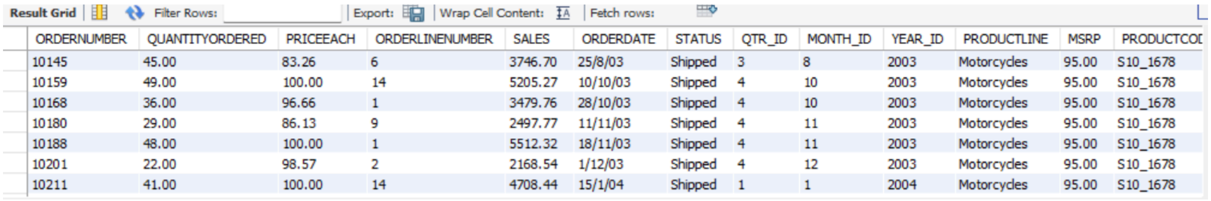
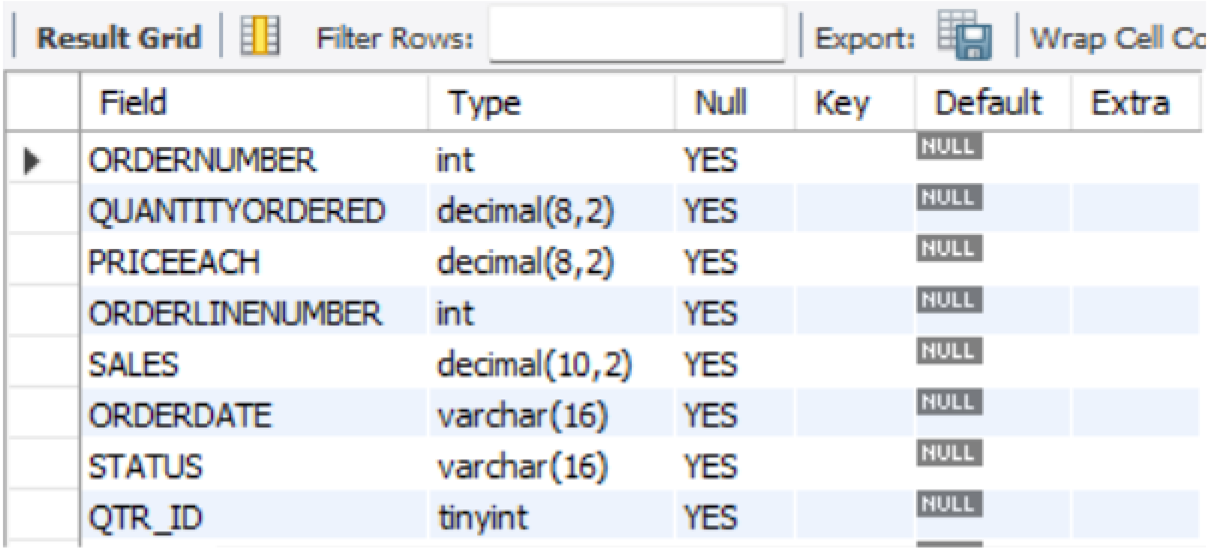
```
-- Use the correct database
USE rfm_sales;

-- 1. View sample records
SELECT * FROM sales_sample_data LIMIT 20;
```



