9
10	10	21	2018-01-01	Meat_lm	1	S	Lamb	9.66	9.66	10
11	11	23	2018-01-01	Meat_lm	1	M	Lamb	10.14	10.14	11
12	12	25	2018-01-01	Meat_lm	1	L	Lamb	10.63	10.63	12
13	13	27	2018-01-01	Veg_Mt	1	S	Mix	11.11	11.11	13
14	14	29	2018-01-01	Veg_Mt	1	M	Mix	11.60	11.60	14
15	15	31	2018-01-01	Veg_Mt	1	L	Mix	12.09	12.09	15

2. Find out the total revenue

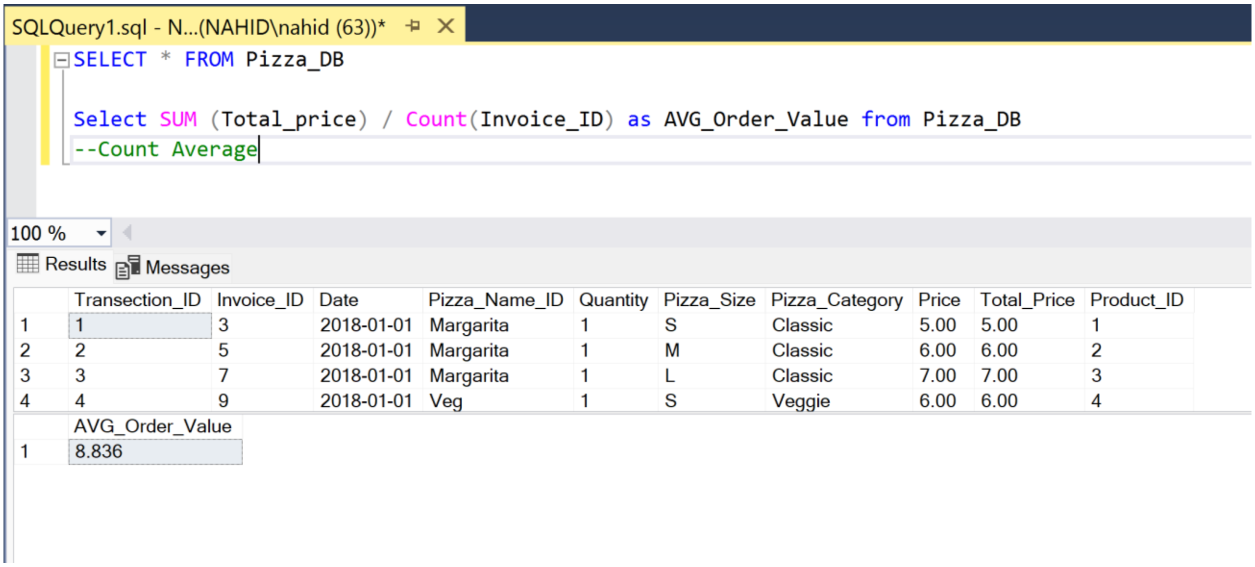


```sql
SELECT * FROM Pizza_DB
SELECT SUM(Total_Price) as Total_Revenue from Pizza_DB
```

	Transection_ID	Invoice_ID	Date	Pizza_Name_ID	Quantity	Pizza_Size	Pizza_Category	Price	Total_Price	Product_ID
1	1	3	2018-01-01	Margarita	1	S	Classic	5.00	5.00	1
2	2	5	2018-01-01	Margarita	1	M	Classic	6.00	6.00	2
3	3	7	2018-01-01	Margarita	1	L	Classic	7.00	7.00	3
4	4	9	2018-01-01	Veg	1	S	Veggie	6.00	6.00	4
5	5	11	2018-01-01	Veg	1	M	Veggie	7.00	7.00	5
6	6	13	2018-01-01	Veg	1	L	Veggie	8.00	8.00	6

	Total_Revenue
1	483995.85

3. Average order Value



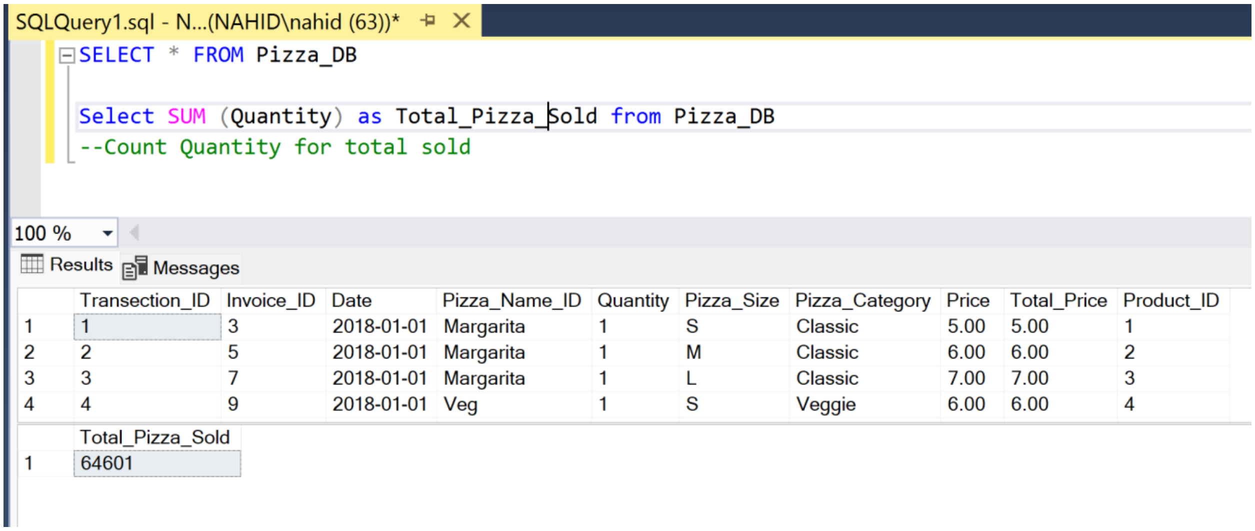
```sql
SELECT * FROM Pizza_DB

Select SUM (Total_price) / Count(Invoice_ID) as AVG_Order_Value from Pizza_DB
--Count Average
```

	Transection_ID	Invoice_ID	Date	Pizza_Name_ID	Quantity	Pizza_Size	Pizza_Category	Price	Total_Price	Product_ID
1	1	3	2018-01-01	Margarita	1	S	Classic	5.00	5.00	1
2	2	5	2018-01-01	Margarita	1	M	Classic	6.00	6.00	2
3	3	7	2018-01-01	Margarita	1	L	Classic	7.00	7.00	3
4	4	9	2018-01-01	Veg	1	S	Veggie	6.00	6.00	4

