

SQL Analyst Practice Problems - Portfolio Edition

1. Customers from East or West (age 30-39)

```
SELECT customer_name
FROM customers
WHERE region IN ('West', 'East')
AND age_group = '30-39';
```

2. North Region Orders with Quantity > 2

```
SELECT c.customer_name
FROM orders o
INNER JOIN customers c ON o.customer_id = c.customer_id
WHERE c.region = 'North' AND o.quantity > 2;
```

3. Total Revenue by Product Category

```
SELECT p.category, SUM(o.quantity * o.unit_price) AS total_revenue
FROM orders o
INNER JOIN products p ON o.product_id = p.product_id
GROUP BY p.category;
```

4. Regions with More Than 2 Orders

```
SELECT c.region, COUNT(*) AS num_orders
FROM orders o
INNER JOIN customers c ON o.customer_id = c.customer_id
GROUP BY c.region
HAVING COUNT(*) > 2;
```

5. Product Categories with More Than 2 Orders

```
SELECT p.category, COUNT(*) AS num_orders
FROM orders o
```

```
INNER JOIN products p ON o.product_id = p.product_id
GROUP BY p.category
HAVING COUNT(*) > 2;
```

6. Total Revenue by Region (Filtered)

```
SELECT c.region, SUM(o.quantity * o.unit_price) AS total_revenue
FROM orders o
INNER JOIN customers c ON o.customer_id = c.customer_id
GROUP BY c.region
HAVING SUM(o.quantity * o.unit_price) > 600;
```

7. Order Value Category by Region (CASE WHEN)

```
SELECT
  c.region,
  CASE
    WHEN o.quantity * o.unit_price < 300 THEN 'Low'
    WHEN o.quantity * o.unit_price BETWEEN 300 AND 700 THEN 'Mid'
    ELSE 'High'
  END AS value_category,
  COUNT(*) AS num_orders
FROM orders o
INNER JOIN customers c ON c.customer_id = o.customer_id
GROUP BY c.region, value_category;
```