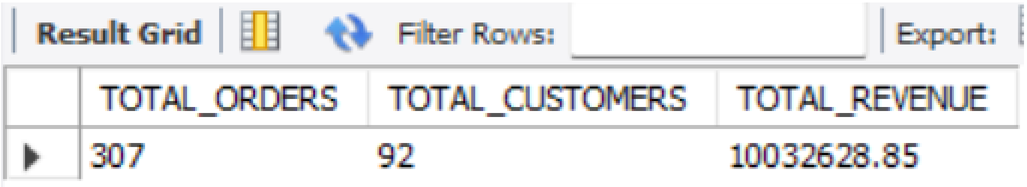
	ORDERNUMBER	QUANTITYORDERED	PRICEEACH	ORDERLINENUMBER	SALES	ORDERDATE	STATUS	QTR_ID	MONTH_ID	YEAR_ID	PRODUCTLINE	MSRP	PRODUCTCOD
	10145	45.00	83.26	6	3746.70	25/8/03	Shipped	3	8	2003	Motorcycles	95.00	S10_1678
	10159	49.00	100.00	14	5205.27	10/10/03	Shipped	4	10	2003	Motorcycles	95.00	S10_1678
	10168	36.00	96.66	1	3479.76	28/10/03	Shipped	4	10	2003	Motorcycles	95.00	S10_1678
	10180	29.00	86.13	9	2497.77	11/11/03	Shipped	4	11	2003	Motorcycles	95.00	S10_1678
	10188	48.00	100.00	1	5512.32	18/11/03	Shipped	4	11	2003	Motorcycles	95.00	S10_1678
	10201	22.00	98.57	2	2168.54	1/12/03	Shipped	4	12	2003	Motorcycles	95.00	S10_1678
	10211	41.00	100.00	14	4708.44	15/1/04	Shipped	1	1	2004	Motorcycles	95.00	S10_1678

```
-- 2. Check structure of the table
DESCRIBE sales_sample_data;
```



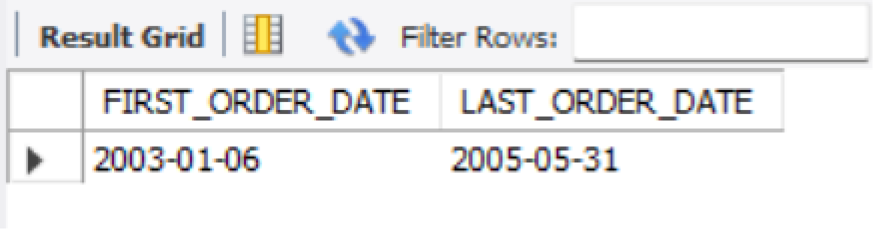
	Field	Type	Null	Key	Default	Extra
▶	ORDERNUMBER	int	YES		NULL	
	QUANTITYORDERED	decimal(8,2)	YES		NULL	
	PRICEEACH	decimal(8,2)	YES		NULL	
	ORDERLINENUMBER	int	YES		NULL	
	SALES	decimal(10,2)	YES		NULL	
	ORDERDATE	varchar(16)	YES		NULL	
	STATUS	varchar(16)	YES		NULL	
	QTR_ID	tinyint	YES		NULL	

```
-- 3. Basic summary stats: Total orders, distinct customers, total revenue
SELECT
   COUNT(DISTINCT ORDERNUMBER) AS TOTAL_ORDERS,
   COUNT(DISTINCT CUSTOMERNAME) AS TOTAL_CUSTOMERS,
   ROUND(SUM(SALES), 2) AS TOTAL_REVENUE
FROM sales_sample_data;
```



