

```
CREATE TABLE online_sales (
    order_id INT,
    order_date DATE,
    amount DECIMAL(10, 2),
    product_id INT
);

INSERT INTO online_sales (order_id, order_date, amount, product_id) VALUES
(1, '2023-01-15', 100.00, 101),
(2, '2023-01-20', 250.00, 102),
(3, '2023-02-10', 150.00, 103),
(4, '2023-02-18', 300.00, 104),
(5, '2023-03-05', 200.00, 105),
(6, '2023-03-25', 350.00, 106),
(7, '2023-04-10', 180.00, 107),
(8, '2023-04-20', 220.00, 108),
(9, '2023-05-11', 400.00, 109),
(10, '2023-05-15', 120.00, 110),
(11, '2023-06-01', 330.00, 111),
(12, '2023-06-18', 140.00, 112),
(13, '2023-07-05', 310.00, 113),
(14, '2023-07-25', 260.00, 114),
(15, '2023-08-10', 180.00, 115),
(16, '2023-08-30', 390.00, 116),
(17, '2023-09-12', 210.00, 117),
(18, '2023-09-28', 190.00, 118),
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(19, '2023-10-02', 410.00, 119),

(20, '2023-10-18', 370.00, 120),

(21, '2023-11-03', 430.00, 121),

(22, '2023-11-17', 280.00, 122),

(23, '2023-12-05', 390.00, 123),

(24, '2023-12-25', 460.00, 124),

(25, '2024-01-05', 210.00, 125),

(26, '2024-01-20', 190.00, 126),

(27, '2024-02-14', 310.00, 127),

(28, '2024-02-28', 290.00, 128),

(29, '2024-03-11', 370.00, 129),

(30, '2024-03-27', 360.00, 130);

SELECT

YEAR(order\_date) AS year,

MONTH(order\_date) AS month,

SUM(amount) AS monthly\_revenue,

COUNT(DISTINCT order\_id) AS order\_volume

FROM

online\_sales

GROUP BY

YEAR(order\_date), MONTH(order\_date)

ORDER BY

year, month;

year	month	monthly_revenue	order_volume
2023	1	350.00	2
2023	2	450.00	2
2023	3	550.00	2
2023	4	400.00	2
2023	5	520.00	2
2023	6	470.00	2
2023	7	570.00	2
2023	8	570.00	2
2023	9	400.00	2
2023	10	780.00	2
2023	11	710.00	2
2023	12	850.00	2
2024	1	400.00	2
2024	2	600.00	2
2024	3	730.00	2

15 rows in set (0.05 sec)

```

SELECT
    DATE_FORMAT(order_date, '%Y-%m') AS month,
    SUM(amount) AS monthly_revenue
FROM
    online_sales
GROUP BY
    month
ORDER BY
    monthly_revenue DESC
LIMIT 3;

```

month	monthly_revenue
2023-12	850.00
2023-10	780.00
2024-03	730.00

3 rows in set (0.01 sec)

Hints/Mini Guide: Use EXTRACT(MONTH FROM order\_date) for month. b. c. d. e. f. GROUP BY year/month. Use SUM() for revenue. COUNT(DISTINCT order\_id) for volume. Use ORDER BY for sorting. Limit results for specific time periods

```
mysql> SELECT
->     EXTRACT(MONTH FROM o
->     FROM
->     online_sales;
+-----+
| month |
+-----+
|     1  |
|     1  |
|     2  |
|     2  |
|     3  |
|     3  |
|     4  |
|     4  |
|     5  |
|     5  |
|     6  |
|     6  |
|     7  |
|     7  |
|     8  |
|     8  |
|     9  |
+-----+
```

```
SELECT EXTRACT(MONTH FROM order_date) AS month FROM online_sales;
```

```
mysql> SELECT
->     YEAR(order_date) AS year,
->     MONTH(order_date) AS month,
->     SUM(amount) AS revenue
->   FROM
->     online_sales
->  GROUP BY
->    YEAR(order_date), MONTH(order_date)
+-----+-----+-----+
| year | month | revenue |
+-----+-----+-----+
| 2023 | 1     | 350.00 |
| 2023 | 2     | 450.00 |
| 2023 | 3     | 550.00 |
| 2023 | 4     | 400.00 |
| 2023 | 5     | 520.00 |
| 2023 | 6     | 470.00 |
| 2023 | 7     | 570.00 |
| 2023 | 8     | 570.00 |
| 2023 | 9     | 400.00 |
| 2023 | 10    | 780.00 |
| 2023 | 11    | 710.00 |
| 2023 | 12    | 850.00 |
| 2024 | 1     | 400.00 |
| 2024 | 2     | 600.00 |
| 2024 | 3     | 730.00 |
+-----+-----+-----+
15 rows in set (0.00 sec)
```

SELECT

```
YEAR(order_date) AS year,  
MONTH(order_date) AS month,  
SUM(amount) AS monthly_revenue,  
COUNT(DISTINCT order_id) AS order_volume  
  
FROM  
online_sales  
  
WHERE  
order_date BETWEEN '2023-01-01' AND '2023-12-31'  
  
GROUP BY  
YEAR(order_date), MONTH(order_date)  
  
ORDER BY  
year, month;
```