

SQL Project on Sales Dataset

Introduction:

The Sales dataset contains detailed information about product sales, including: Order details, Product details, Customer information, Transaction values

The purpose of this project is to analyze the dataset using SQL queries to extract business insights related to:

- Sales performance
- Customer buying behaviour
- Regional and product analysis
- Profitability trends

Workflow:

1. Dataset Collection:

The dataset was initially provided in Excel format (Sales.xlsx).

2. Database Creation & Import:

A new database was created in MySQL Workbench.

The Excel sheet was imported into a table named sales

3. SQL Queries Execution:

Different types of queries were performed:

- Basic queries
- Filtering queries
- Aggregations
- Top/Bottom analysis
- Self-joins and subqueries

4. Results & Insights:

The query results were analysed to extract business insights.

Queries and their Output:

1. Details of sales with quantity ordered, product code, city, contact first name from sales table

Query 1 Sales SQL Project* ×

```
1 • CREATE DATABASE SALES_SQL;
2 • USE SALES_SQL;
3 • SHOW TABLES;
4 • SELECT * FROM SALES;
5 • SELECT SALES.*, QUANTITYORDERED, PRODUCTCODE, CITY, CONTACTFIRSTNAME FROM SALES;
6
```

Result Grid | Filter Rows: Export: Wrap Cell Content: Fetch rows: Result Grid Form Editor Field Types Query Stats

| ORDERNUMBER | QUANTITYORDERED | PRICEEACH | ORDERLINENUMBER | SALES | ORDERDATE | STATUS | QTR_ID | MONTH_ID | YEAR_ID | PRODUCTLINE | MSRP | PRODUCTCODE | CUSTOMERNAME |
|-------------|-----------------|-----------|-----------------|---------|--------------------|---------|--------|----------|---------|-------------|------|-------------|--------------------|
| 10107 | 30 | 95.7 | 2 | 2871 | 2/24/2003 0:00 | Shipped | 1 | 2 | 2003 | Motorcycles | 95 | S10_1678 | Land of Toys Inc. |
| 10121 | 34 | 81.35 | 5 | 2765.9 | 05-07-2003 0:00:00 | Shipped | 2 | 5 | 2003 | Motorcycles | 95 | S10_1678 | Reims Collectables |
| 10134 | 41 | 94.74 | 2 | 3884.34 | 07-01-2003 0:00:00 | Shipped | 3 | 7 | 2003 | Motorcycles | 95 | S10_1678 | Lyon Souvenir |
| 10145 | 45 | 83.26 | 6 | 3746.7 | 8/25/2003 0:00:00 | Shipped | 3 | 8 | 2003 | Motorcycles | 95 | S10_1678 | Toys4GrownUp |
| 10159 | 49 | 100 | 14 | 5205.27 | 10-10-2003 0:00:00 | Shipped | 4 | 10 | 2003 | Motorcycles | 95 | S10_1678 | Corporate Gift |
| 10168 | 36 | 96.66 | 1 | 3479.76 | 10/28/2003 0:00:00 | Shipped | 4 | 10 | 2003 | Motorcycles | 95 | S10_1678 | Technics Stores |
| 10180 | 29 | 86.13 | 9 | 2497.77 | 11-11-2003 0:00:00 | Shipped | 4 | 11 | 2003 | Motorcycles | 95 | S10_1678 | Daedalus Design |
| 10188 | 48 | 100 | 1 | 5512.32 | 11/18/2003 0:00:00 | Shipped | 4 | 11 | 2003 | Motorcycles | 95 | S10_1678 | Herku Gifts |
| 10201 | 22 | 98.57 | 2 | 2168.54 | 12-01-2003 0:00:00 | Shipped | 4 | 12 | 2003 | Motorcycles | 95 | S10_1678 | Mini Wheels Co. |
| 10211 | 41 | 100 | 14 | 4708.44 | 1/15/2004 0:00:00 | Shipped | 1 | 1 | 2004 | Motorcycles | 95 | S10_1678 | Auto Canal Peti |
| 10223 | 37 | 100 | 1 | 3965.66 | 2/20/2004 0:00:00 | Shipped | 1 | 2 | 2004 | Motorcycles | 95 | S10_1678 | Australian Coll. |
| 10237 | 23 | 100 | 7 | 2333.12 | 04-05-2004 0:00:00 | Shipped | 2 | 4 | 2004 | Motorcycles | 95 | S10_1678 | Vitachrome Inc. |
| 10251 | 28 | 100 | 2 | 3188.64 | 5/18/2004 0:00:00 | Shipped | 2 | 5 | 2004 | Motorcycles | 95 | S10_1678 | Tekni Collectabl |
| 10263 | 34 | 100 | 2 | 3676.76 | 6/28/2004 0:00:00 | Shipped | 2 | 6 | 2004 | Motorcycles | 95 | S10_1678 | Gift Depot Inc. |
| 10276 | 46 | 87.93 | 1 | 4177.26 | 7/23/2004 0:00:00 | Shipped | 2 | 7 | 2004 | Motorcycles | 95 | S10_1678 | La Pastiche C.R. |

