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	478,090.55	30
2015	02	304,805.74	28
2015	03	1,056,872.28	69
2015	04	721,358.81	63
2015	05	740,829.42	68
2015	06	907,063.41	64
2015	07	826,692.44	64
2015	08	1,040,595.55	70
2015	09	1,746,698.48	129
2015	10	987,257.20	78
2015	11	2,008,573.18	145
2015	12	1,971,064.64	139

Monthly Revenue and Order Volume for 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	294,238.10	29
2016	02	339,018.50	36
2016	03	817,035.70	75
2016	04	991,702.80	71
2016	05	965,875.30	72
2016	06	709,867.60	66
2016	07	921,126.60	64
2016	08	1,037,118.00	67
2016	09	1,944,860.00	137
2016	10	1,084,051.00	86
2016	11	2,114,095.00	155
2016	12	1,968,589.00	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	587,847.37	47
2017	02	550,374.12	45
2017	03	989,459.71	85
2017	04	940,131.86	87
2017	05	1,475,205.50	107
2017	06	1,263,714.45	95
2017	07	1,218,810.23	95
2017	08	1,114,048.21	89
2017	09	2,446,622.38	186
2017	10	1,208,886.47	103
2017	11	2,555,007.51	182
2017	12	2,169,720.32	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	1,012,209.67	66
2018	02	769,148.76	52
2018	03	1,292,693.26	117
2018	04	1,357,549.89	115
2018	05	1,613,077.51	116
2018	06	1,493,764.30	129
2018	07	1,442,344.11	108
2018	08	1,419,794.18	109
2018	09	2,788,147.56	222
2018	10	2,037,556.18	144
2018	11	3,101,009.62	259
2018	12	2,860,939.60	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	3,101,009.62	259
2018	12	2,860,939.60	222
2018	09	2,788,147.56	222
2017	11	2,555,007.51	182
2017	09	2,446,622.38	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	21,188,234.64	1,659
2017	16,519,828.15	1,293
2016	13,187,577.06	1,017
2015	12,789,901.69	947