Coffee Shop Analysis

➤ KPI

1. Total Sales Analysis:

- **Total sales**

```
29
30    --Total Sales
31 ▾  SELECT ROUND(SUM(unit_price * transaction_qty)) AS Total_sale
32    FROM coffee
33
```

Data Output   Messages   Notifications

	total_sale numeric
1	698812

- **Total sales by Month**

Query   Query History

```
35    --Total Sales for each respective month
36    SELECT
37        EXTRACT(MONTH FROM transaction_date)AS MONTH,
38        ROUND(SUM(unit_price * transaction_qty)) AS total_sales
39        FROM coffee
40        GROUP BY MONTH;
41
42
```

Data Output   Messages   Notifications

	month numeric	total_sales numeric
1	1	81678
2	2	76145
3	3	98835
4	4	118941
5	5	156728
6	6	166486

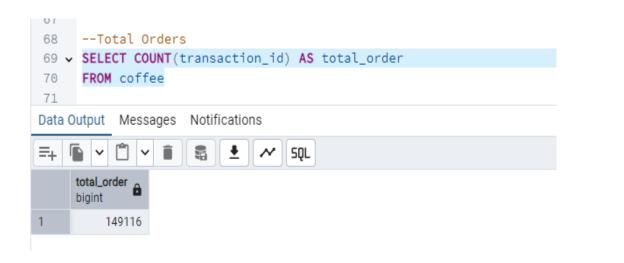- **Total sales KPI- MOM difference and MOM growth**
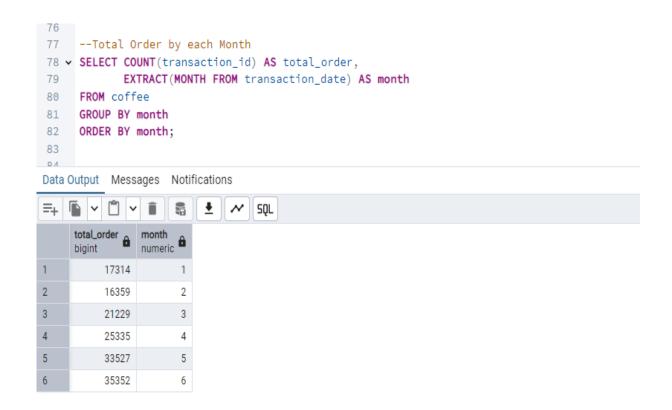
```sql
WITH monthly_sales AS (
    SELECT
        EXTRACT(MONTH FROM transaction_date) AS month,
        ROUND(SUM(unit_price * transaction_qty)) AS total_sales
    FROM coffee
    WHERE EXTRACT(MONTH FROM transaction_date) IN (4, 5)
    GROUP BY EXTRACT(MONTH FROM transaction_date)
)
SELECT
    month,
    total_sales,
    ROUND(
        (total_sales - LAG(total_sales) OVER (ORDER BY month)) * 100.0 /
        LAG(total_sales) OVER (ORDER BY month),
        2
    ) AS mon_increase_percentage
FROM monthly_sales
ORDER BY month;
```

month numeric	total_sales numeric	mon_increase_percentage numeric
4	118941	[null]
5	156728	31.77

2. Total Order Analysis:

- **Total sales**

```sql
--Total Orders
SELECT COUNT(transaction_id) AS total_order
FROM coffee
```

total_order bigint
149116

• Total Order by Month

```
76
77   --Total Order by each Month
78 ⌄ SELECT COUNT(transaction_id) AS total_order,
79          EXTRACT(MONTH FROM transaction_date) AS month
80   FROM coffee
81   GROUP BY month
82   ORDER BY month;
83
84
```

Data Output   Messages   Notifications

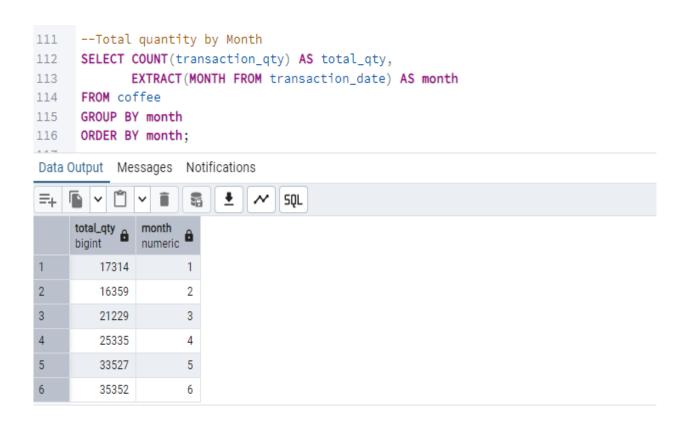| total_order bigint	month numeric
17314	1
16359	2
21229	3
25335	4
33527	5
35352	6

