

Sales Trends Analysis using Aggregations

Monthly Revenue and Order volume in 2015

Query:

```
SELECT
    strftime('%Y', order_date) AS order_year,
    strftime('%m', order_date) AS order_month,
    SUM(sales) AS monthly_revenue,
    COUNT(DISTINCT order_id) AS monthly_order_volume
FROM
    cleaned_sales_data
WHERE
    order_date BETWEEN "2015-01-01" AND "2015-12-31"
GROUP BY
    order_year, order_month
ORDER BY
    order_year, order_month;
```

Output:

order_year	order_month	monthly_revenue	monthly_order_volume
2015	01	478090.54518891	30
2015	02	304805.73945568	28
2015	03	1056872.27874405	69
2015	04	721358.81175138	63
2015	05	740829.4217818	68
2015	06	907063.41408025	64
2015	07	826692.43708196	64
2015	08	1040595.54536159	70
2015	09	1746698.47769357	129
2015	10	987257.20435192	78
2015	11	2008573.1812021	145
2015	12	1971064.63679971	139

Monthly Revenue and Order volume in 2016

Query:

```
SELECT
    strftime('%Y', order_date) AS order_year,
    strftime('%m', order_date) AS order_month,
    SUM(sales) AS monthly_revenue,
    COUNT(DISTINCT order_id) AS monthly_order_volume
FROM
    cleaned_sales_data
WHERE
    order_date BETWEEN "2016-01-01" AND "2016-12-31"
GROUP BY
    order_year, order_month
ORDER BY
    order_year, order_month;
```

Output:

order_year	order_month	monthly_revenue	monthly_order_volume
2016	01	294238.0927707	29
2016	02	339018.47274447	36
2016	03	817035.6550115	75
2016	04	991702.84975512	71
2016	05	965875.327698	72
2016	06	709867.63411625	66
2016	07	921126.61015126	64
2016	08	1037118.22500635	67
2016	09	1944859.58114819	137
2016	10	1084050.91152956	86
2016	11	2114094.83612841	155
2016	12	1968588.86097266	159

Monthly Revenue and Order volume in 2017

Query:

```
SELECT
    strftime('%Y', order_date) AS order_year,
    strftime('%m', order_date) AS order_month,
    SUM(sales) AS monthly_revenue,
    COUNT(DISTINCT order_id) AS monthly_order_volume
FROM
    cleaned_sales_data
WHERE
    order_date BETWEEN "2017-01-01" AND "2017-12-31"
GROUP BY
    order_year, order_month
ORDER BY
    order_year, order_month;
```

Output:

order_year	order_month	monthly_revenue	monthly_order_volume
2017	01	587847.37062031	47
2017	02	550374.1247908	45
2017	03	989459.7075568	85
2017	04	940131.86291974	87
2017	05	1475205.50000623	107
2017	06	1263714.4549596	95
2017	07	1218810.23461695	95
2017	08	1114048.20976229	89
2017	09	2446622.38169949	186
2017	10	1208886.4738113	103
2017	11	2555007.51290646	182
2017	12	2169720.31556257	172

Monthly Revenue and Order volume in 2018

Query:

```
SELECT
    strftime('%Y', order_date) AS order_year,
    strftime('%m', order_date) AS order_month,
    SUM(sales) AS monthly_revenue,
    COUNT(DISTINCT order_id) AS monthly_order_volume
FROM
    cleaned_sales_data
WHERE
    order_date BETWEEN "2018-01-01" AND "2018-12-31"
GROUP BY
    order_year, order_month
ORDER BY
    order_year, order_month;
```

Output:

order_year	order_month	monthly_revenue	monthly_order_volume
2018	01	1012209.6689938	66
2018	02	769148.75866458	52
2018	03	1292693.26012638	117
2018	04	1357549.89385048	115
2018	05	1613077.51446025	116
2018	06	1493764.2959579	129
2018	07	1442344.11387828	108
2018	08	1419794.17639829	109
2018	09	2788147.56456489	222
2018	10	2037556.18088514	144
2018	11	3101009.61837377	259
2018	12	2860939.59839685	222

Top 5 months with most revenue

Query:

```
SELECT
    strftime('%Y', order_date) AS order_year,
    strftime('%m', order_date) AS order_month,
    SUM(sales) AS monthly_revenue,
    COUNT(DISTINCT order_id) AS monthly_order_volume
FROM
    cleaned_sales_data
GROUP BY
    order_year, order_month
ORDER BY
    monthly_revenue DESC
LIMIT 5;
```

Output:

order_year	order_month	monthly_revenue	monthly_order_volume
2018	11	3101009.61837377	259
2018	12	2860939.59839685	222
2018	09	2788147.56456489	222
2017	11	2555007.51290646	182
2017	09	2446622.38169949	186

Year-wise revenue (2015 - 2018)

Query:

```
SELECT
    strftime('%Y', order_date) AS order_year,
    SUM(sales) AS yearly_revenue,
    COUNT(DISTINCT order_id) AS yearly_order_volume
FROM
    cleaned_sales_data
GROUP BY
    order_year
ORDER BY
    yearly_revenue DESC;
```

Output:

order_year	yearly_revenue	yearly_order_volume
2018	21188234.6445506	1659
2017	16519828.1492125	1293
2016	13187577.0570325	1017
2015	12789901.6934929	947