	AVG_Order_Value
1	8.836

4. Total pizza sold



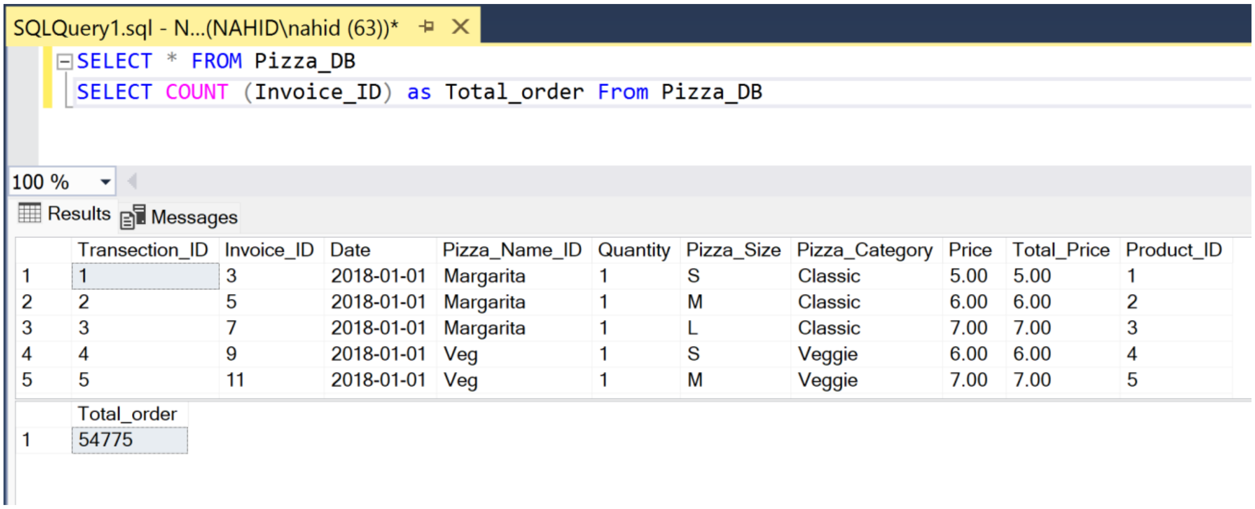
```sql
SELECT * FROM Pizza_DB

Select SUM (Quantity) as Total_Pizza_Sold from Pizza_DB
--Count Quantity for total sold
```

	Transection_ID	Invoice_ID	Date	Pizza_Name_ID	Quantity	Pizza_Size	Pizza_Category	Price	Total_Price	Product_ID
1	1	3	2018-01-01	Margarita	1	S	Classic	5.00	5.00	1
2	2	5	2018-01-01	Margarita	1	M	Classic	6.00	6.00	2
3	3	7	2018-01-01	Margarita	1	L	Classic	7.00	7.00	3
4	4	9	2018-01-01	Veg	1	S	Veggie	6.00	6.00	4

	Total_Pizza_Sold
1	64601

5. Total Orders placed

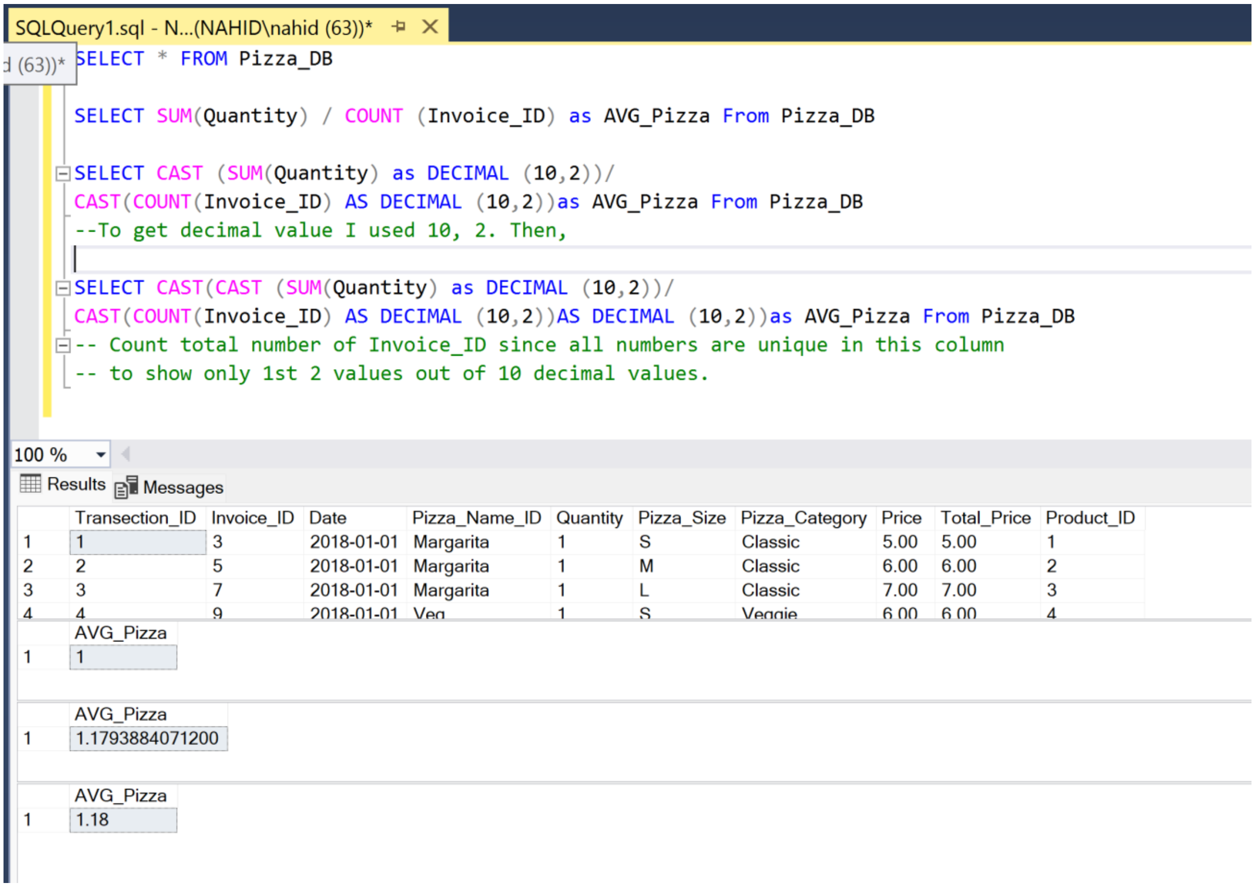


```
SELECT * FROM Pizza_DB
SELECT COUNT (Invoice_ID) as Total_order From Pizza_DB
```

	Transection_ID	Invoice_ID	Date	Pizza_Name_ID	Quantity	Pizza_Size	Pizza_Category	Price	Total_Price	Product_ID
1	1	3	2018-01-01	Margarita	1	S	Classic	5.00	5.00	1
2	2	5	2018-01-01	Margarita	1	M	Classic	6.00	6.00	2
3	3	7	2018-01-01	Margarita	1	L	Classic	7.00	7.00	3
4	4	9	2018-01-01	Veg	1	S	Veggie	6.00	6.00	4
5	5	11	2018-01-01	Veg	1	M	Veggie	7.00	7.00	5

	Total_order
1	54775

6. Average Pizza Per Order



```
SELECT * FROM Pizza_DB

SELECT SUM(Quantity) / COUNT (Invoice_ID) as AVG_Pizza From Pizza_DB

SELECT CAST (SUM(Quantity) as DECIMAL (10,2))/
CAST(COUNT(Invoice_ID) AS DECIMAL (10,2))as AVG_Pizza From Pizza_DB
--To get decimal value I used 10, 2. Then,

SELECT CAST(CAST (SUM(Quantity) as DECIMAL (10,2))/
CAST(COUNT(Invoice_ID) AS DECIMAL (10,2))AS DECIMAL (10,2))as AVG_Pizza From Pizza_DB
-- Count total number of Invoice_ID since all numbers are unique in this column
-- to show only 1st 2 values out of 10 decimal values.
```

	Transection_ID	Invoice_ID	Date	Pizza_Name_ID	Quantity	Pizza_Size	Pizza_Category	Price	Total_Price	Product_ID
1	1	3	2018-01-01	Margarita	1	S	Classic	5.00	5.00	1
2	2	5	2018-01-01	Margarita	1	M	Classic	6.00	6.00	2
3	3	7	2018-01-01	Margarita	1	L	Classic	7.00	7.00	3
4	4	9	2018-01-01	Veg	1	S	Veggie	6.00	6.00	4

