

Online Sales Data Analysis Report

Extract Month from Each Transaction Date

```
-- Extract Month from Each Transaction Date
```




```
SELECT
```

```
    transaction_id,
```

```
    `date`,
```

```
    EXTRACT(MONTH FROM `date`) AS month_num
```

```
FROM online_sales_data;
```

Result Grid   Filter Rows: <input type="text"/>			
	transaction_id	date	month_num
▶	10001	2024-01-01	1
	10002	2024-01-02	1
	10003	2024-01-03	1
	10004	2024-01-04	1
	10005	2024-01-05	1
	10006	2024-01-06	1
	10007	2024-01-07	1
Result 1 			

Group by Year and Month to Get Total Revenue

-- Group by Year and Month to Get Total Revenue

- ```
SELECT
 YEAR(`date`) AS year,
 MONTH(`date`) AS month,
 SUM(total_revenue) AS monthly_revenue
FROM online_sales_data
GROUP BY year, month
ORDER BY year, month;
```

| Result Grid |      |       |                 | Filter Rows: |
|-------------|------|-------|-----------------|--------------|
|             | year | month | monthly_revenue |              |
| ▶           | 2024 | 1     | 14548.32        |              |
|             | 2024 | 2     | 10803.37        |              |
|             | 2024 | 3     | 12849.24        |              |
|             | 2024 | 4     | 12451.69        |              |
|             | 2024 | 5     | 8455.49         |              |
|             | 2024 | 6     | 7384.55         |              |

# Calculate Total Revenue (SUM)

```
1 -- Calculate Total Revenue (SUM)
2
3 • SELECT SUM(total_revenue) AS total_sales
4 FROM online_sales_data;
5
```

| Result Grid |             |
|-------------|-------------|
|             | total_sales |
| ▶           | 80567.85    |



# Count Unique Orders per Month

```
1 -- Count Unique Orders per Month
2
3 • SELECT
4 YEAR(`date`) AS year,
5 MONTH(`date`) AS month,
6 COUNT(DISTINCT transaction_id) AS order_volume
7 FROM online_sales_data
8 GROUP BY year, month
9 ORDER BY year, month;
```

| Result Grid |      |       |              |
|-------------|------|-------|--------------|
|             | year | month | order_volume |
| ▶           | 2024 | 1     | 31           |
|             | 2024 | 2     | 29           |
|             | 2024 | 3     | 31           |
|             | 2024 | 4     | 30           |
|             | 2024 | 5     | 31           |
|             | 2024 | 6     | 30           |
|             | 2024 | 7     | 31           |
|             | 2024 | 8     | 27           |

# Sort Months by Highest Revenue

```
1 -- Sort Months by Highest Revenue
2
3 • SELECT
4 YEAR(`date`) AS year,
5 MONTH(`date`) AS month,
6 SUM(total_revenue) AS monthly_revenue
7 FROM online_sales_data
8 GROUP BY year, month
9 ORDER BY monthly_revenue DESC;
```

| Result Grid     Filter Rows: <input type="text"/> |      |       |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|-----------------|
|                                                                                                                                                                                                                         | year | month | monthly_revenue |
| ▶                                                                                                                                                                                                                       | 2024 | 1     | 14548.32        |
|                                                                                                                                                                                                                         | 2024 | 3     | 12849.24        |
|                                                                                                                                                                                                                         | 2024 | 4     | 12451.69        |
|                                                                                                                                                                                                                         | 2024 | 2     | 10803.37        |
|                                                                                                                                                                                                                         | 2024 | 5     | 8455.49         |
|                                                                                                                                                                                                                         | 2024 | 6     | 7384.55         |
|                                                                                                                                                                                                                         | 2024 | 8     | 7278.11         |

# Top 3 Best-Selling Products by Year

```
1 -- Top 3 Best-Selling Products by Revenue if Year
2
3 • SELECT
4 product_name,
5 SUM(total_revenue) AS total_revenue
6 FROM online_sales_data
7 GROUP BY product_name
8 ORDER BY total_revenue DESC
9 LIMIT 3;
10
```

| Result Grid |                     |               | Filter Rows: |
|-------------|---------------------|---------------|--------------|
|             | product_name        | total_revenue |              |
| ▶           | Canon EOS R5 Camera | 3899.99       |              |
|             | LG OLED TV          | 2599.98       |              |
|             | MacBook Pro 16-inch | 2499.99       |              |

# Per Region – Highest Revenue Product

```
3 • SELECT region, product_name, total_revenue
4 FROM (
5 SELECT
6 region,
7 product_name,
8 SUM(total_revenue) AS total_revenue,
9 ROW_NUMBER() OVER (PARTITION BY region ORDER BY SUM(total_revenue) DESC) AS rank_num
10 FROM online_sales_data
11 GROUP BY region, product_name
12) AS ranked
13 WHERE rank_num = 1;
```

|   | region        | product_name        | total_revenue |
|---|---------------|---------------------|---------------|
| ▶ | Asia          | Peloton Bike        | 1895.00       |
|   | Europe        | LG OLED TV          | 2599.98       |
|   | North America | Canon EOS R5 Camera | 3899.99       |



# Most Popular Payment Method

```
1 -- Most Popular Payment Method
2
3 • SELECT
4 payment_method,
5 COUNT(*) AS total_orders
6 FROM online_sales_data
7 GROUP BY payment_method
8 ORDER BY total_orders DESC;
9
```

| Result Grid |                |              | Filter Rows: |
|-------------|----------------|--------------|--------------|
|             | payment_method | total_orders |              |
| ▶           | Credit Card    | 120          |              |
|             | PayPal         | 80           |              |
|             | Debit Card     | 40           |              |