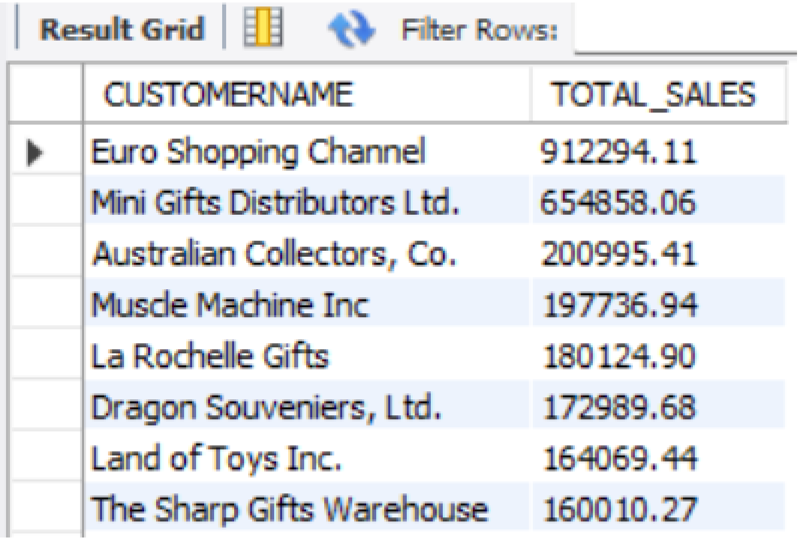
	TOTAL_ORDERS	TOTAL_CUSTOMERS	TOTAL_REVENUE
▶	307	92	10032628.85

```
-- 4. Date range (Business start and end)
SELECT
   MIN(STR_TO_DATE(ORDERDATE, '%d/%m/%y')) AS FIRST_ORDER_DATE,
   MAX(STR_TO_DATE(ORDERDATE, '%d/%m/%y')) AS LAST_ORDER_DATE
FROM sales_sample_data;
```



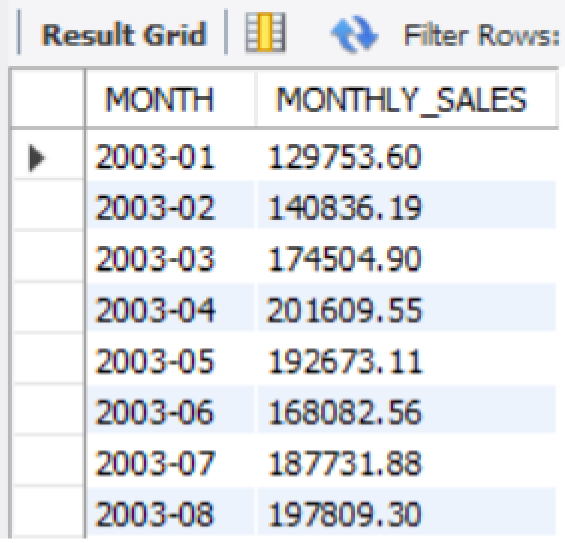
	FIRST_ORDER_DATE	LAST_ORDER_DATE
▶	2003-01-06	2005-05-31

```
-- 5. Top 10 customers by total sales
SELECT
   CUSTOMERNAME,
   ROUND(SUM(SALES), 2) AS TOTAL_SALES
FROM sales_sample_data
GROUP BY CUSTOMERNAME
ORDER BY TOTAL_SALES DESC
LIMIT 10;
```



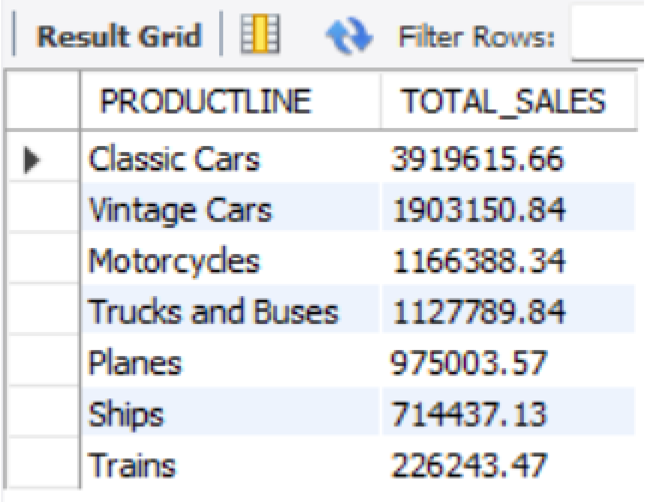
	CUSTOMERNAME	TOTAL_SALES
▶	Euro Shopping Channel	912294.11
	Mini Gifts Distributors Ltd.	654858.06
	Australian Collectors, Co.	200995.41
	Muscle Machine Inc	197736.94
	La Rochelle Gifts	180124.90
	Dragon Souveniers, Ltd.	172989.68
	Land of Toys Inc.	164069.44
	The Sharp Gifts Warehouse	160010.27

```
-- 6. Monthly sales trend
SELECT
   DATE_FORMAT(STR_TO_DATE(ORDERDATE, '%d/%m/%y'), '%Y-%m') AS MONTH,
   ROUND(SUM(SALES), 2) AS MONTHLY_SALES
FROM sales_sample_data
GROUP BY MONTH
ORDER BY MONTH;
```