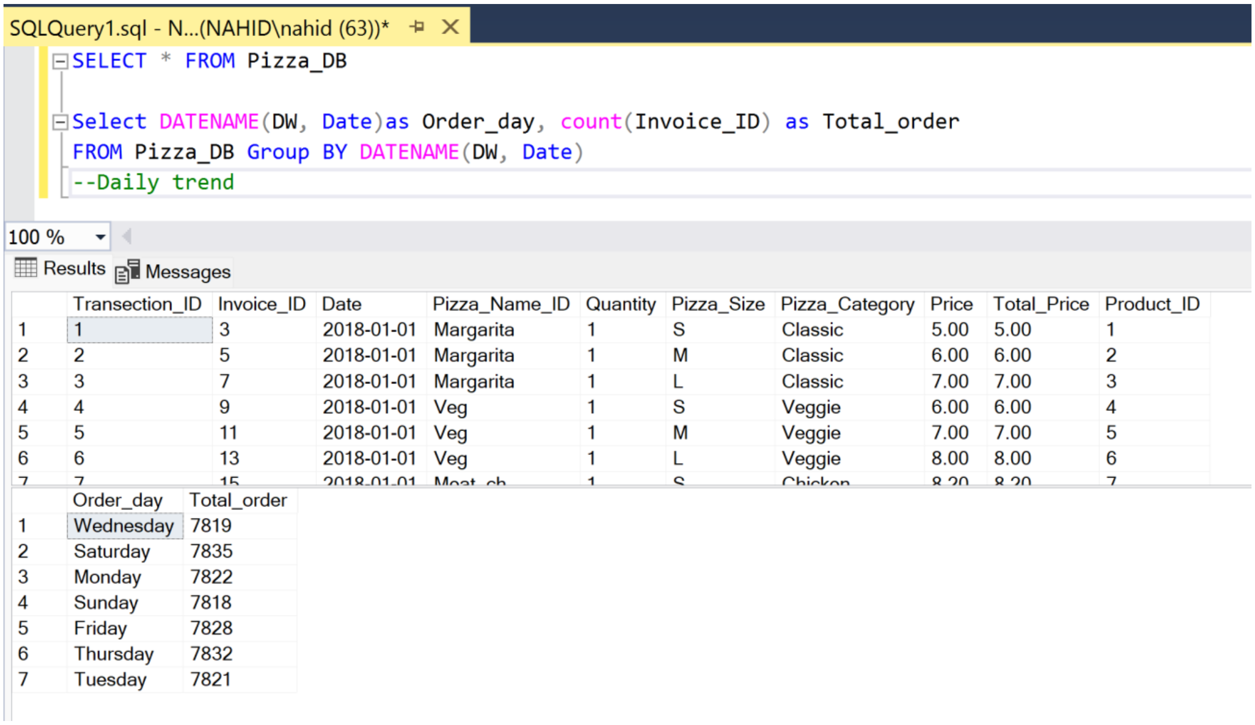
	AVG_Pizza
1	1

	AVG_Pizza
1	1.1793884071200

	AVG_Pizza
1	1.18

Chart requirement

7. Daily trend total order



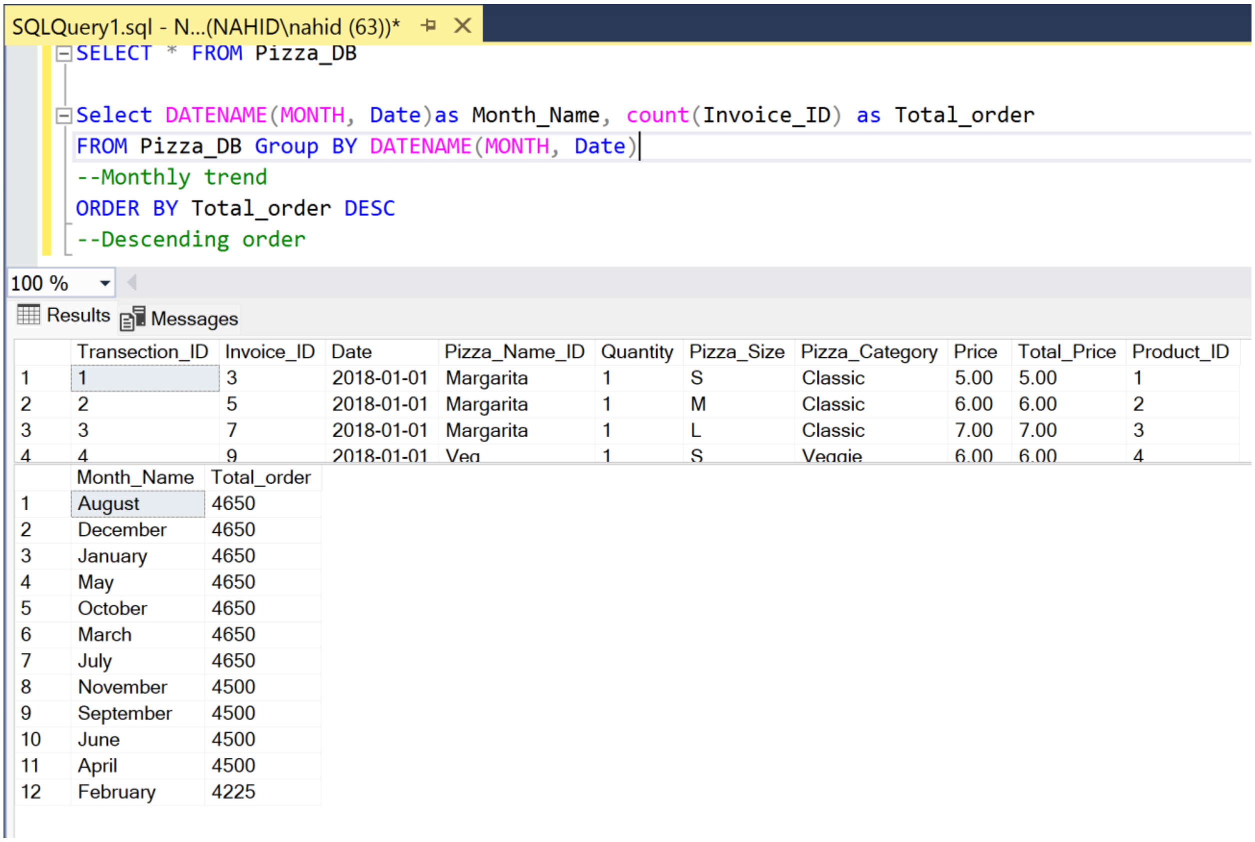
```
SELECT * FROM Pizza_DB

Select DATENAME(DW, Date)as Order_day, count(Invoice_ID) as Total_order
FROM Pizza_DB Group BY DATENAME(DW, Date)
--Daily trend
```

	Transection_ID	Invoice_ID	Date	Pizza_Name_ID	Quantity	Pizza_Size	Pizza_Category	Price	Total_Price	Product_ID
1	1	3	2018-01-01	Margarita	1	S	Classic	5.00	5.00	1
2	2	5	2018-01-01	Margarita	1	M	Classic	6.00	6.00	2
3	3	7	2018-01-01	Margarita	1	L	Classic	7.00	7.00	3
4	4	9	2018-01-01	Veg	1	S	Veggie	6.00	6.00	4
5	5	11	2018-01-01	Veg	1	M	Veggie	7.00	7.00	5
6	6	13	2018-01-01	Veg	1	L	Veggie	8.00	8.00	6
7	7	15	2018-01-01	Meat_ch	1	S	Chicken	8.20	8.20	7

	Order_day	Total_order
1	Wednesday	7819
2	Saturday	7835
3	Monday	7822
4	Sunday	7818
5	Friday	7828
6	Thursday	7832
7	Tuesday	7821