SALES 6 × Read Only

2. Find if duplicate order numbers exist

```
6 • SELECT ORDERNUMBER, COUNT(*) FROM SALES GROUP BY ORDERNUMBER HAVING COUNT(*)>1;
7
8
```

Result Grid | Filter Rows: Export: Wrap Cell Content: Result Grid Form Editor Field Types Query Stats

| ORDERNUMBER | COUNT(*) |
|-------------|----------|
| 10107 | 8 |
| 10121 | 5 |
| 10134 | 7 |
| 10145 | 16 |
| 10159 | 18 |
| 10168 | 18 |
| 10180 | 14 |
| 10188 | 8 |
| 10201 | 7 |
| 10211 | 15 |
| 10223 | 15 |
| 10237 | 9 |
| 10251 | 6 |
| 10263 | 11 |

result 7 × Read Only

3. Show the 10% discount on each order

```
8 • SELECT ORDERNUMBER, SALES, (SALES*0.1) AS DISCOUNT_AMOUNT, (SALES-(SALES*0.1)) AS DISCOUNT_SALES FROM SALES;
```

Result Grid | Filter Rows: Export: Wrap Cell Content: Result Grid Form Editor Field Types

| ORDERNUMBER | SALES | DISCOUNT_AMOUNT | DISCOUNT_SALES |
|-------------|---------|--------------------|-------------------|
| 10107 | 2871 | 287.1 | 2583.9 |
| 10121 | 2765.9 | 276.59000000000003 | 2489.31 |
| 10134 | 3884.34 | 388.434 | 3495.906 |
| 10145 | 3746.7 | 374.67 | 3372.029999999997 |
| 10159 | 5205.27 | 520.527 | 4684.743 |
| 10168 | 3479.76 | 347.9760000000006 | 3131.784 |
| 10180 | 2497.77 | 249.7700000000002 | 2247.993 |
| 10188 | 5512.32 | 551.232 | 4961.088 |
| 10201 | 2168.54 | 216.854 | 1951.686 |
| 10211 | 4708.44 | 470.844 | 4237.596 |
| 10223 | 3965.66 | 396.5660000000003 | 3569.094 |
| 10237 | 2333.12 | 233.312 | 2099.808 |
| 10251 | 3188.64 | 318.8640000000003 | 2869.776 |

Result 9 × Read Only

4. Calculate profit for each order using MSRP and PRICEEACH

```
9 • ERNUMBER,(MSRP-PRICEEACH)*QUANTITYORDERED AS PROFIT FROM SALES;
10
```

| ORDERNUMBER | PROFIT |
|-------------|--------------------|
| 10107 | -21.00000000000085 |
| 10121 | 464.1000000000002 |
| 10134 | 10.66000000000021 |
| 10145 | 528.299999999997 |
| 10159 | -245 |
| 10168 | -59.759999999998 |
| 10180 | 257.23000000000013 |
| 10188 | -240 |
| 10201 | -78.5399999999985 |
| 10211 | -205 |
| 10223 | -185 |
| 10237 | -115 |
| 10251 | -140 |

