

SQL Query Portfolio

A public-safe SQL demonstration based on academic database-development coursework. The package uses a synthetic relational dataset and five reproducible queries.

PORTFOLIO SNAPSHOT

- Five related tables in a customer-orders model
- Five tested queries using synthetic records
- Joins, filtering, calculations, GROUP BY, HAVING, and a CTE
- Downloadable SQL files and selected results

DATA MODEL

A connected customer-orders schema

The public portfolio package uses five related tables. The simplified schema preserves the academic focus on record relationships while keeping the data fully synthetic.



WHY THE MODEL MATTERS

The structure separates customers, orders, products, and line items so that queries can connect records accurately, calculate totals, and summarize results without repeating the same information in multiple places.

SELECTED QUERY

Join records and calculate line totals

```
SELECT c.contact_name,  
       co.order_id,  
       co.order_date,  
       p.product_name,  
       od.quantity,  
       od.quantity * od.unit_price AS line_total  
FROM customer AS c  
JOIN customer_order AS co ON c.customer_id = co.customer_id  
JOIN order_detail AS od ON co.order_id = od.order_id  
JOIN product AS p ON od.product_id = p.product_id  
ORDER BY co.order_date DESC, co.order_id;
```

What this query demonstrates

- Uses primary and foreign keys to connect customers, orders, order details, and products.
- Calculates a line total from quantity and unit price.
- Orders the result set by the most recent order date and stable order identifier.
- Uses table aliases to make multi-table logic easier to read and maintain.

RESULTS AND PACKAGE

Reproducible public demonstration

The public package contains a synthetic schema, sample data, five queries, and selected result previews.

03 - Customer purchase totals

Company	Contact	Total purchases
Northstar Office	Alex Morgan	\$167.50
Coastal Market	Morgan Reyes	\$118.50
Pinecrest Supply	Riley Patel	\$96.75

Included query coverage

- Filtered customer view
- Multi-table order detail join
- Customer purchase totals with GROUP BY and HAVING
- Most-sold product common table expression
- Recent orders by employee

REVIEW PACKAGE

The downloadable project package includes the schema, synthetic sample data, five SQL queries, selected result previews, and a concise README with setup instructions.