8. Monthly trend total order



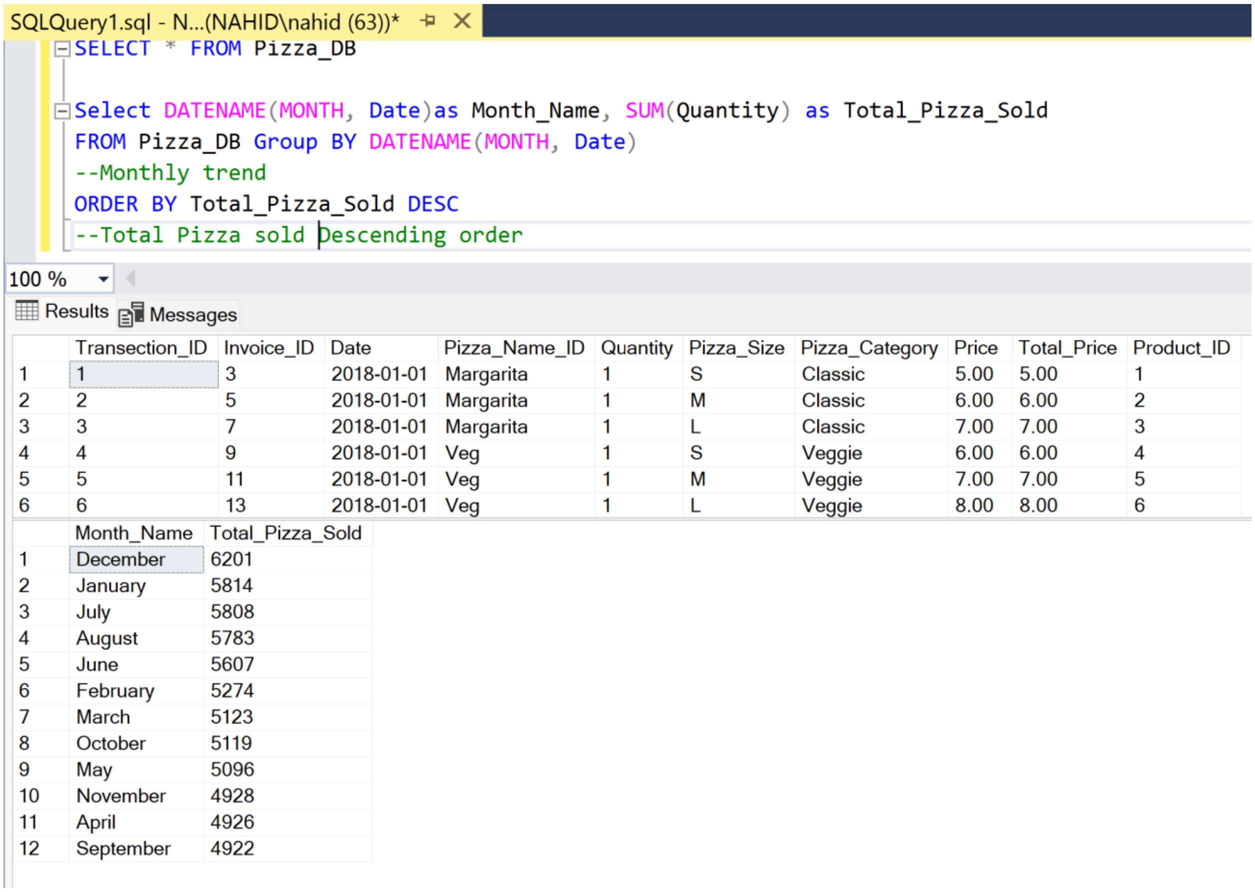
```sql
SELECT * FROM Pizza_DB

Select DATENAME(MONTH, Date)as Month_Name, count(Invoice_ID) as Total_order
FROM Pizza_DB Group BY DATENAME(MONTH, Date)
--Monthly trend
ORDER BY Total_order DESC
--Descending order
```

	Transection_ID	Invoice_ID	Date	Pizza_Name_ID	Quantity	Pizza_Size	Pizza_Category	Price	Total_Price	Product_ID
1	1	3	2018-01-01	Margarita	1	S	Classic	5.00	5.00	1
2	2	5	2018-01-01	Margarita	1	M	Classic	6.00	6.00	2
3	3	7	2018-01-01	Margarita	1	L	Classic	7.00	7.00	3
4	4	9	2018-01-01	Veg	1	S	Veggie	6.00	6.00	4

	Month_Name	Total_order
1	August	4650
2	December	4650
3	January	4650
4	May	4650
5	October	4650
6	March	4650
7	July	4650
8	November	4500
9	September	4500
10	June	4500
11	April	4500
12	February	4225

9. Monthly trend total Pizza sold



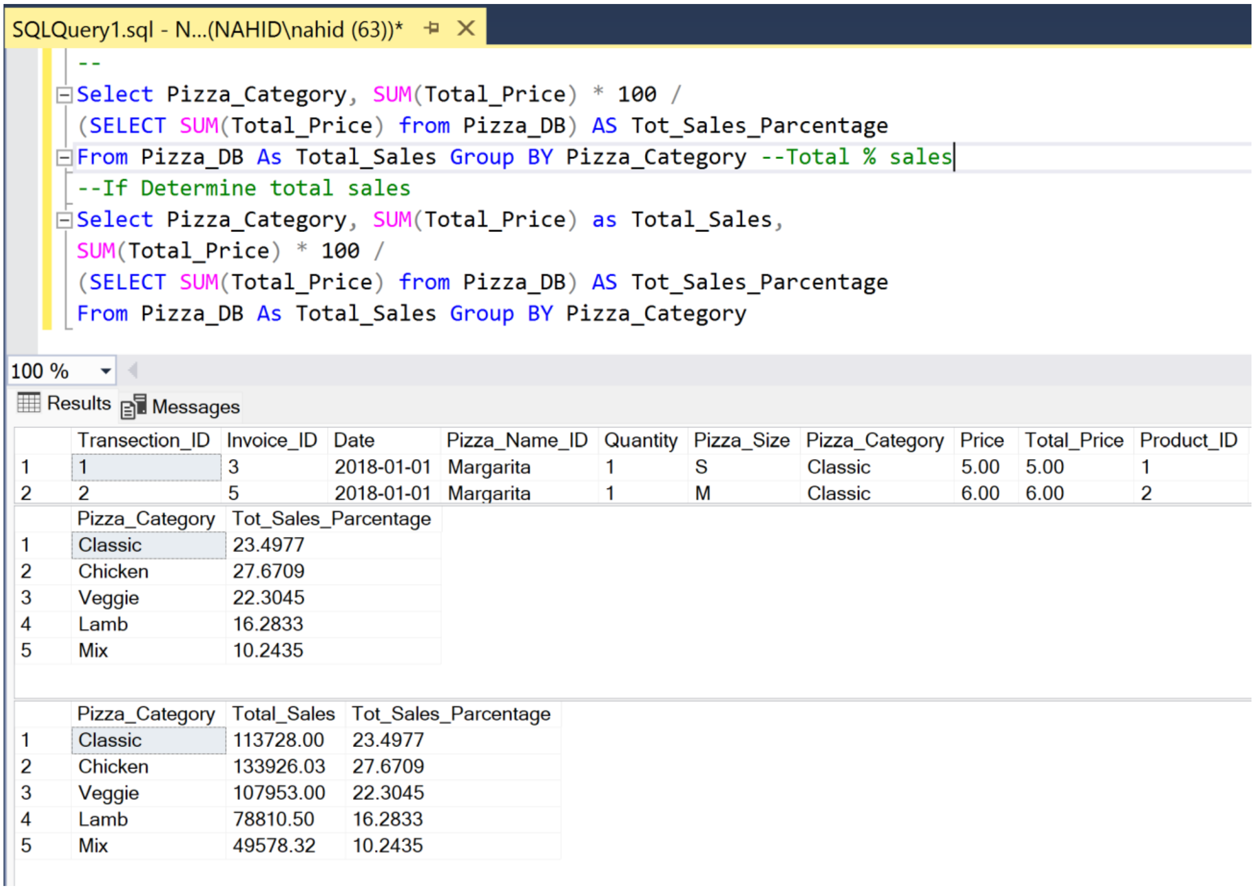
```
SELECT * FROM Pizza_DB

Select DATENAME(MONTH, Date)as Month_Name, SUM(Quantity) as Total_Pizza_Sold
FROM Pizza_DB Group BY DATENAME(MONTH, Date)
--Monthly trend
ORDER BY Total_Pizza_Sold DESC
--Total Pizza sold Descending order
```

