Coding Challenge MySQL

**1) Total Sales Revenue by Product**

SELECT

p.id AS product\_id,

p.name AS product\_name,

SUM(oi.quantity \* oi.price) AS total\_revenue

FROM products p

JOIN order\_items oi ON p.id = oi.product\_id

JOIN orders o ON o.id = oi.order\_id

WHERE o.status = 'completed'

GROUP BY p.id, p.name

ORDER BY total\_revenue DESC;

---------------------------------------------------------------------------------------------------------

**2) Top Customers by Spending**

SELECT c.id AS customer\_id, c.name AS customer\_name, SUM(oi.quantity \* oi.price) AS total\_spending FROM customers c JOIN orders o ON c.id = o.customer\_id JOIN order\_items oi ON o.id = oi.order\_id WHERE o.status = 'completed' GROUP BY c.id, c.name ORDER BY total\_spending DESC LIMIT 5;

---------------------------------------------------------------------------------------------------------

**4) Recent Orders**

SELECT o.id AS order\_id, c.name AS customer\_name, o.order\_date, o.status FROM orders o

JOIN customers c ON o.customer\_id = c.id

WHERE o.status = 'completed' AND o.order\_date >= NOW() - INTERVAL 30 DAY ORDER BY o.order\_date DESC;

---------------------------------------------------------------------------------------------------------

**7) Customers Without Orders**

SELECT c.id, c.name FROM customers c LEFT JOIN orders o ON c.id = o.customer\_id WHERE o.id IS NULL;

--------------------------------------------------------------------------------------------------------------

**11) Query Optimization Challenge**

SELECT c.id AS customer\_id, c.name AS customer\_name, SUM(oi.quantity \* oi.price) AS total\_spent FROM customers c JOIN orders o ON c.id = o.customer\_id JOIN order\_items oi ON o.id = oi.order\_id WHERE o.status = 'completed' GROUP BY c.id, c.name