



COFFEE SHOP SALES ANALYSIS

Coffee shop raw data comprises of 11 columns and 149,116 rows

| transaction_id | transaction_date | transaction_time | store_id | store_location | product_id | unit_price | product_category | product_type | product_detail |
|----------------|------------------|------------------|----------|-------------------|------------|------------|------------------|-----------------------|------------------------------|
| 1 | 1/1/2023 | 7:06:11 | 2 | 5 Lower Manhattan | 32 | 3 | Coffee | Gourmet brewed coffee | Ethiopia Rg |
| 2 | 1/1/2023 | 7:08:56 | 2 | 5 Lower Manhattan | 57 | 3.1 | Tea | Brewed Chai tea | Spicy Eye Opener Chai Lg |
| 3 | 1/1/2023 | 7:14:04 | 2 | 5 Lower Manhattan | 59 | 4.5 | Drinking Chocol | Hot chocolate | Dark chocolate Lg |
| 4 | 1/1/2023 | 7:20:24 | 1 | 5 Lower Manhattan | 22 | 2 | Coffee | Drip coffee | Our Old Time Diner Blend Sm |
| 5 | 1/1/2023 | 7:22:41 | 2 | 5 Lower Manhattan | 57 | 3.1 | Tea | Brewed Chai tea | Spicy Eye Opener Chai Lg |
| 6 | 1/1/2023 | 7:22:41 | 1 | 5 Lower Manhattan | 77 | 3 | Bakery | Scone | Oatmeal Scone |
| 7 | 1/1/2023 | 7:25:49 | 1 | 5 Lower Manhattan | 22 | 2 | Coffee | Drip coffee | Our Old Time Diner Blend Sm |
| 8 | 1/1/2023 | 7:33:34 | 2 | 5 Lower Manhattan | 28 | 2 | Coffee | Gourmet brewed coffee | Columbian Medium Roast Sm |
| 9 | 1/1/2023 | 7:39:13 | 1 | 5 Lower Manhattan | 39 | 4.25 | Coffee | Barista Espresso | Latte Rg |
| 10 | 1/1/2023 | 7:39:34 | 2 | 5 Lower Manhattan | 58 | 3.5 | Drinking Chocol | Hot chocolate | Dark chocolate Rg |
| 11 | 1/1/2023 | 7:43:05 | 1 | 5 Lower Manhattan | 56 | 2.55 | Tea | Brewed Chai tea | Spicy Eye Opener Chai Rg |
| 12 | 1/1/2023 | 7:44:35 | 2 | 5 Lower Manhattan | 33 | 3.5 | Coffee | Gourmet brewed coffee | Ethiopia Lg |
| 13 | 1/1/2023 | 7:45:51 | 1 | 5 Lower Manhattan | 51 | 3 | Tea | Brewed Black tea | Earl Grey Lg |
| 14 | 1/1/2023 | 7:48:19 | 1 | 5 Lower Manhattan | 57 | 3.1 | Tea | Brewed Chai tea | Spicy Eye Opener Chai Lg |
| 15 | 1/1/2023 | 7:52:36 | 2 | 5 Lower Manhattan | 87 | 3 | Coffee | Barista Espresso | Ouro Brasileiro shot |
| 16 | 1/1/2023 | 7:59:58 | 2 | 5 Lower Manhattan | 47 | 3 | Tea | Brewed Green tea | Serenity Green Tea Lg |
| 17 | 1/1/2023 | 7:59:58 | 1 | 5 Lower Manhattan | 79 | 3.75 | Bakery | Scone | Jumbo Savory Scone |
| 18 | 1/1/2023 | 8:00:18 | 1 | 8 Hell's Kitchen | 42 | 2.5 | Tea | Brewed herbal tea | Lemon Grass Rg |
| 19 | 1/1/2023 | 8:00:39 | 2 | 8 Hell's Kitchen | 59 | 4.5 | Drinking Chocol | Hot chocolate | Dark chocolate Lg |
| 20 | 1/1/2023 | 8:11:45 | 1 | 8 Hell's Kitchen | 61 | 4.75 | Drinking Chocol | Hot chocolate | Sustainably Grown Organic Lg |
| 21 | 1/1/2023 | 8:17:27 | 2 | 8 Hell's Kitchen | 33 | 3.5 | Coffee | Gourmet brewed coffee | Ethiopia Lg |
| 22 | 1/1/2023 | 8:24:26 | 2 | 5 Lower Manhattan | 56 | 2.55 | Tea | Brewed Chai tea | Spicy Eye Opener Chai Rg |
| 23 | 1/1/2023 | 8:24:26 | 1 | 5 Lower Manhattan | 69 | 3.25 | Bakery | Biscotti | Hazelnut Biscotti |
| 24 | 1/1/2023 | 8:29:38 | 1 | 8 Hell's Kitchen | 56 | 2.55 | Tea | Brewed Chai tea | Spicy Eye Opener Chai Rg |
| 25 | 1/1/2023 | 8:31:23 | 1 | 8 Hell's Kitchen | 40 | 3.75 | Coffee | Barista Espresso | Cappuccino |
| 26 | 1/1/2023 | 8:33:08 | 1 | 5 Lower Manhattan | 43 | 3 | Tea | Brewed herbal tea | Lemon Grass Lg |
| 27 | 1/1/2023 | 8:33:08 | 1 | 5 Lower Manhattan | 76 | 3.5 | Bakery | Biscotti | Chocolate Chip Biscotti |
| 28 | 1/1/2023 | 8:35:03 | 2 | 5 Lower Manhattan | 45 | 3 | Tea | Brewed herbal tea | Peppermint Lg |
| 29 | 1/1/2023 | 8:35:03 | 1 | 5 Lower Manhattan | 71 | 3.75 | Bakery | Pastry | Chocolate Croissant |
| 30 | 1/1/2023 | 8:41:57 | 2 | 8 Hell's Kitchen | 40 | 3.75 | Coffee | Barista Espresso | Cappuccino |
| 31 | 1/1/2023 | 8:52:03 | 1 | 8 Hell's Kitchen | 38 | 3.75 | Coffee | Barista Espresso | Latte |

