

Project 1: E-Commerce Sales Insights

1. Total Revenue

```
SELECT SUM(revenue) AS total_revenue  
FROM sales;
```

2. Total Orders

```
SELECT COUNT(DISTINCT order_id) AS total_orders  
FROM sales;
```

3. Total Quantity Sold

```
SELECT SUM(quantity) AS total_quantity  
FROM sales;
```

4. Profit Calculation

```
SELECT  
    SUM(revenue - (cost * quantity)) AS total_profit  
FROM sales;
```

5. Average Order Value (AOV)

```
SELECT  
    SUM(revenue) * 1.0 / COUNT(DISTINCT order_id) AS aov  
FROM sales;
```

6. Revenue by Month

```
SELECT  
    DATE_TRUNC('month', order_date) AS month,  
    SUM(revenue) AS total_revenue  
FROM sales  
GROUP BY 1  
ORDER BY 1;
```

7. Revenue by Category

```
SELECT  
    p.category,  
    SUM(s.revenue) AS total_revenue  
FROM sales s  
JOIN products p ON s.product_id = p.product_id  
GROUP BY p.category  
ORDER BY total_revenue DESC;
```

8. Top 10 Products by Revenue

```
SELECT
    p.product_name,
    SUM(s.revenue) AS total_revenue
FROM sales s
JOIN products p ON s.product_id = p.product_id
GROUP BY p.product_name
ORDER BY total_revenue DESC
LIMIT 10;
```

9. Region-Wise Revenue

```
SELECT
    region,
    SUM(revenue) AS total_revenue
FROM sales
GROUP BY region
ORDER BY total_revenue DESC;
```

10. Daily Revenue Trend

```
SELECT
    order_date,
    SUM(revenue) AS daily_revenue
FROM sales
GROUP BY order_date
ORDER BY order_date;
```