

-- TASK 6: Sales Trend Analysis Using Aggregations

-- a. Use EXTRACT(MONTH FROM order_date) for month.

-- b. GROUP BY year/month.

-- c. Use SUM() for revenue.

-- d. COUNT(DISTINCT order_id) for volume.

-- e. Use ORDER BY for sorting.

-- f. Limit results for specific time periods.

-- 1. Monthly Revenue and Order Volume (Grouped by Year & Month)

SELECT

EXTRACT(YEAR FROM order_date) AS order_year,

EXTRACT(MONTH FROM order_date) AS order_month,

SUM(amount) AS total_revenue,

COUNT(DISTINCT order_id) AS order_volume

FROM orders

GROUP BY order_year, order_month

ORDER BY order_year, order_month;

	order_year	order_month	total_revenue	order_volume
▶	2022	1	8197.51	16
	2022	2	7414.47	14
	2022	3	6797.98	16
	2022	4	4411.23	12
	2022	5	10805.32	18
	2022	6	4540.99	13
	2022	7	4547.90	8
	2022	8	8549.28	15
	2022	9	6781.09	11
	2022	10	4942.37	11
	2022	11	6329.64	13
	2022	12	10099.41	22
	2023	1	10200.52	16
	2023	2	10736.36	18
	2023	3	6149.49	11
	2023	4	6370.75	12
	2023	5	12964.10	19
	2023	6	6396.42	15
	2023	7	8015.73	16
	2023	8	8115.63	18
	2023	9	9639.74	19
	2023	10	5620.72	15

Result 5 ×

-- 2. Monthly Revenue and Volume for a Specific Year (e.g., 2023)

SELECT

EXTRACT(YEAR FROM order_date) AS order_year,

EXTRACT(MONTH FROM order_date) AS order_month,

SUM(amount) AS total_revenue,

COUNT(DISTINCT order_id) AS order_volume

FROM orders

WHERE EXTRACT(YEAR FROM order_date) = 2023

GROUP BY order_year, order_month

ORDER BY order_month;

	order_year	order_month	total_revenue	order_volume
►	2023	1	10200.52	16
	2023	2	10736.36	18
	2023	3	6149.49	11
	2023	4	6370.75	12
	2023	5	12964.10	19
	2023	6	6396.42	15
	2023	7	8015.73	16
	2023	8	8115.63	18
	2023	9	9639.74	19
	2023	10	5620.72	15
	2023	11	9090.65	18
	2023	12	11527.56	22

-- 3. Top 5 Revenue-Generating Months (All-Time)

SELECT

EXTRACT(YEAR FROM order_date) AS order_year,

EXTRACT(MONTH FROM order_date) AS order_month,

SUM(amount) AS total_revenue,

COUNT(DISTINCT order_id) AS order_volume

FROM orders

GROUP BY order_year, order_month

ORDER BY total_revenue DESC

LIMIT 5;

	order_year	order_month	total_revenue	order_volume
►	2023	5	12964.10	19
	2023	12	11527.56	22
	2022	5	10805.32	18
	2023	2	10736.36	18
	2023	1	10200.52	16

-- 4. Monthly Revenue and Volume Between Two Dates

SELECT

EXTRACT(YEAR FROM order_date) AS order_year,

EXTRACT(MONTH FROM order_date) AS order_month,

```

SUM(amount) AS total_revenue,
COUNT(DISTINCT order_id) AS order_volume
FROM orders
WHERE order_date BETWEEN '2023-01-01' AND '2023-12-31'
GROUP BY order_year, order_month
ORDER BY order_year, order_month;

```

	order_year	order_month	total_revenue	order_volume
▶	2023	1	10200.52	16
	2023	2	10736.36	18
	2023	3	6149.49	11
	2023	4	6370.75	12
	2023	5	12964.10	19
	2023	6	6396.42	15
	2023	7	8015.73	16
	2023	8	8115.63	18
	2023	9	9639.74	19
	2023	10	5620.72	15
	2023	11	9090.65	18
	2023	12	11527.56	22