• Total Order KPI- MOM difference and MOM growth

```
85 ⌄ WITH monthly_order AS (
86       SELECT
87           COUNT(transaction_id) AS total_order,
88           EXTRACT(MONTH FROM transaction_date) AS month
89       FROM coffee
90       WHERE EXTRACT(MONTH FROM transaction_date) IN (4, 5)
91       GROUP BY EXTRACT(MONTH FROM transaction_date)
92   )
93   SELECT
94       month,
95       total_order,
96       ROUND(
97           (total_order - LAG(total_order) OVER (ORDER BY month)) * 100.0 /
98           LAG(total_order) OVER (ORDER BY month),
99           2
100      ) AS mon_increase_percentage
101  FROM monthly_order
102  ORDER BY month;
```

Data Output   Messages   Notifications

total_order bigint	month numeric
17314	1
16359	2

3. Total Quantity Analysis:

- **Total Quantity**

```
106
107    --Total Quantity
108 ∨  SELECT COUNT(transaction_qty) AS total_qty FROM coffee
109
```

Data Output   Messages   Notifications

	total_qty bigint 🔒
1	149116

- **Total Quantity by Month**

```
111    --Total quantity by Month
112    SELECT COUNT(transaction_qty) AS total_qty,
113           EXTRACT(MONTH FROM transaction_date) AS month
114    FROM coffee
115    GROUP BY month
116    ORDER BY month;
```

Data Output   Messages   Notifications

	total_qty bigint 🔒	month numeric 🔒
1	17314	1
2	16359	2
3	21229	3
4	25335	4
5	33527	5
6	35352	6

- **Total Quantity KPI- MOM difference and MOM growth**

```
122 v WITH monthly_qty AS (
123        SELECT
124            COUNT(transaction_qty) AS total_qty,
125            EXTRACT(MONTH FROM transaction_date) AS month
126        FROM coffee
127        WHERE EXTRACT(MONTH FROM transaction_date) IN (4, 5)
128        GROUP BY EXTRACT(MONTH FROM transaction_date)
129 )SELECT
130        month,
131        total_qty,
132        ROUND(
133            (total_qty - LAG(total_qty) OVER (ORDER BY month)) * 100.0 /
134            LAG(total_qty) OVER (ORDER BY month),
135            2
136        ) AS mon_increase_percentage
137 FROM monthly_qty
138 ORDER BY month;
```

Data Output Messages Notifications

month numeric	total_qty bigint	mon_increase_percentage numeric
4	25335	[null]
5	33527	32.33

o **Total Sales by store location:**

```
149    --Sales Analysis by store location
150 v SELECT
151        store_location,
152        SUM(unit_price * transaction_qty) AS total_sales
153 FROM coffee
154 WHERE EXTRACT(MONTH FROM transaction_date)=5
155 GROUP BY store_location
156 ORDER BY total_sales DESC;
```

Data Output Messages Notifications

store_location character varying (30)	total_sales numeric
Hell's Kitchen	52598.93
Astoria	52428.76
Lower Manhattan	51700.07