	Transection_ID	Invoice_ID	Date	Pizza_Name_ID	Quantity	Pizza_Size	Pizza_Category	Price	Total_Price	Product_ID
1	1	3	2018-01-01	Margarita	1	S	Classic	5.00	5.00	1
2	2	5	2018-01-01	Margarita	1	M	Classic	6.00	6.00	2
3	3	7	2018-01-01	Margarita	1	L	Classic	7.00	7.00	3
4	4	9	2018-01-01	Veg	1	S	Veggie	6.00	6.00	4
5	5	11	2018-01-01	Veg	1	M	Veggie	7.00	7.00	5
6	6	13	2018-01-01	Veg	1	L	Veggie	8.00	8.00	6

	Month_Name	Total_Pizza_Sold
1	December	6201
2	January	5814
3	July	5808
4	August	5783
5	June	5607
6	February	5274
7	March	5123
8	October	5119
9	May	5096
10	November	4928
11	April	4926
12	September	4922

10. Percentage of sales by pizza category

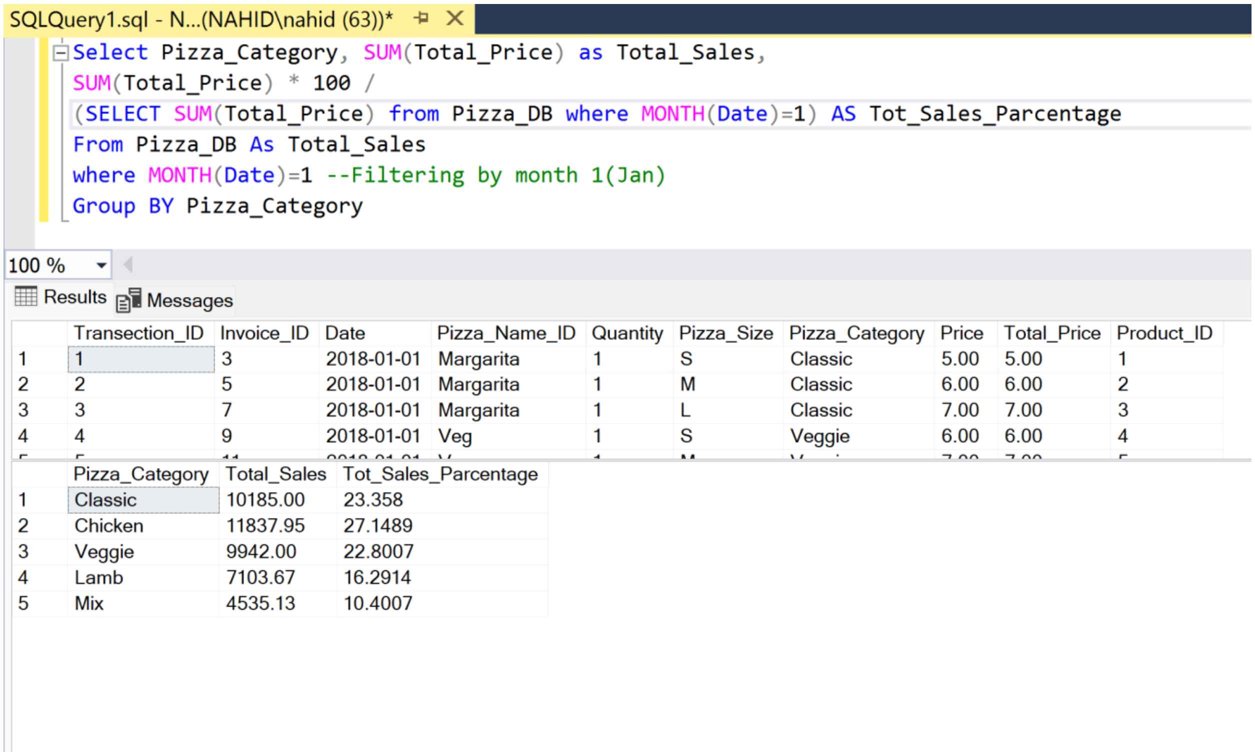


```sql
--
Select Pizza_Category, SUM(Total_Price) * 100 /
(SELECT SUM(Total_Price) from Pizza_DB) AS Tot_Sales_Parcentage
From Pizza_DB As Total_Sales Group BY Pizza_Category --Total % sales
--If Determine total sales
Select Pizza_Category, SUM(Total_Price) as Total_Sales,
SUM(Total_Price) * 100 /
(SELECT SUM(Total_Price) from Pizza_DB) AS Tot_Sales_Parcentage
From Pizza_DB As Total_Sales Group BY Pizza_Category
```

	Transection_ID	Invoice_ID	Date	Pizza_Name_ID	Quantity	Pizza_Size	Pizza_Category	Price	Total_Price	Product_ID
1	1	3	2018-01-01	Margarita	1	S	Classic	5.00	5.00	1
2	2	5	2018-01-01	Margarita	1	M	Classic	6.00	6.00	2

	Pizza_Category	Tot_Sales_Parcentage
1	Classic	23.4977
2	Chicken	27.6709
3	Veggie	22.3045
4	Lamb	16.2833
5	Mix	10.2435

	Pizza_Category	Total_Sales	Tot_Sales_Parcentage
1	Classic	113728.00	23.4977
2	Chicken	133926.03	27.6709
3	Veggie	107953.00	22.3045
4	Lamb	78810.50	16.2833
5	Mix	49578.32	10.2435