5. Find country wise sales and their percentage contribution in descending order

```
10 SELECT COUNTRY,SUM(SALES) AS COUNTRY_SALES,(SUM(SALES)/(SELECT SUM(SALES) FROM SALES) * 100) AS PERCENTAGE_CONTRIBUTION
11 FROM SALES GROUP BY COUNTRY ORDER BY COUNTRY_SALES DESC;
```

| COUNTRY | COUNTRY_SALES | PERCENTAGE_CONTRIBUTION |
|-----------|-------------------|-------------------------|
| USA | 3627982.83 | 36.16183638648206 |
| Spain | 1215686.920000009 | 12.117331740025444 |
| France | 1110916.519999993 | 11.073035159673012 |
| Australia | 630623.100000001 | 6.285721413884452 |
| UK | 478880.460000001 | 4.773230099108067 |
| Italy | 374674.3099999976 | 3.734557667804081 |
| Finland | 329581.910000001 | 3.2851001958474693 |
| Norway | 307463.700000001 | 3.064637440465066 |
| Singapore | 288488.4100000003 | 2.8755016687375985 |
| Denmark | 245637.15 | 2.4483827087852426 |
| Canada | 224078.5599999994 | 2.2334979530315198 |
| Germany | 220472.0899999994 | 2.197505452890314 |
| Sweden | 210014.21 | 2.093311864118244 |

6. Show quarterly sales of each year

```
12 • SELECT YEAR_ID,QTR_ID,SUM(SALES) AS QuarterlySales FROM SALES GROUP BY YEAR_ID, QTR_ID;
```

| YEAR_ID | QTR_ID | QuarterlySales |
|---------|--------|-------------------|
| 2003 | 1 | 445094.690000002 |
| 2003 | 2 | 562365.22 |
| 2003 | 3 | 649514.539999999 |
| 2003 | 4 | 1860005.089999987 |
| 2004 | 1 | 833730.680000005 |
| 2004 | 2 | 766260.729999996 |
| 2004 | 3 | 1109396.270000005 |
| 2004 | 4 | 2014774.919999995 |
| 2005 | 1 | 1071992.360000003 |
| 2005 | 2 | 719494.350000001 |

7. Find all orders where sales > 5000

13 • SELECT ORDERNUMBER, CUSTOMERNAME, SALES FROM SALES WHERE SALES > 5000;

The screenshot shows a database query results grid titled "Result Grid". The query is: "SELECT ORDERNUMBER, CUSTOMERNAME, SALES FROM SALES WHERE SALES > 5000;". The results show 17 rows of data. The columns are ORDERNUMBER, CUSTOMERNAME, and SALES. The data includes various customer names like Corporate Gift Ideas Co., Herku Gifts, Salzburg Collectables, etc., with their respective sales values.

| ORDERNUMBER | CUSTOMERNAME | SALES |
|-------------|-----------------------------|---------|
| 10159 | Corporate Gift Ideas Co. | 5205.27 |
| 10188 | Herkku Gifts | 5512.32 |
| 10341 | Salzburg Collectables | 7737.93 |
| 10417 | Euro Shopping Channel | 7516.08 |
| 10103 | Baane Mini Imports | 5404.62 |
| 10112 | Volvo Model Replicas, Co | 7209.11 |
| 10126 | Corrida Auto Replicas, Ltd | 7329.06 |
| 10140 | Technics Stores Inc. | 7374.1 |
| 10150 | Dragon Souvenirs, Ltd. | 10993.5 |
| 10174 | Australian Gift Network, Co | 8014.82 |
| 10183 | Classic Gift Ideas, Inc | 5372.57 |
| 10194 | Savoley & Henriot, Co. | 7290.36 |
| 10206 | Canadian Gift Exchange N... | 9064.89 |

8. Find all customers from France who bought Motorcycles

14 • SELECT ORDERNUMBER, CUSTOMERNAME, PRODUCTLINE, COUNTRY FROM SALES WHERE COUNTRY = 'France' AND PRODUCTLINE = 'Motorcycles';