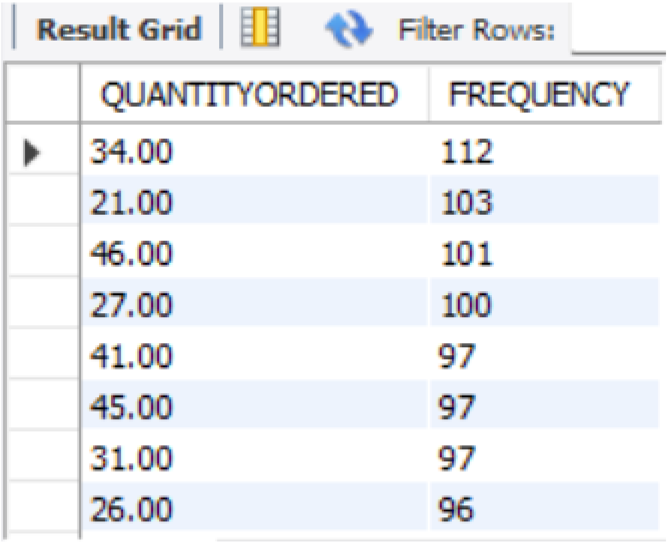
MONTH	MONTHLY_SALES
2003-01	129753.60
2003-02	140836.19
2003-03	174504.90
2003-04	201609.55
2003-05	192673.11
2003-06	168082.56
2003-07	187731.88
2003-08	197809.30

```
-- 7. Top-selling product categories
SELECT
   PRODUCTLINE,
   ROUND(SUM(SALES), 2) AS TOTAL_SALES
FROM sales_sample_data
GROUP BY PRODUCTLINE
ORDER BY TOTAL_SALES DESC;
```



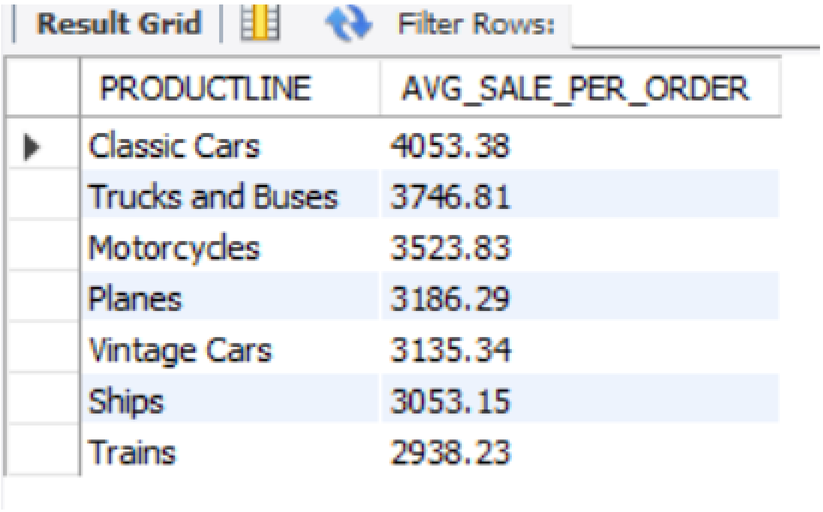
PRODUCTLINE	TOTAL_SALES
Classic Cars	3919615.66
Vintage Cars	1903150.84
Motorcycles	1166388.34
Trucks and Buses	1127789.84
Planes	975003.57
Ships	714437.13
Trains	226243.47

```
-- 8. Quantity ordered distribution
SELECT
   QUANTITYORDERED,
   COUNT(*) AS FREQUENCY
FROM sales_sample_data
GROUP BY QUANTITYORDERED
ORDER BY FREQUENCY DESC;
```