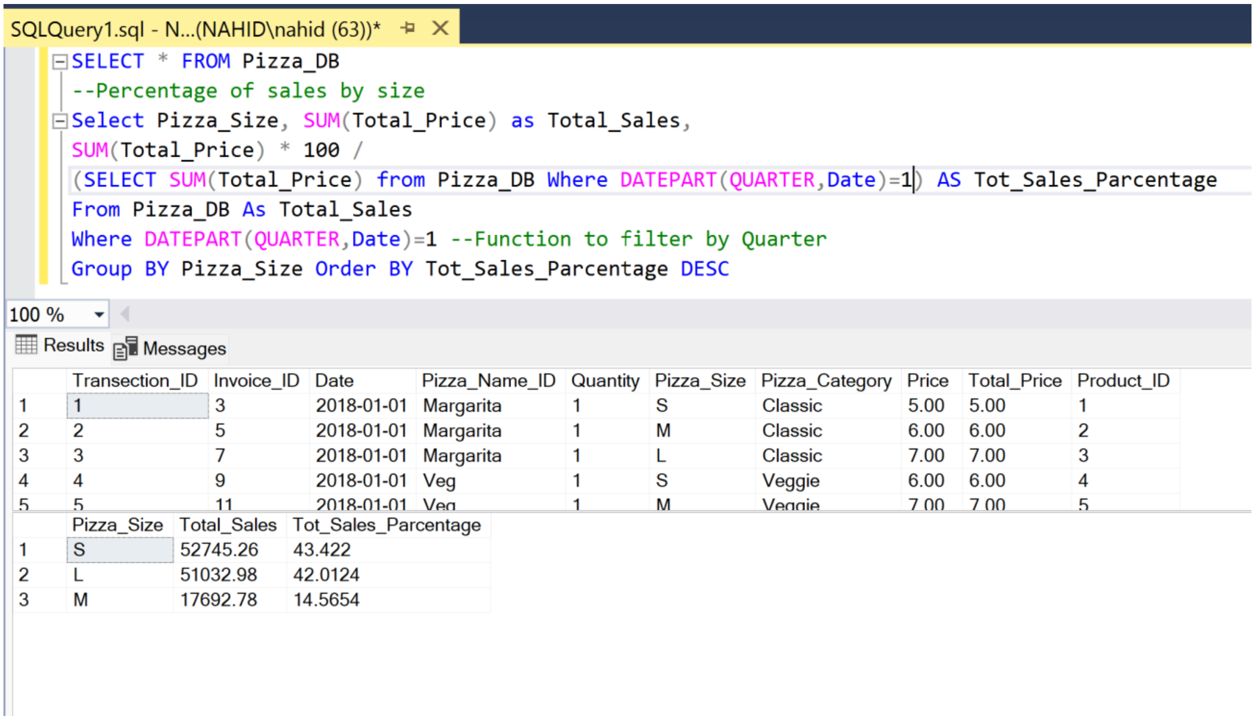


```sql
Select Pizza_Category, SUM(Total_Price) as Total_Sales,
SUM(Total_Price) * 100 /
(SELECT SUM(Total_Price) from Pizza_DB where MONTH(Date)=1) AS Tot_Sales_Parcentage
From Pizza_DB As Total_Sales
where MONTH(Date)=1 --Filtering by month 1(Jan)
Group BY Pizza_Category
```

	Transection_ID	Invoice_ID	Date	Pizza_Name_ID	Quantity	Pizza_Size	Pizza_Category	Price	Total_Price	Product_ID
1	1	3	2018-01-01	Margarita	1	S	Classic	5.00	5.00	1
2	2	5	2018-01-01	Margarita	1	M	Classic	6.00	6.00	2
3	3	7	2018-01-01	Margarita	1	L	Classic	7.00	7.00	3
4	4	9	2018-01-01	Veg	1	S	Veggie	6.00	6.00	4

	Pizza_Category	Total_Sales	Tot_Sales_Parcentage
1	Classic	10185.00	23.358
2	Chicken	11837.95	27.1489
3	Veggie	9942.00	22.8007
4	Lamb	7103.67	16.2914
5	Mix	4535.13	10.4007

11. Percentage of sales by size

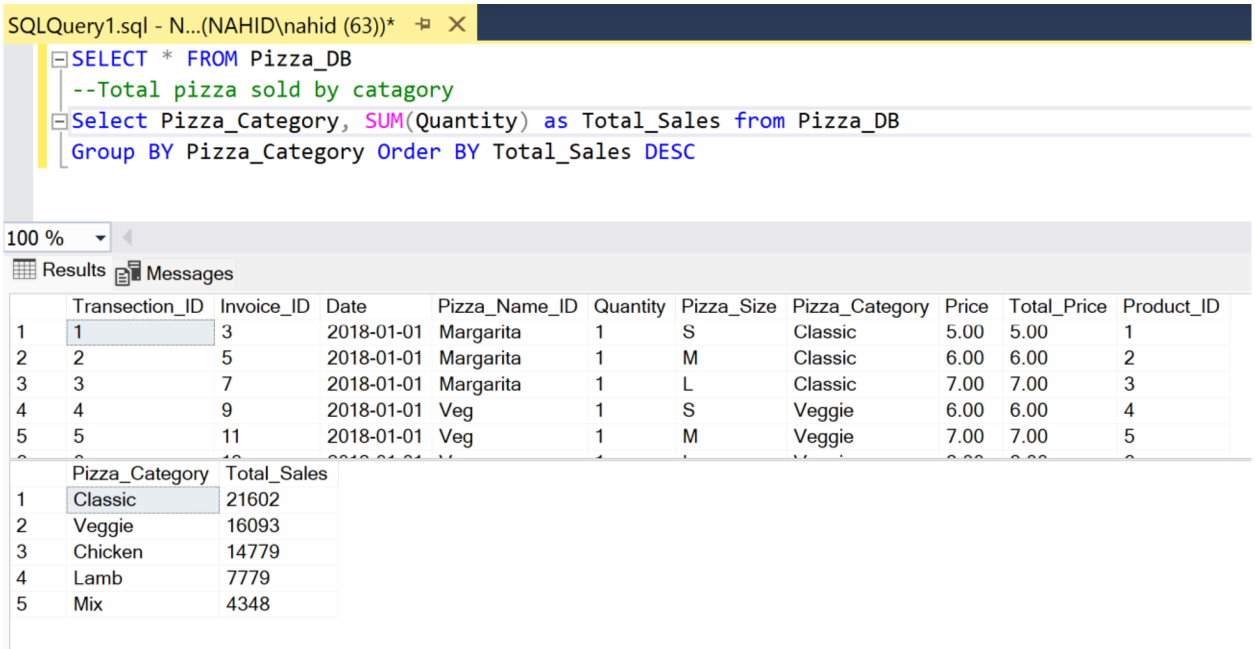


```
SELECT * FROM Pizza_DB
--Percentage of sales by size
Select Pizza_Size, SUM(Total_Price) as Total_Sales,
SUM(Total_Price) * 100 /
(SELECT SUM(Total_Price) from Pizza_DB Where DATEPART(QUARTER,Date)=1) AS Tot_Sales_Parcentage
From Pizza_DB As Total_Sales
Where DATEPART(QUARTER,Date)=1 --Function to filter by Quarter
Group BY Pizza_Size Order BY Tot_Sales_Parcentage DESC
```

	Transection_ID	Invoice_ID	Date	Pizza_Name_ID	Quantity	Pizza_Size	Pizza_Category	Price	Total_Price	Product_ID
1	1	3	2018-01-01	Margarita	1	S	Classic	5.00	5.00	1
2	2	5	2018-01-01	Margarita	1	M	Classic	6.00	6.00	2
3	3	7	2018-01-01	Margarita	1	L	Classic	7.00	7.00	3
4	4	9	2018-01-01	Veg	1	S	Veggie	6.00	6.00	4
5	5	11	2018-01-01	Veg	1	M	Veggie	7.00	7.00	5

	Pizza_Size	Total_Sales	Tot_Sales_Parcentage
1	S	52745.26	43.422
2	L	51032.98	42.0124
3	M	17692.78	14.5654