The screenshot shows a database query results grid titled "Result Grid". The query is: "SELECT ORDERNUMBER, CUSTOMERNAME, PRODUCTLINE, COUNTRY FROM SALES WHERE COUNTRY = 'France' AND PRODUCTLINE = 'Motorcycles';". The results show 18 rows of data. The columns are ORDERNUMBER, CUSTOMERNAME, PRODUCTLINE, and COUNTRY. The data includes various customer names like Reims Collectables, Lyon Souveniers, Daedalus Designs Imports, etc., who have purchased Motorcycles from France.

| ORDERNUMBER | CUSTOMERNAME | PRODUCTLINE | COUNTRY |
|-------------|--------------------------|-------------|---------|
| 10121 | Reims Collectables | Motorcycles | France |
| 10134 | Lyon Souvenirs | Motorcycles | France |
| 10180 | Daedalus Designs Imports | Motorcycles | France |
| 10211 | Auto Canal Petit | Motorcycles | France |
| 10275 | La Rochelle Gifts | Motorcycles | France |
| 10375 | La Rochelle Gifts | Motorcycles | France |
| 10134 | Lyon Souvenirs | Motorcycles | France |
| 10180 | Daedalus Designs Imports | Motorcycles | France |
| 10275 | La Rochelle Gifts | Motorcycles | France |
| 10298 | Atelier graphique | Motorcycles | France |
| 10402 | Auto Canal Petit | Motorcycles | France |
| 10134 | Lyon Souvenirs | Motorcycles | France |
| 10180 | Daedalus Designs Imports | Motorcycles | France |

9. Find orders with sales greater than 3000 AND quantity less than 40

15 • SELECT ORDERNUMBER, CUSTOMERNAME, SALES, QUANTITYORDERED FROM SALES WHERE SALES > 3000 AND QUANTITYORDERED < 40;

The screenshot shows a database query results grid titled "Result Grid". The query is: "SELECT ORDERNUMBER, CUSTOMERNAME, SALES, QUANTITYORDERED FROM SALES WHERE SALES > 3000 AND QUANTITYORDERED < 40;". The results show 19 rows of data. The columns are ORDERNUMBER, CUSTOMERNAME, SALES, and QUANTITYORDERED. The data includes various customer names like Technics Stores Inc., Australian Collectors, Co., Tekni Collectables Inc., etc., with their respective sales and quantity ordered values.

| ORDERNUMBER | CUSTOMERNAME | SALES | QUANTITYORDERED |
|-------------|-----------------------------|---------|-----------------|
| 10168 | Technics Stores Inc. | 3479.76 | 36 |
| 10223 | Australian Collectors, Co. | 3965.66 | 37 |
| 10251 | Tekni Collectables Inc. | 3188.64 | 28 |
| 10263 | Gift Depot Inc. | 3676.76 | 34 |
| 10285 | Marta's Replicas Co. | 4099.68 | 36 |
| 10103 | Baane Mini Imports | 5404.62 | 26 |
| 10112 | Volvo Model Replicas, Co | 7209.11 | 29 |
| 10126 | Corrida Auto Replicas, Ltd | 7329.06 | 38 |
| 10140 | Technics Stores Inc. | 7374.1 | 37 |
| 10163 | Classic Legends Inc. | 4860.24 | 21 |
| 10174 | Australian Gift Network, Co | 8014.82 | 34 |
| 10183 | Classic Gift Ideas, Inc | 5372.57 | 23 |
| 10215 | West Coast Collectables ... | 6075.3 | 35 |

10. Find orders where price is equal to ANY MSRP values

```
16 • SELECT ORDERNUMBER, PRODUCTCODE, PRICEEACH, MSRP FROM SALES WHERE PRICEEACH = ANY (SELECT MSRP FROM SALES);
```

| | ORDERNUMBER | PRODUCTCODE | PRICEEACH | MSRP |
|---|-------------|-------------|-----------|------|
| ▶ | 10159 | S10_1678 | 100 | 95 |
| | 10188 | S10_1678 | 100 | 95 |
| | 10211 | S10_1678 | 100 | 95 |
| | 10223 | S10_1678 | 100 | 95 |
| | 10237 | S10_1678 | 100 | 95 |
| | 10251 | S10_1678 | 100 | 95 |
| | 10263 | S10_1678 | 100 | 95 |
| | 10285 | S10_1678 | 100 | 95 |
| | 10299 | S10_1678 | 100 | 95 |
| | 10309 | S10_1678 | 100 | 95 |
| | 10329 | S10_1678 | 100 | 95 |
| | 10341 | S10_1678 | 100 | 95 |
| | 10403 | S10_1678 | 100 | 95 |