- Raw data loaded to power query for cleaning.
- Two unneeded columns was removed (product id and store id)
- 4 calculated columns was added (revenue, name of month , name of day and time range)

coffee shop sales analysis

Home Transform Add Column View Tools Help

☒ Query Settings
 ☐ Monospaced
 ☐ Column distribution
 ☐ Always allow
 ☒ Formula Bar
 ☒ Show whitespace
 ☐ Column profile
 ☒ Column quality

Layout Data Preview Parameters Columns Advanced Dependencies

= Table.RenameColumns("#Extracted Day Name",{{"transaction_date - Copy", "transaction day"}})

| | transaction_id | transaction_date | transaction day | transaction Months | transaction_time | transaction time rang |
|----|----------------|------------------|-----------------|--------------------|------------------|-----------------------|
| | Valid 100% | Valid 100% | Valid 100% | Valid 100% | Valid 100% | Valid 100% |
| | Error 0% | Error 0% | Error 0% | Error 0% | Error 0% | Error 0% |
| | Empty 0% | Empty 0% | Empty 0% | Empty 0% | Empty 0% | Empty 0% |
| 1 | 1 | 1/1/2023 | Sunday | Jan | 7:06:11 AM | Morning |
| 2 | 2 | 1/1/2023 | Sunday | Jan | 7:08:56 AM | Morning |
| 3 | 3 | 1/1/2023 | Sunday | Jan | 7:14:04 AM | Morning |
| 4 | 4 | 1/1/2023 | Sunday | Jan | 7:20:24 AM | Morning |
| 5 | 5 | 1/1/2023 | Sunday | Jan | 7:22:41 AM | Morning |
| 6 | 6 | 1/1/2023 | Sunday | Jan | 7:22:41 AM | Morning |
| 7 | 7 | 1/1/2023 | Sunday | Jan | 7:25:49 AM | Morning |
| 8 | 8 | 1/1/2023 | Sunday | Jan | 7:33:34 AM | Morning |
| 9 | 9 | 1/1/2023 | Sunday | Jan | 7:39:13 AM | Morning |
| 10 | 10 | 1/1/2023 | Sunday | Jan | 7:39:34 AM | Morning |
| 11 | 11 | 1/1/2023 | Sunday | Jan | 7:43:05 AM | Morning |
| 12 | 12 | 1/1/2023 | Sunday | Jan | 7:44:35 AM | Morning |
| 13 | 13 | 1/1/2023 | Sunday | Jan | 7:45:51 AM | Morning |
| 14 | 14 | 1/1/2023 | Sunday | Jan | 7:48:19 AM | Morning |
| 15 | 15 | 1/1/2023 | Sunday | Jan | 7:52:36 AM | Morning |
| 16 | 16 | 1/1/2023 | Sunday | Jan | 7:59:58 AM | Morning |
| 17 | 17 | 1/1/2023 | Sunday | Jan | 7:59:58 AM | Morning |