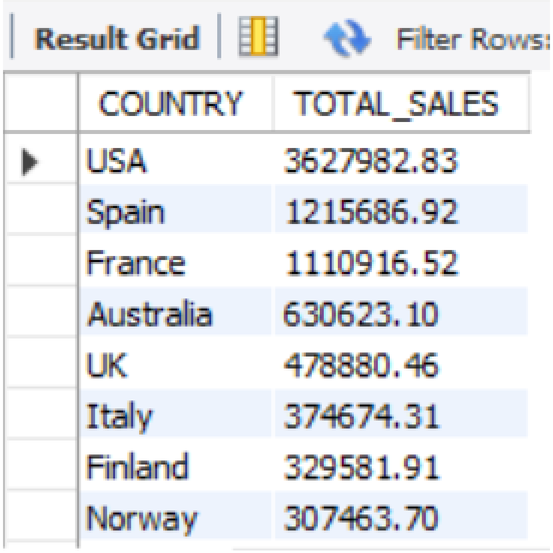
QUANTITYORDERED	FREQUENCY
34.00	112
21.00	103
46.00	101
27.00	100
41.00	97
45.00	97
31.00	97
26.00	96

```
-- 9. Average sales by product category
SELECT
   PRODUCTLINE,
   ROUND(AVG(SALES), 2) AS AVG_SALE_PER_ORDER
FROM sales_sample_data
GROUP BY PRODUCTLINE
ORDER BY AVG_SALE_PER_ORDER DESC;
```



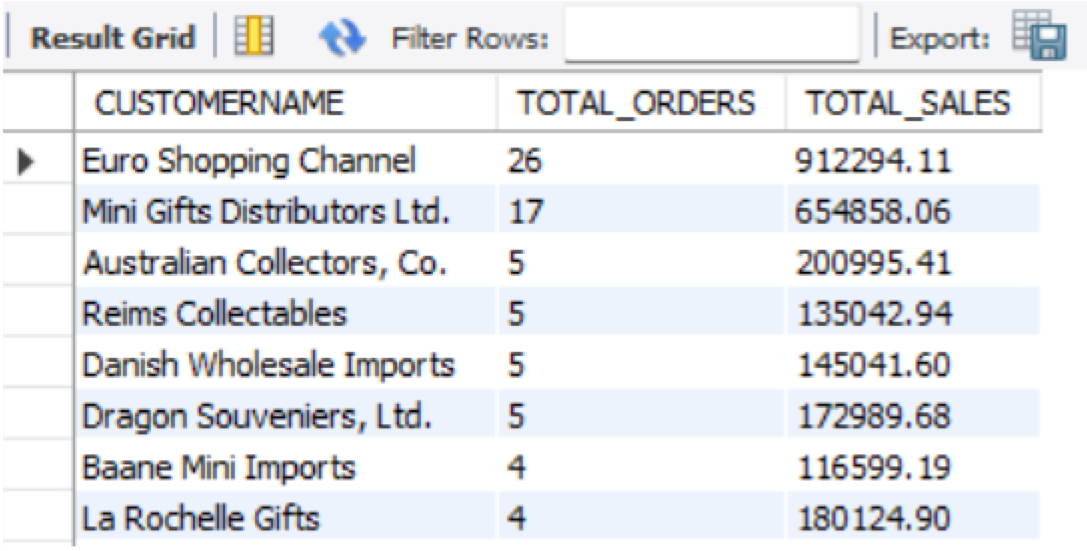
PRODUCTLINE	AVG_SALE_PER_ORDER
Classic Cars	4053.38
Trucks and Buses	3746.81
Motorcycles	3523.83
Planes	3186.29
Vintage Cars	3135.34
Ships	3053.15
Trains	2938.23

```
-- 10. Revenue by country (if column exists)
-- If 'COUNTRY' column is available in your dataset
-- SELECT
--     COUNTRY,
--     ROUND(SUM(SALES), 2) AS TOTAL_SALES
-- FROM sales_sample_data
-- GROUP BY COUNTRY
-- ORDER BY TOTAL_SALES DESC;
```