11. Find orders where sales are greater than ALL sales from USA

```
17 • SELECT ORDERNUMBER, CUSTOMERNAME, SALES FROM SALES WHERE SALES > ALL (SELECT SALES FROM SALES WHERE COUNTRY = 'France');
```

| | ORDERNUMBER | CUSTOMERNAME | SALES |
|---|-------------|------------------------------|---------|
| ▶ | 10424 | Euro Shopping Channel | 12001 |
| | 10403 | UK Collectables, Ltd. | 11886.6 |
| | 10407 | The Sharp Gifts Warehouse | 14082.8 |
| | 10322 | Online Diecast Creations Co. | 12536.5 |
| | 10412 | Euro Shopping Channel | 11887.8 |

12. Find customers who ordered products with a price higher than the average price

```
18 • SELECT CUSTOMERNAME, PRODUCTCODE, PRICEEACH, TERRITORY FROM SALES WHERE PRICEEACH > (SELECT AVG(PRICEEACH) FROM SALES);  
19
```

| | CUSTOMERNAME | PRODUCTCODE | PRICEEACH | TERRITORY |
|---|----------------------------|-------------|-----------|-----------|
| ▶ | Land of Toys Inc. | S10_1678 | 95.7 | NA |
| | Lyon Souvenirs | S10_1678 | 94.74 | EMEA |
| | Corporate Gift Ideas Co. | S10_1678 | 100 | NA |
| | Technics Stores Inc. | S10_1678 | 96.66 | NA |
| | Daedalus Designs Imports | S10_1678 | 86.13 | EMEA |
| | Herkku Gifts | S10_1678 | 100 | EMEA |
| | Mini Wheels Co. | S10_1678 | 98.57 | NA |
| | Auto Canal Petit | S10_1678 | 100 | EMEA |
| | Australian Collectors, Co. | S10_1678 | 100 | APAC |
| | Vitachrome Inc. | S10_1678 | 100 | NA |
| | Tekni Collectables Inc. | S10_1678 | 100 | NA |
| | Gift Depot Inc. | S10_1678 | 100 | NA |
| | La Rochelle Gifts | S10_1678 | 92.83 | EMEA |

13. Find the 3rd highest sales orders using subquery

```
19 •   SELECT ORDERDATE,PRODUCTCODE,SALES,CUSTOMERNAME,PHONE,ADDRESSLINE1,STATUS_ FROM SALES WHERE SALES IN  
20      (SELECT MAX(SALES) FROM SALES WHERE SALES<  
21      (SELECT MAX(SALES) FROM SALES WHERE SALES<  
22      (SELECT MAX(SALES) FROM SALES)));
```

| ORDERDATE | PRODUCTCODE | SALES | CUSTOMERNAME | PHONE | ADDRESSLINE1 | STATUS_ |
|----------------|-------------|-------|-----------------------|----------------|-------------------|------------|
| 5/31/2005 0:00 | S10_1949 | 12001 | Euro Shopping Channel | (91) 555 94 44 | C/Moralzarzal, 86 | In Process |



14. Find the top 3 highest sales orders using subquery

```
23 •   SELECT CUSTOMERNAME,ADDRESSLINE1,CITY,DEALSIZE,ORDERDATE,STATUS_,TERRITORY FROM SALES ORDER BY SALES DESC LIMIT 3;
```

| CUSTOMERNAME | ADDRESSLINE1 | CITY | DEALSIZE | ORDERDATE | STATUS_ | TERRITORY |
|------------------------------|--------------------------|----------|----------|------------------|------------|-----------|
| The Sharp Gifts Warehouse | 3086 Ingle Ln. | San Jose | Large | 4/22/2005 0:00 | On Hold | NA |
| Online Diecast Creations Co. | 2304 Long Airport Avenue | Nashua | Large | 11-04-2004 00:00 | Shipped | NA |
| Euro Shopping Channel | C/Moralzarzal, 86 | Madrid | Large | 5/31/2005 0:00 | In Process | EMEA |