12. Total pizza sold by category

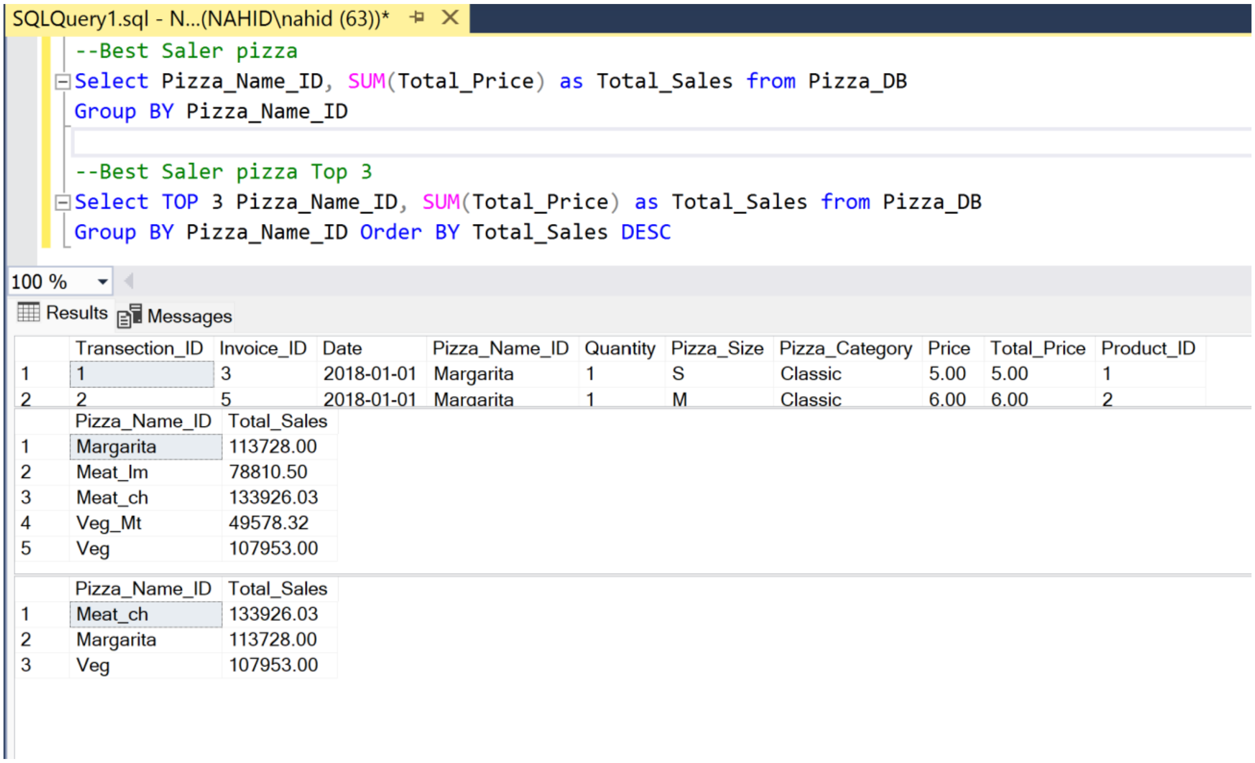


```
SELECT * FROM Pizza_DB
--Total pizza sold by catagory
Select Pizza_Category, SUM(Quantity) as Total_Sales from Pizza_DB
Group BY Pizza_Category Order BY Total_Sales DESC
```

	Transection_ID	Invoice_ID	Date	Pizza_Name_ID	Quantity	Pizza_Size	Pizza_Category	Price	Total_Price	Product_ID
1	1	3	2018-01-01	Margarita	1	S	Classic	5.00	5.00	1
2	2	5	2018-01-01	Margarita	1	M	Classic	6.00	6.00	2
3	3	7	2018-01-01	Margarita	1	L	Classic	7.00	7.00	3
4	4	9	2018-01-01	Veg	1	S	Veggie	6.00	6.00	4
5	5	11	2018-01-01	Veg	1	M	Veggie	7.00	7.00	5

	Pizza_Category	Total_Sales
1	Classic	21602
2	Veggie	16093
3	Chicken	14779
4	Lamb	7779
5	Mix	4348

13. Best seller Total pizza sold



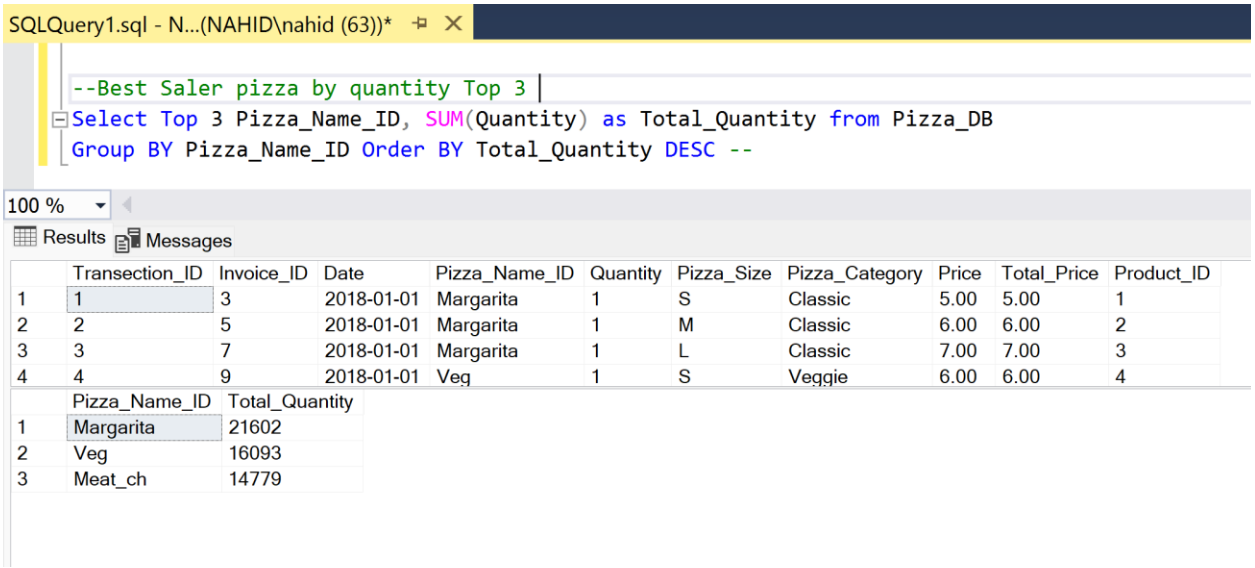
```sql
--Best Saler pizza
Select Pizza_Name_ID, SUM(Total_Price) as Total_Sales from Pizza_DB
Group BY Pizza_Name_ID

--Best Saler pizza Top 3
Select TOP 3 Pizza_Name_ID, SUM(Total_Price) as Total_Sales from Pizza_DB
Group BY Pizza_Name_ID Order BY Total_Sales DESC
```

	Transection_ID	Invoice_ID	Date	Pizza_Name_ID	Quantity	Pizza_Size	Pizza_Category	Price	Total_Price	Product_ID
1	1	3	2018-01-01	Margarita	1	S	Classic	5.00	5.00	1
2	2	5	2018-01-01	Margarita	1	M	Classic	6.00	6.00	2

	Pizza_Name_ID	Total_Sales
1	Margarita	113728.00
2	Meat_Im	78810.50
3	Meat_ch	133926.03
4	Veg_Mt	49578.32
5	Veg	107953.00

	Pizza_Name_ID	Total_Sales
1	Meat_ch	133926.03
2	Margarita	113728.00
3	Veg	107953.00