13 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows

PREVIEW DOWNLOADED ON FRIDAY

5:22 PM 2/15/2025

Type here to search

Query Settings

NAME

coffee sales cleaned data

APPLIED STEPS

Duplicated Column1

Reordered Columns1

Removed Columns

Added Custom

Changed Type3

Reordered Columns2

Renamed Columns1

Removed Columns1

Added Conditional Column

Replaced Value2

Reordered Columns3

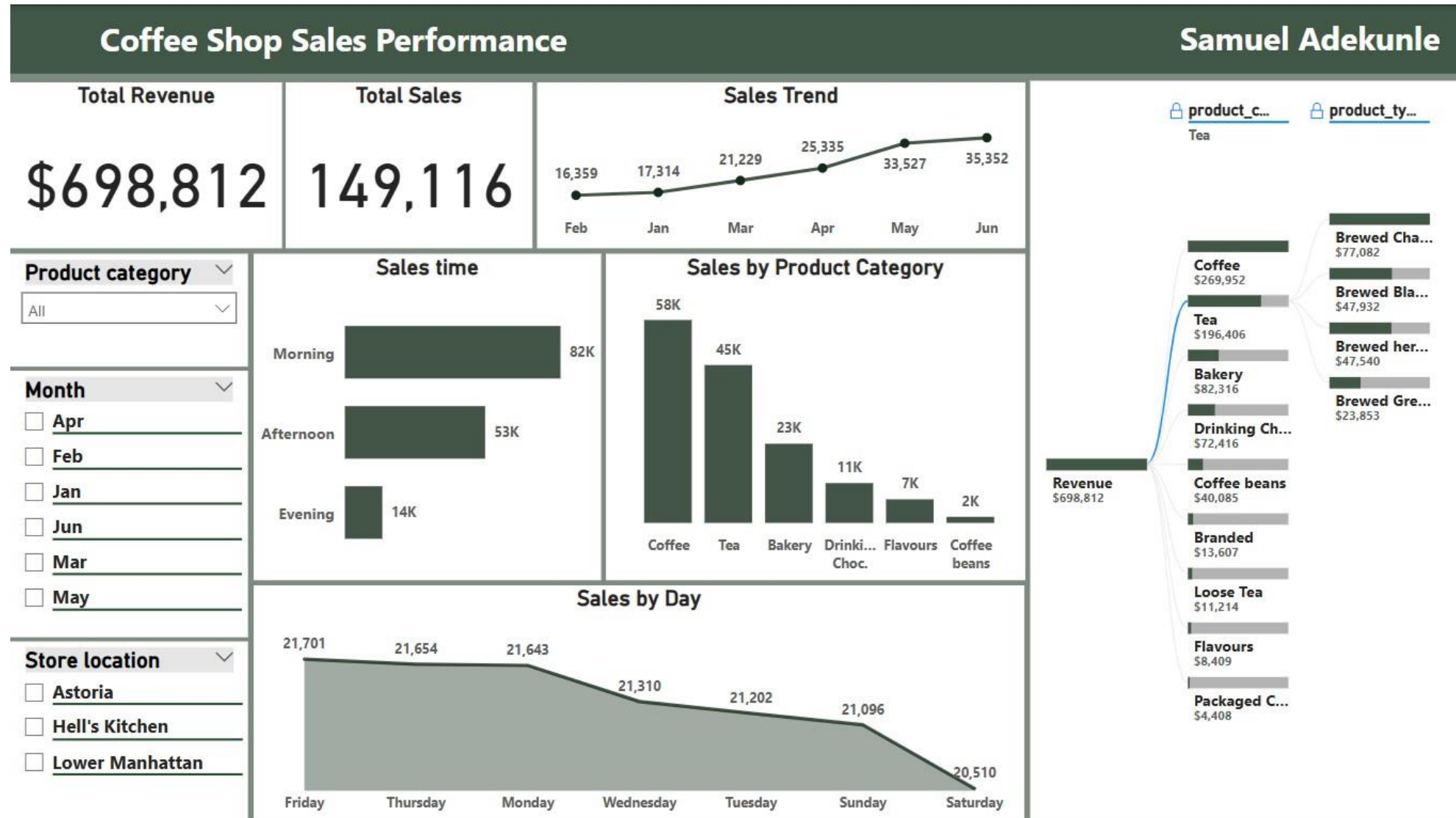
Inserted Month Name

Removed Columns2

Extracted Day Name

Renamed Columns2

Dashboard created for visualization

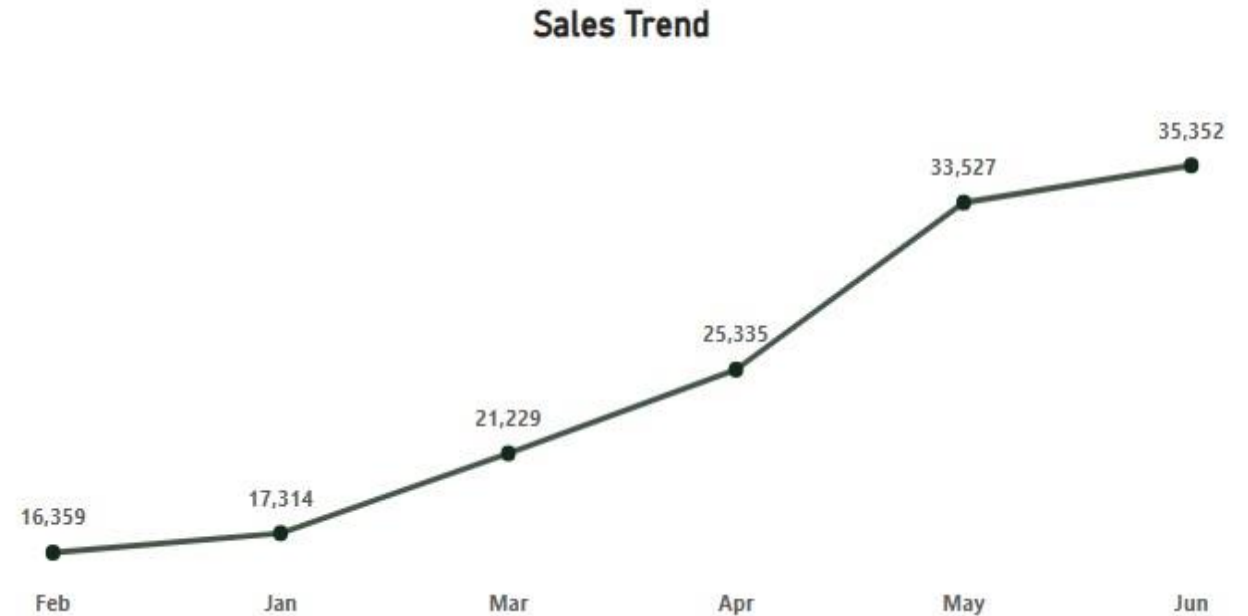


Analysis objectives

- Analyze sales Trends and product revenue
- Identify Best-Selling Products
- Analyze Peak Sales Hours and day
- Identify sales improvement

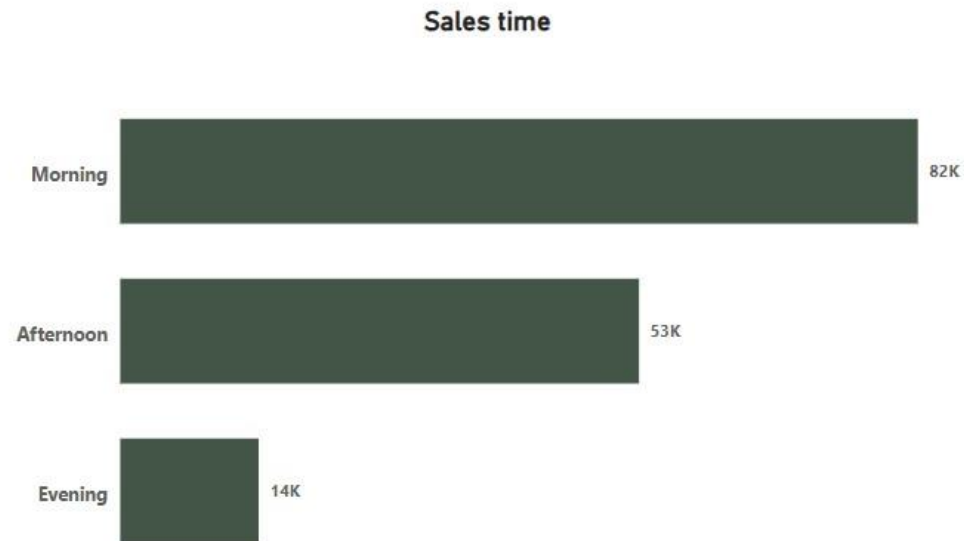
Key Insights:

- The overall trend is **upward**, showing continuous growth in sales; If the current trend continues, sales are expected to rise steadily.
- The highest growth occurred from April to May, possibly due to a seasonal factor, promotion, or increased demand.
- The rate of increase slowed in June, which could indicate seasonal stabilization.



Best Sales Month: June (35,352 sales)

- Best selling Time: Morning (81,751 sales)
- Evening has the lowest sales



Total Revenue

\$698,812

Total Sales

149,116

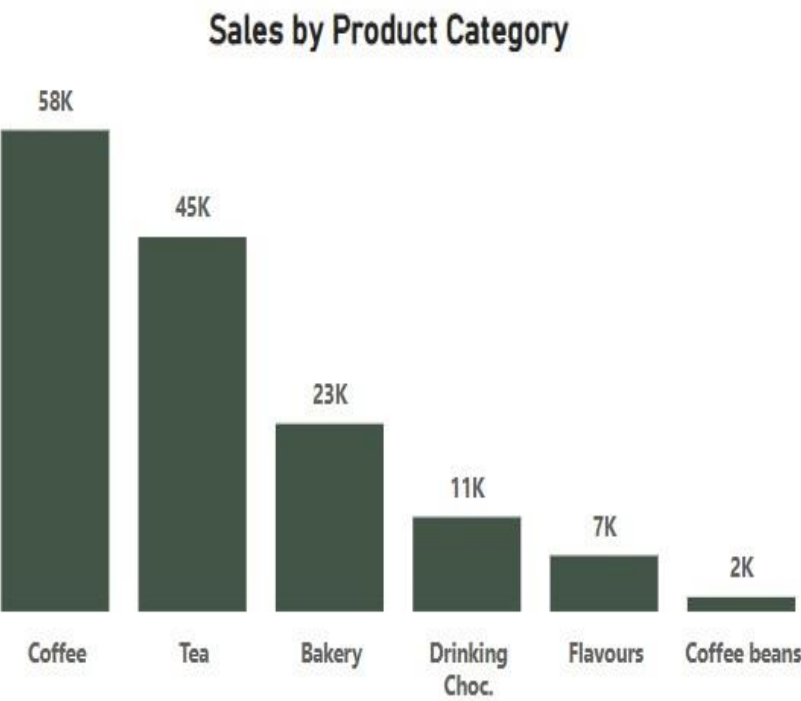
Products Revenue:

Coffee has the highest revenue



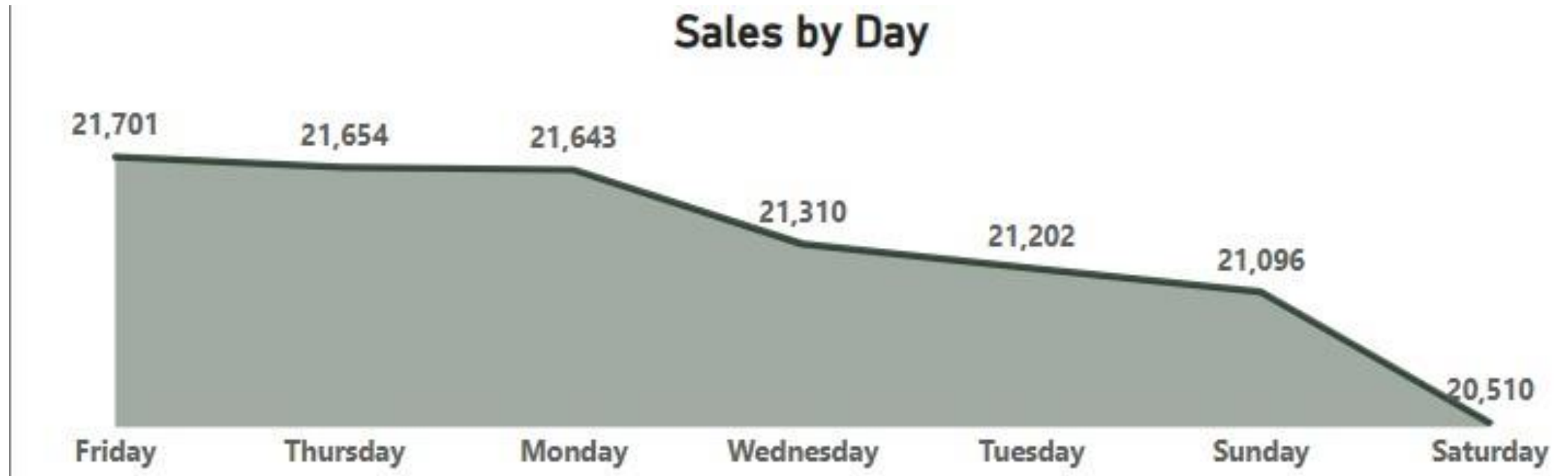
Top six Products sales:

Coffee has the highest sales



Day Sales

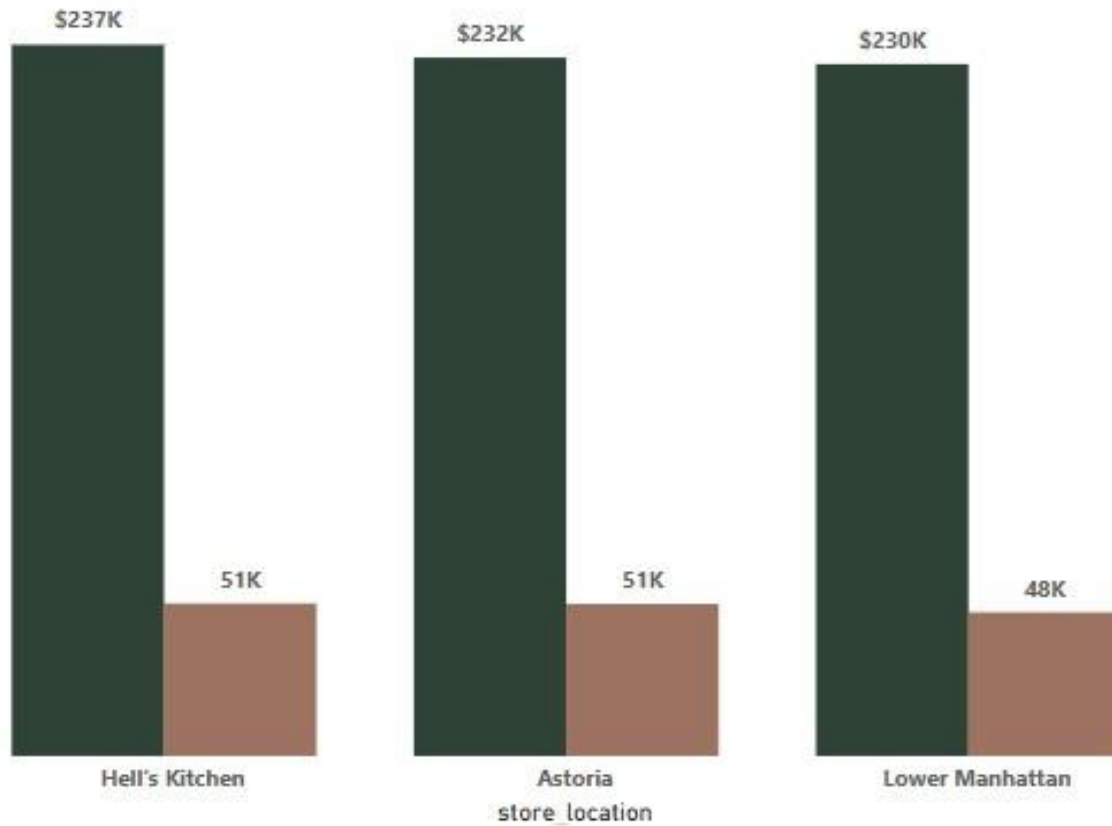
- Fridays, Thursdays and Mondays have the highest sales respectively.
- There is little difference between sales days.



Store sales and revenue

Revenue and Total Transactions by store_location

● Revenue ● Total Transactions



There is no significant difference between sales and revenue made in all locations

Recommendations

- **Evening Hour Promotions** - Offer discounts or combos from 5:00 PM - 8:00 PM (e.g., “Buy One, Get One 50% Off”) for sale improvement.
- Invest more in the two highest-sale product types from each category.