15. Find highest vs. lowest sales per year (using self-join)

```
24 •   SELECT o1.YEAR_ID,  
25      MAX(o1.SALES) AS HighestSale,  
26      MIN(o2.SALES) AS LowestSale  
27  FROM SALES o1  
28  JOIN SALES o2  
29    ON o1.YEAR_ID = o2.YEAR_ID  
30  GROUP BY o1.YEAR_ID;
```

| YEAR_ID | HighestSale | LowestSale |
|---------|-------------|------------|
| 2003 | 11279.2 | 710.2 |
| 2004 | 12536.5 | 577.6 |
| 2005 | 14082.8 | 482.13 |



16. Find all customers who ordered Motorcycles or Classic Cars using set operator

```
31 •   SELECT CUSTOMERNAME, PRODUCTLINE FROM sales WHERE PRODUCTLINE = 'Motorcycles'  
32  UNION  
33  SELECT CUSTOMERNAME, PRODUCTLINE FROM sales WHERE PRODUCTLINE = 'Classic Cars';  
34
```

| CUSTOMERNAME | PRODUCTLINE |
|----------------------------|-------------|
| Land of Toys Inc. | Motorcycles |
| Reims Collectables | Motorcycles |
| Lyon Souveniers | Motorcycles |
| Toys4GrownUps.com | Motorcycles |
| Corporate Gift Ideas Co. | Motorcycles |
| Technics Stores Inc. | Motorcycles |
| Daedalus Designs Imports | Motorcycles |
| Herkku Gifts | Motorcycles |
| Mini Wheels Co. | Motorcycles |
| Auto Canal Petit | Motorcycles |
| Australian Collectors, Co. | Motorcycles |
| Vitachrome Inc. | Motorcycles |

Result 12 x



17. Find customers whose sales are above the average sales of their own country

```
34 •   SELECT CUSTOMERNAME, COUNTRY, SALES FROM sales s1 WHERE SALES > (SELECT AVG(s2.SALES)
35           FROM sales s2
36           WHERE s1.COUNTRY = s2.COUNTRY);
37
```

Result Grid | Filter Rows: Export: Wrap Cell Content: Fetch rows: Result Grid Form Editor Field Types Read Only

| CUSTOMERNAME | COUNTRY | SALES |
|----------------------------|-----------|---------|
| Lyon Souveniers | France | 3884.34 |
| Toys4GrownUps.com | USA | 3746.7 |
| Corporate Gift Ideas Co. | USA | 5205.27 |
| Herkku Gifts | Norway | 5512.32 |
| Auto Canal Petit | France | 4708.44 |
| Australian Collectors, Co. | Australia | 3965.66 |
| Gift Depot Inc. | USA | 3676.76 |
| La Rochelle Gifts | France | 4177.35 |
| Marta's Replicas Co. | USA | 4099.68 |
| Baane Mini Imports | Norway | 4394.38 |
| Diecast Classics Inc. | USA | 4358.04 |
| Land of Toys Inc. | USA | 4396.14 |

sales 4 x

18. Find customers who placed orders in more than one year

```
37 •   SELECT DISTINCT CUSTOMERNAME, YEAR_ID, CITY, DEALSIZE
38     FROM sales s1
39     WHERE EXISTS (
40       SELECT 1
41       FROM sales s2
42       WHERE s1.CUSTOMERNAME = s2.CUSTOMERNAME
43       AND s1.YEAR_ID != s2.YEAR_ID
44     );
```