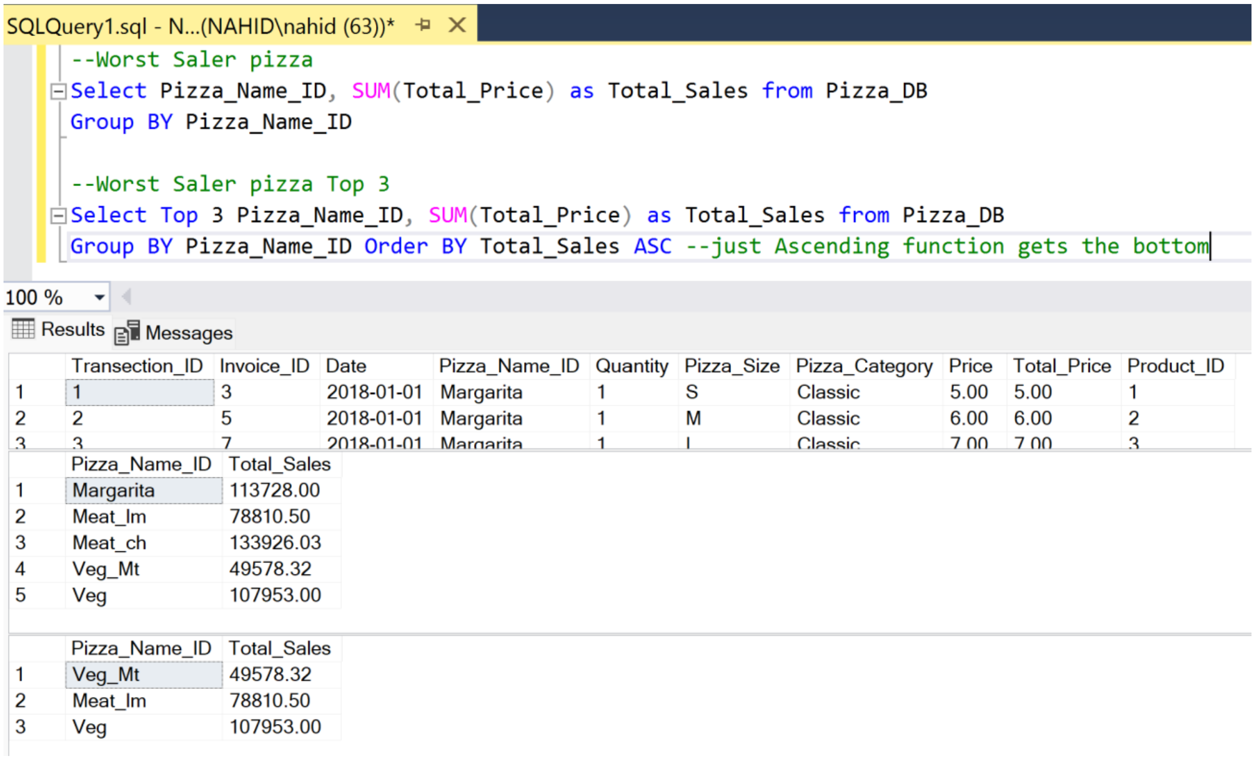


```sql
--Best Saler pizza by quantity Top 3
Select Top 3 Pizza_Name_ID, SUM(Quantity) as Total_Quantity from Pizza_DB
Group BY Pizza_Name_ID Order BY Total_Quantity DESC --
```

	Transection_ID	Invoice_ID	Date	Pizza_Name_ID	Quantity	Pizza_Size	Pizza_Category	Price	Total_Price	Product_ID
1	1	3	2018-01-01	Margarita	1	S	Classic	5.00	5.00	1
2	2	5	2018-01-01	Margarita	1	M	Classic	6.00	6.00	2
3	3	7	2018-01-01	Margarita	1	L	Classic	7.00	7.00	3
4	4	9	2018-01-01	Veg	1	S	Veggie	6.00	6.00	4

	Pizza_Name_ID	Total_Quantity
1	Margarita	21602
2	Veg	16093
3	Meat_ch	14779

14. Worst seller Total Pizza Sold



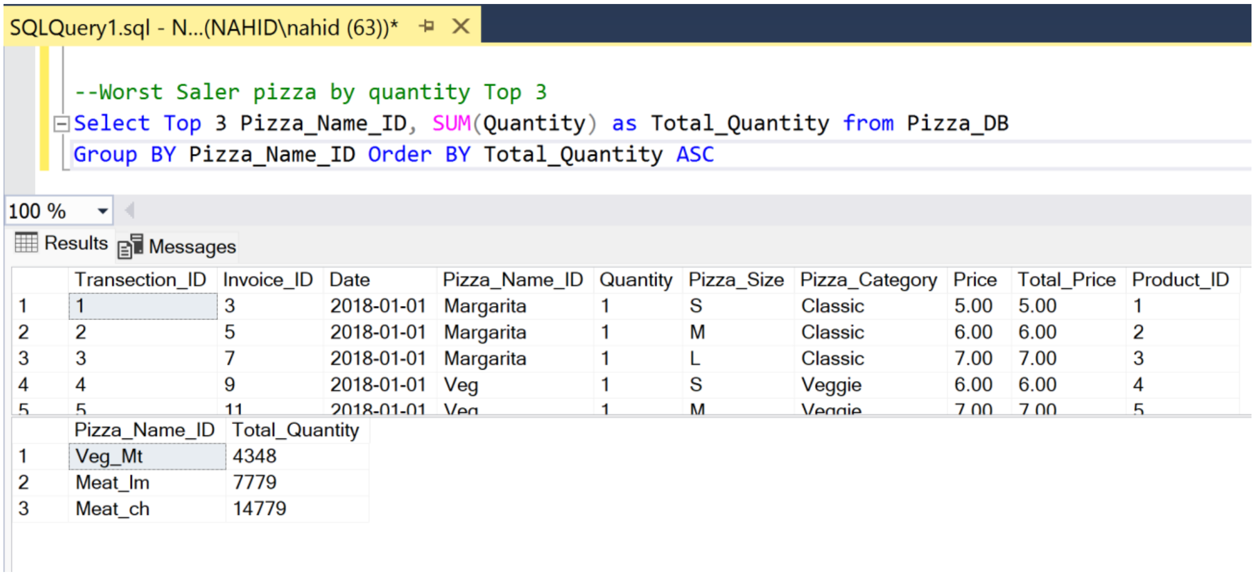
```
--Worst Saler pizza
Select Pizza_Name_ID, SUM(Total_Price) as Total_Sales from Pizza_DB
Group BY Pizza_Name_ID

--Worst Saler pizza Top 3
Select Top 3 Pizza_Name_ID, SUM(Total_Price) as Total_Sales from Pizza_DB
Group BY Pizza_Name_ID Order BY Total_Sales ASC --just Ascending function gets the bottom
```

	Transection_ID	Invoice_ID	Date	Pizza_Name_ID	Quantity	Pizza_Size	Pizza_Category	Price	Total_Price	Product_ID
1	1	3	2018-01-01	Margarita	1	S	Classic	5.00	5.00	1
2	2	5	2018-01-01	Margarita	1	M	Classic	6.00	6.00	2
3	3	7	2018-01-01	Margarita	1	L	Classic	7.00	7.00	3

	Pizza_Name_ID	Total_Sales
1	Margarita	113728.00
2	Meat_Im	78810.50
3	Meat_ch	133926.03
4	Veg_Mt	49578.32
5	Veg	107953.00

	Pizza_Name_ID	Total_Sales
1	Veg_Mt	49578.32
2	Meat_Im	78810.50
3	Veg	107953.00



```
--Worst Saler pizza by quantity Top 3
Select Top 3 Pizza_Name_ID, SUM(Quantity) as Total_Quantity from Pizza_DB
Group BY Pizza_Name_ID Order BY Total_Quantity ASC
```

	Transection_ID	Invoice_ID	Date	Pizza_Name_ID	Quantity	Pizza_Size	Pizza_Category	Price	Total_Price	Product_ID
1	1	3	2018-01-01	Margarita	1	S	Classic	5.00	5.00	1
2	2	5	2018-01-01	Margarita	1	M	Classic	6.00	6.00	2
3	3	7	2018-01-01	Margarita	1	L	Classic	7.00	7.00	3
4	4	9	2018-01-01	Veg	1	S	Veggie	6.00	6.00	4
5	5	11	2018-01-01	Veg	1	M	Veggie	7.00	7.00	5

	Pizza_Name_ID	Total_Quantity
1	Veg_Mt	4348
2	Meat_Im	7779
3	Meat_ch	14779