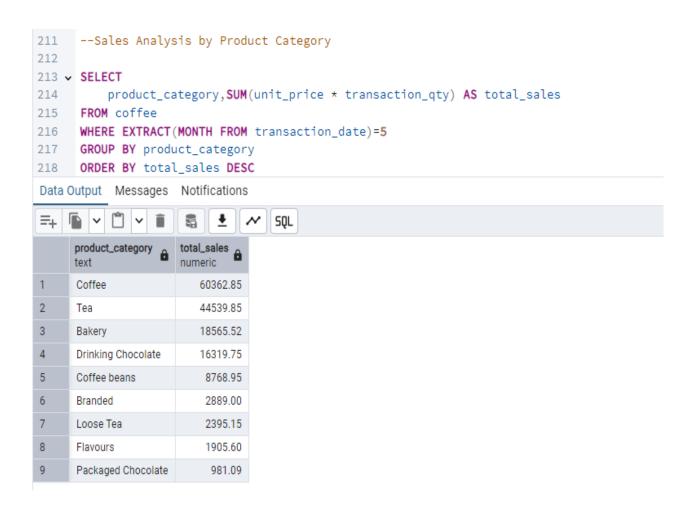### ○ Total Sales over specific Date:

```sql
142 ∨  SELECT
143         ROUND(SUM(unit_price * transaction_qty)/1000,1) AS Total_sale,
144         SUM(transaction_qty) AS Total_qty,
145         COUNT(transaction_id) AS Total_qty
146     FROM coffee
147     WHERE
148         transaction_date ='2023-05-18';
149
```

Data Output   Messages   Notifications

total_sale numeric	total_qty bigint	total_qty bigint
5.6	1659	1192

○ Sales Analysis by Product Category:

```sql
211     --Sales Analysis by Product Category
212
213 ∨  SELECT
214         product_category,SUM(unit_price * transaction_qty) AS total_sales
215     FROM coffee
216     WHERE EXTRACT(MONTH FROM transaction_date)=5
217     GROUP BY product_category
218     ORDER BY total_sales DESC
```

Data Output   Messages   Notifications

	product_category text	total_sales numeric
1	Coffee	60362.85
2	Tea	44539.85
3	Bakery	18565.52
4	Drinking Chocolate	16319.75
5	Coffee beans	8768.95
6	Branded	2889.00
7	Loose Tea	2395.15
8	Flavours	1905.60
9	Packaged Chocolate	981.09

Top 5 products by sales:

```sql
221  SELECT
222      product_type,SUM(unit_price * transaction_qty) AS total_sales
223  FROM coffee
224  WHERE EXTRACT(MONTH FROM transaction_date)=5 AND product_category= 'Coffee'
225  GROUP BY product_type
226  ORDER BY total_sales DESC
227  LIMIT 10
228  |
```

Data Output   Messages   Notifications

	product_type 🔒 text	total_sales 🔒 numeric
1	Barista Espresso	20423.75
2	Gourmet brewed cof...	15559.20
3	Premium brewed cof...	8739.20
4	Organic brewed coffee	8350.20
5	Drip coffee	7290.50

Sales Analysis by Days and Hours:

```sql
287
288 v SELECT
289      CASE
290          WHEN EXTRACT(DOW FROM transaction_date)=2 THEN 'Monday'
291          WHEN EXTRACT(DOW FROM transaction_date)=3 THEN 'Tuesday'
292          WHEN EXTRACT(DOW FROM transaction_date)=4 THEN 'Wednesday'
293          WHEN EXTRACT(DOW FROM transaction_date)=5 THEN 'Thursday'
294          WHEN EXTRACT(DOW FROM transaction_date)=6 THEN 'Friday'
295          WHEN EXTRACT(DOW FROM transaction_date)=7 THEN 'Saturday'
296          ELSE 'Sunday'
297      END AS Day_of_week,
298      ROUND(SUM(unit_price * transaction_qty)) AS total_sales
299      FROM
300          coffee
301      WHERE
302          EXTRACT(MONTH FROM transaction_date)=5
303      GROUP BY
304              Day_of_week;
```

	day_of_week text 🔒	total_sales 🔒 numeric
1	Friday	20795
2	Monday	25347
3	Sunday	44526
4	Thursday	20341
5	Tuesday	25465
6	Wednesday	20254

```
241   SELECT
242         EXTRACT(HOUR FROM transaction_time) AS hour_no,
243         SUM(unit_price * transaction_qty) AS total_sales
244   FROM coffee
245             WHERE EXTRACT(MONTH FROM transaction_date)=5
246             GROUP BY hour_no
247             ORDER BY hour_no DESC;
```

Data Output   Messages   Notifications

	hour_no 🔒 numeric	total_sales 🔒 numeric
1	20	655.93
2	19	6256.47
3	18	7679.91
4	17	8966.85
5	16	9154.31
6	15	9525.15
7	14	9057.66
8	13	9379.21
9	12	8869.79