

# TASK 6: Sales Trend Analysis Using Aggregations

## SQL Script

```
SELECT EXTRACT(YEAR FROM order_date) AS sales_year, EXTRACT(MONTH FROM order_date) AS sales_month, SUM(amount) AS total_revenue, COUNT(DISTINCT order_id) AS total_orders FROM online_sales.orders GROUP BY EXTRACT(YEAR FROM order_date), EXTRACT(MONTH FROM order_date) ORDER BY sales_year ASC, sales_month ASC;
```

## Sample Results Table

| sales_year | sales_month | total_revenue | total_orders |
|------------|-------------|---------------|--------------|
| 2023       | 1           | 152,300       | 1,245        |
| 2023       | 2           | 165,900       | 1,398        |
| 2023       | 3           | 171,450       | 1,512        |
| 2023       | 4           | 190,100       | 1,670        |
| 2023       | 5           | 178,250       | 1,590        |
| 2023       | 6           | 201,980       | 1,745        |

## Outcome Summary

This analysis helps identify monthly trends in sales by grouping data using EXTRACT functions and applying aggregations like SUM() for revenue and COUNT(DISTINCT order\_id) for order volume. It offers insights into seasonal patterns, demand forecasting, and supports decision-making in business environments.