Result Grid | Filter Rows: Export: Wrap Cell Content: Result Grid Form Editor Field Types Read Only

| CUSTOMERNAME | YEAR_ID | CITY | DEALSIZE |
|----------------------------|---------|---------------|----------|
| Land of Toys Inc. | 2003 | NYC | Small |
| Reims Collectables | 2003 | Reims | Small |
| Lyon Souveniers | 2003 | Paris | Medium |
| Toys4GrownUps.com | 2003 | Pasadena | Medium |
| Corporate Gift Ideas Co. | 2003 | San Francisco | Medium |
| Technics Stores Inc. | 2003 | Burlingame | Medium |
| Daedalus Designs Imports | 2003 | Lille | Small |
| Herkku Gifts | 2003 | Bergen | Medium |
| Mini Wheels Co. | 2003 | San Francisco | Small |
| Auto Canal Petit | 2004 | Paris | Medium |
| Australian Collectors, Co. | 2004 | Melbourne | Medium |
| Vitachrome Inc. | 2004 | NYC | Small |

sales 6 x

19. Create a view for year-wise sales summary

```
45 •   CREATE VIEW YearlySales AS
46     SELECT YEAR_ID, SUM(SALES) AS TotalSales, AVG(SALES) AS AvgSales FROM sales GROUP BY YEAR_ID;
47 •   SELECT * FROM YearlySales;
48
49
```

Result Grid | Filter Rows: Export: Wrap Cell Content: Result Grid Form Editor Field Types Read Only

| CUSTOMERNAME | PRODUCTCODE | YEAR_ID |
|----------------------------|-------------|---------|
| Land of Toys Inc. | S10_1678 | 2004 |
| La Rochelle Gifts | S10_1678 | 2005 |
| Land of Toys Inc. | S10_1678 | 2003 |
| La Rochelle Gifts | S10_1678 | 2004 |
| Land of Toys Inc. | S10_2016 | 2004 |
| Australian Collectors, Co. | S10_2016 | 2004 |
| Australian Collectors, Co. | S10_2016 | 2003 |
| Land of Toys Inc. | S10_2016 | 2003 |
| Land of Toys Inc. | S10_4698 | 2004 |
| Australian Collectors, Co. | S10_4698 | 2004 |
| Technics Stores Inc. | S10_4698 | 2005 |
| Australian Collectors, Co. | S10_4698 | 2003 |

Result 30 x

20. Create a view for customers with high-value orders (> 5000)

```
49 • CREATE VIEW HighValueOrders AS
50   SELECT ORDERNUMBER, CUSTOMERNAME, COUNTRY, SALES
51   FROM sales
52   WHERE SALES > 5000;
53 •   SELECT * FROM HighValueOrders;
54
```

Result Grid | Filter Rows: Export: Wrap Cell Content: Result Grid Form Editor Field Types Read Only

| CUSTOMERNAME | PRODUCTCODE | YEAR_ID |
|----------------------------|-------------|---------|
| Land of Toys Inc. | S10_1678 | 2004 |
| La Rochelle Gifts | S10_1678 | 2005 |
| Land of Toys Inc. | S10_1678 | 2003 |
| La Rochelle Gifts | S10_1678 | 2004 |
| Land of Toys Inc. | S10_2016 | 2004 |
| Australian Collectors, Co. | S10_2016 | 2004 |
| Australian Collectors, Co. | S10_2016 | 2003 |
| Land of Toys Inc. | S10_2016 | 2003 |
| Land of Toys Inc. | S10_4698 | 2004 |
| Australian Collectors, Co. | S10_4698 | 2004 |
| Technics Stores Inc. | S10_4698 | 2005 |
| Australian Collectors, Co. | S10_4698 | 2003 |

Result 30 ×

21. Customers from Countries alphabetically between 'France' and 'USA'

```
56 • SELECT CUSTOMERNAME, COUNTRY, SALES
57   FROM sales WHERE COUNTRY BETWEEN 'France' AND 'USA';
58
```

