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Supermarket Sales

This analysis provides key insights on the sales performance of three supermarket branches in the span of three months. This report outlines some of the key findings of the analysis.

Please feel free to view all queries and results. Details and instructions on how to do so are outlined in the README file of the supermarket_sales repository. These are just some of the results that were selected for reporting.

Each number corresponds to its respective query in the full analysis.

1.1 Average customer rating per branch

The following query finds the average customer rating per branch. Ratings are measured on a scale of 1-10. The branch with the highest rating is Branch C with a rating of 7.07.

```
1   --Average customer rating per branch--
2
3   select round(avg(Rating), 2) as avg_rating, Branch
4   from supermarket_sales
5   group by Branch
6   order by avg_rating desc
7   ;
```

2.1 Peak Shopping Hours

The Peak Shopping Hours query identifies the hours of the day in which the most transactions took place across all three branches. The top three shopping hours are 7 pm, 1 pm, and 3 pm. This is likely because most people are off of work by 7 pm, and the 1 pm and 3 pm hours are likely boosted by people shopping on the weekend. Although, that would need to be confirmed by further analysis. The least popular shopping hours are 5 pm, 8 pm, and 4 pm likely due to the fact that most people are at work during the hours of 4 and 5 pm, and at home by 8 pm.

```
1   --Peak shopping hours--
2
3   with hourly_sales as (
4       select left(Time, 2) as hour, count(*) as transaction_count, round(sum(Total), 2) as total_revenue
5       from supermarket_sales
6       group by hour
7   )
8
9   select *
10  from hourly_sales
11  order by transaction_count desc
12  ;
```

3.0 Monthly Sales by Branch

This query combines CTEs and RANK to determine total monthly sales and best selling product lines for each month. Branch C is a consistent top performer ranking first in month one, and second in months two and three. Branch B ranked third in two out of the three months. As for individual product lines, sports and travel is consistently one of the top performers throughout the three months. Home and lifestyle as well food and beverage are also strong performing product lines.

```sql
1  -- Monthly sales by branch and best selling product line--
2
3  with
4
5  -- Monthly sales by branch--
6
7  monthly_sales as(
8      select Branch, month(Date) as month, round(sum(Total), 2) as total_sales
9      from supermarket_sales
10     group by Branch, month
11 ),
12
13 --Monthly sales by product line for each branch--
14
15 product_line_sales as (
16     select Branch, month(Date) as month, "Product line", round(sum(Total), 2) as product_line_total
17     from supermarket_sales
18     group by Branch, month, "Product line"
19 ),
20
21 -- Identify the best selling product line per branch per month--
22
```

```sql
21 -- Identify the best selling product line per branch per month--
22
23 ranked_product_lines as (
24     select Branch,
25            month,
26            "Product line",
27            product_line_total,
28            rank() over (partition by Branch, month order by product_line_total desc) as rank
29     from product_line_sales
30 )
```

```sql
32 --Combine monthly sales with the best selling product lines--
33
34 select
35     ms.Branch,
36     ms.month,
37     ms.total_sales,
38     rpl."Product line" as best_selling_product_line,
39     rpl.product_line_total as best_selling_product_line_sales,
40     rank() over (partition by ms.month order by ms.total_sales desc) as rank
41 from monthly_sales as ms
42 left join ranked_product_lines as rpl
43 on ms.Branch = rpl.Branch and ms.month = rpl.month and rpl.rank = 1
44 order by ms.Branch, ms.month
45 ;
```