

TITLE

SQL SALES MANAGEMENT SYSTEM

*

02-06-2025

MONDAY

ABOUT THE PROJECT

"Analyzed customer and product
data using SQL queries."



SKILLS USED

"SQL, Joins, Group By, Aggregation, Subqueries"

Tool

MySQL





```
1 •  create database sales;
2
3 •  use sales;
4
5 •  CREATE TABLE Customers (
6      customer_id INT PRIMARY KEY,
7      name VARCHAR(100),
8      email VARCHAR(100),
9      country VARCHAR(50)
10 );
11
12 •  select * from customers;
13
14 •  CREATE TABLE Products (
15      product_id INT PRIMARY KEY,
16      product_name VARCHAR(100),
17      category VARCHAR(50),
18      price DECIMAL(10, 2)
19 );
20
21 •  CREATE TABLE Sales (
22      sale_id INT PRIMARY KEY,
23      customer_id INT,
24      product_id INT,
25      sale_date DATE,
26      quantity INT,
27      FOREIGN KEY (customer_id) REFERENCES Customers(customer_id),
28      FOREIGN KEY (product_id) REFERENCES Products(product_id)
29 );
30
```



schema customers x products sales queries.sql1 queries.sql2 queries.sql3* queries.sql 4 queries.sql 5



1 • SELECT * FROM sales.customers;

Result Grid | Filter Rows: Edit: Export/Import: Wrap Cell Content:

| | customer_id | name | email | country |
|---|-------------|-------------|---------------------|---------|
| ▶ | 1 | Alice Smith | alice@example.com | USA |
| | 2 | Bob Johnson | bob@example.com | Canada |
| | 3 | Charlie Lee | charlie@example.com | UK |
| | | NONE | NONE | NONE |

MySQL Workbench

Local instance MySQL80 ×

File Edit View Query Database Server Tools Scripting Help

schema customers products sales queries.sql1 queries.sql2 queries.sql3* queries.sql 4 queries.sql 5

Don't Limit

1 • SELECT * FROM sales.products;

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

| | product_id | product_name | category | price |
|---|------------|--------------|-------------|-------|
| ▶ | 1 | Laptop | Electronics | 800 |
| | 2 | Smartphone | Electronics | 500 |
| | 3 | Tablet | Electronics | 300 |

Local instance MySQL80 ×

File Edit View Query Database Server Tools Scripting Help



schema customers products sales × queries.sql1 queries.sql2 queries.sql3* queries.sql 4 queries.sql 5

1 • **SELECT * FROM sales.sales;**Result Grid | Filter Rows: Export: Wrap Cell Content:

| | sale_id | customer_id | product_id | sale_date | quantity |
|---|---------|-------------|------------|------------|----------|
| ▶ | 1 | 1 | 1 | 2024-01-05 | 2 |
| | 2 | 2 | 2 | 2024-02-10 | 1 |
| | 3 | 3 | 3 | 2024-03-15 | 3 |
| | 4 | 1 | 2 | 2024-04-20 | 1 |



schema customers products sales queries.sql1 × queries.sql2 queries.sql3* queries.sql 4 queries.sql 5



```
1 -- Total Revenue by Product
2
3 • SELECT
4     p.product_name, SUM(s.quantity * p.price) AS total_revenue
5 FROM
6     Sales s
7     JOIN
8         Products p ON s.product_id = p.product_id
9 GROUP BY p.product_name;
10
```

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

| | product_name | total_revenue |
|---|--------------|---------------|
| ▶ | Laptop | 1600 |
| | Smartphone | 1000 |
| | Tablet | 900 |

MySQL Workbench

Local instance MySQL80 ×

File Edit View Query Database Server Tools Scripting Help

schema customers products sales queries.sql1 queries.sql2 × queries.sql3* queries.sql 4 queries.sql 5

Dont Limit

```
1 -- Top Customers by Spend
2
3 • SELECT
4     c.name, SUM(s.quantity * p.price) AS total_spent
5 FROM
6     Sales s
7         JOIN
8     Customers c ON s.customer_id = c.customer_id
9         JOIN
10    Products p ON s.product_id = p.product_id
11 GROUP BY c.name
12 ORDER BY total_spent DESC;
13
```

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

| | name | total_spent |
|---|-------------|-------------|
| ▶ | Alice Smith | 2100 |
| | Charlie Lee | 900 |
| | Bob Johnson | 500 |



schema customers products sales queries.sql1 queries.sql2 queries.sql3* queries.sql 4 queries.sql 5



```
1 -- Monthly Revenue Trend
2
3 SELECT
4     DATE_FORMAT(s.sale_date, '%Y-%m') AS month,
5     SUM(s.quantity * p.price) AS revenue
6 FROM
7     Sales s
8         JOIN
9     Products p ON s.product_id = p.product_id
10 GROUP BY month
11 ORDER BY month;|
```

12

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

| | month | revenue |
|---|---------|---------|
| ▶ | 2024-01 | 1600 |
| | 2024-02 | 500 |
| | 2024-03 | 900 |
| | 2024-04 | 500 |

MySQL Workbench

Local instance MySQL80 ×

File Edit View Query Database Server Tools Scripting Help

schema customers products sales queries.sql1 queries.sql2 queries.sql3* queries.sql 4 × queries.sql 5

| Don't Limit |

```
1 -- Revenue by Country
2
3 SELECT
4     c.country, SUM(s.quantity * p.price) AS total_revenue
5 FROM
6     Sales s
7         JOIN
8     Customers c ON s.customer_id = c.customer_id
9         JOIN
10    Products p ON s.product_id = p.product_id
11 GROUP BY c.country;
```

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

| | country | total_revenue |
|---|---------|---------------|
| ▶ | USA | 2100 |
| | Canada | 500 |
| | UK | 900 |

MySQL Workbench

Local instance MySQL80 ×

File Edit View Query Database Server Tools Scripting Help

SQL DDL DML Tables Views Functions Triggers Reports

schema customers products sales queries.sql1 queries.sql2 queries.sql3* queries.sql 4 queries.sql 5 ×

Folder Table Refresh Filter Save All | Don't Limit | Star Find | Print

```
1 -- Most Sold Products
2
3 • SELECT
4     p.product_name, SUM(s.quantity) AS total_units_sold
5 FROM
6     Sales s
7     JOIN
8         Products p ON s.product_id = p.product_id
9 GROUP BY p.product_name
10 ORDER BY total_units_sold DESC;
11
```

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

| | product_name | total_units_sold |
|---|--------------|------------------|
| ▶ | Tablet | 3 |
| | Laptop | 2 |
| | Smartphone | 2 |