Result Grid | Filter Rows: Export: Wrap Cell Content: Fetch rows: Result Grid Form Editor Field Types Read Only

| CUSTOMERNAME | COUNTRY | SALES |
|------------------------------|---------|---------|
| West Coast Collectables ... | USA | 6075.3 |
| Cambridge Collectables Co. | USA | 6463.23 |
| Super Scale Inc. | USA | 6120.34 |
| Tokyo Collectables, Ltd | Japan | 7680.64 |
| Amica Models & Co. | Italy | 8014.82 |
| Scandinavian Gift Ideas | Sweden | 7136.19 |
| Auto Assoc. & Cie. | France | 10172.7 |
| Mini Gifts Distributors Ltd. | USA | 11623.7 |
| Online Diecast Creations ... | USA | 6000.4 |
| Mini Wheels Co. | USA | 3003 |
| Mini Gifts Distributors Ltd. | USA | 5691.84 |
| Collectables For Less Inc. | USA | 4514.92 |

sales 15 ×

22. Find top 5 customers by total sales

```
58 • SELECT CUSTOMERNAME, SUM(SALES) AS TotalSales FROM sales GROUP BY CUSTOMERNAME ORDER BY TotalSales DESC LIMIT 5;
59
```

Result Grid | Filter Rows: Export: Wrap Cell Content: Fetch rows: Result Grid Form Editor

| CUSTOMERNAME | TotalSales |
|------------------------------|-------------------|
| Euro Shopping Channel | 91294.1100000002 |
| Mini Gifts Distributors Ltd. | 654858.06 |
| Australian Collectors, Co. | 200995.4099999997 |
| Muscle Machine Inc | 197736.9399999997 |
| La Rochelle Gifts | 180124.9 |

23. Find the number of orders shipped vs not shipped

```
59 • SELECT STATUS_, COUNT(*) FROM sales GROUP BY STATUS_;
```

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

| STATUS_ | COUNT(*) |
|------------|----------|
| Shipped | 2617 |
| Disputed | 14 |
| In Process | 41 |
| Cancelled | 60 |
| On Hold | 44 |
| Resolved | 47 |

24. Find orders where sales are greater than the overall average but less than the maximum

```
60 •  SELECT ORDERNUMBER, CUSTOMERNAME, SALES FROM sales WHERE SALES > (SELECT AVG(SALES) FROM sales)
61          AND SALES < (SELECT MAX(SALES) FROM sales);
```

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

| ORDERNUMBER | CUSTOMERNAME | SALES |
|-------------|----------------------------|---------|
| 10134 | Lyon Souveniers | 3884.34 |
| 10145 | Toys4GrownUps.com | 3746.7 |
| 10159 | Corporate Gift Ideas Co. | 5205.27 |
| 10188 | Herkku Gifts | 5512.32 |
| 10211 | Auto Canal Petit | 4708.44 |
| 10223 | Australian Collectors, Co. | 3965.66 |
| 10263 | Gift Depot Inc. | 3676.76 |
| 10275 | La Rochelle Gifts | 4177.35 |
| 10285 | Marta's Replicas Co. | 4099.68 |
| 10309 | Baane Mini Imports | 4394.38 |
| 10318 | Diecast Classics Inc. | 4358.04 |
| 10329 | Land of Toys Inc. | 4396.14 |

Form Editor Field Types

25. Find customers who bought the same product in different years

```
64 •  SELECT DISTINCT s1.CUSTOMERNAME, s1.PRODUCTCODE, s1.YEAR_ID
65      FROM sales s1
66      JOIN sales s2
67      ON s1.CUSTOMERNAME = s2.CUSTOMERNAME
68      AND s1.PRODUCTCODE = s2.PRODUCTCODE
69      AND s1.YEAR_ID != s2.YEAR_ID;
```

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

| CUSTOMERNAME | PRODUCTCODE | YEAR_ID |
|----------------------------|-------------|---------|
| Land of Toys Inc. | S10_1678 | 2004 |
| La Rochelle Gifts | S10_1678 | 2005 |
| Land of Toys Inc. | S10_1678 | 2003 |
| La Rochelle Gifts | S10_1678 | 2004 |
| Land of Toys Inc. | S10_2016 | 2004 |
| Australian Collectors, Co. | S10_2016 | 2004 |
| Australian Collectors, Co. | S10_2016 | 2003 |
| Land of Toys Inc. | S10_2016 | 2003 |
| Land of Toys Inc. | S10_4698 | 2004 |
| Australian Collectors, Co. | S10_4698 | 2004 |
| Technics Stores Inc. | S10_4698 | 2005 |
| Australian Collectors, Co. | S10_4698 | 2003 |

Form Editor Field Types

Result 30 x Read Only

Submitted by
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