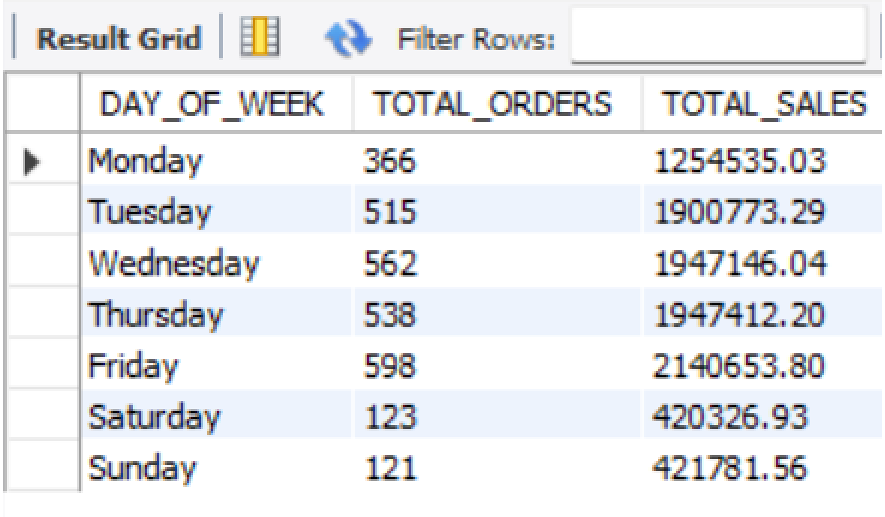
COUNTRY	TOTAL_SALES
USA	3627982.83
Spain	1215686.92
France	1110916.52
Australia	630623.10
UK	478880.46
Italy	374674.31
Finland	329581.91
Norway	307463.70

```
-- 11. Customer order frequency distribution
SELECT
   CUSTOMERNAME,
   COUNT(DISTINCT ORDERNUMBER) AS TOTAL_ORDERS,
   ROUND(SUM(SALES), 2) AS TOTAL_SALES
FROM sales_sample_data
GROUP BY CUSTOMERNAME
ORDER BY TOTAL_ORDERS DESC;
```



CUSTOMERNAME	TOTAL_ORDERS	TOTAL_SALES
Euro Shopping Channel	26	912294.11
Mini Gifts Distributors Ltd.	17	654858.06
Australian Collectors, Co.	5	200995.41
Reims Collectables	5	135042.94
Danish Wholesale Imports	5	145041.60
Dragon Souveniers, Ltd.	5	172989.68
Baane Mini Imports	4	116599.19
La Rochelle Gifts	4	180124.90

```
-- 12. Day of week sales distribution (optional)
SELECT
   DAYNAME(STR_TO_DATE(ORDERDATE, '%d/%m/%y')) AS DAY_OF_WEEK,
   COUNT(*) AS TOTAL_ORDERS,
   ROUND(SUM(SALES), 2) AS TOTAL_SALES
FROM sales_sample_data
GROUP BY DAY_OF_WEEK
ORDER BY FIELD(DAY_OF_WEEK, 'Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday',
'Saturday', 'Sunday');
```



DAY_OF_WEEK	TOTAL_ORDERS	TOTAL_SALES
Monday	366	1254535.03
Tuesday	515	1900773.29
Wednesday	562	1947146.04
Thursday	538	1947412.20
Friday	598	2140653.80
Saturday	123	420326.93
Sunday	121	421781.56