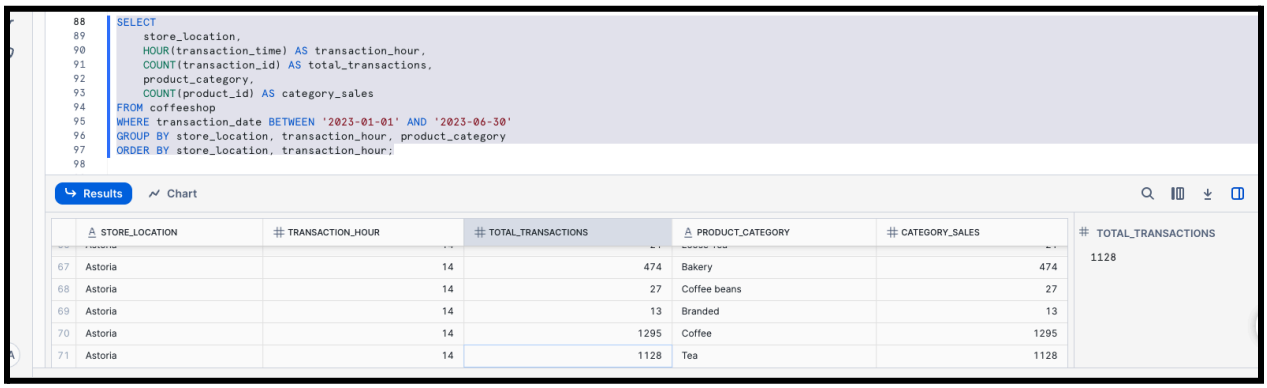
BRIGHT CAFE
CASE STUDY
XOLANI ANNAKIE

STEPS

Extract & Clean Data – Ensure data is structured correctly for analysis:

- Separate data
- Convert timestamps
- Group and categorise users properly (e.g.,products sales, time buckets)
- Handle missing or inconsistent data
- Query data on snowflake and Excel
- **General Analysis**
    - Total sales by product category.
    - Identifying best-selling products.
    - Sales trends over time.
    - Store performance analysis.
    - Peak sales hours.
    - Summary of insights

Transactions per hour



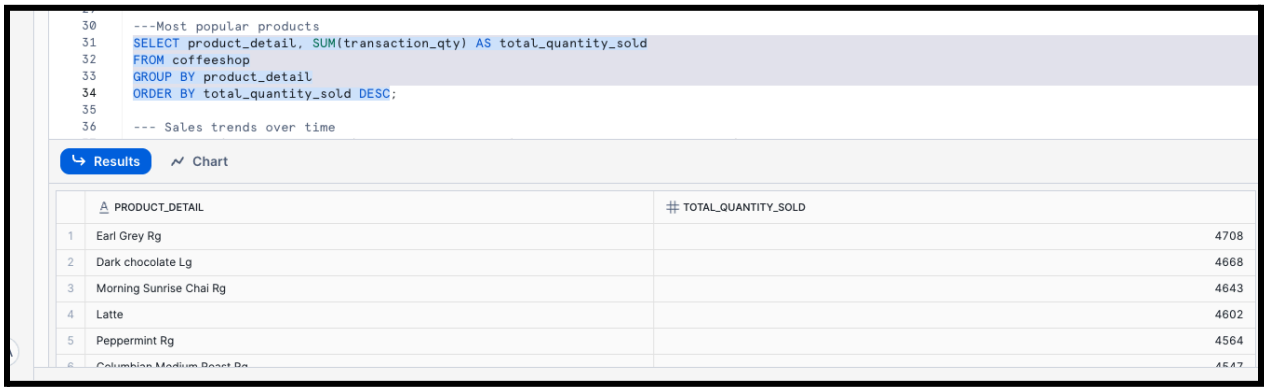
```
SELECT
    store_location,
    HOUR(transaction_time) AS transaction_hour,
    COUNT(transaction_id) AS total_transactions,
    product_category,
    COUNT(product_id) AS category_sales
FROM coffeeshop
WHERE transaction_date BETWEEN '2023-01-01' AND '2023-06-30'
GROUP BY store_location, transaction_hour, product_category
ORDER BY store_location, transaction_hour;
```

Results | Chart

	STORE_LOCATION	TRANSACTION_HOUR	TOTAL_TRANSACTIONS	PRODUCT_CATEGORY	CATEGORY_SALES
67	Astoria	14	474	Bakery	474
68	Astoria	14	27	Coffee beans	27
69	Astoria	14	13	Branded	13
70	Astoria	14	1295	Coffee	1295
71	Astoria	14	1128	Tea	1128

TOTAL_TRANSACTIONS: 1128

Most popular products



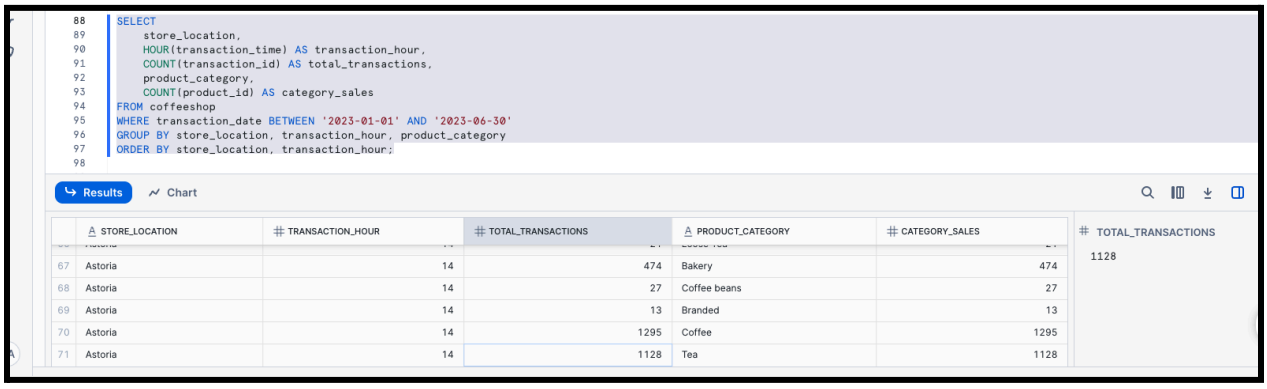
```
---Most popular products
SELECT product_detail, SUM(transaction_qty) AS total_quantity_sold
FROM coffeeshop
GROUP BY product_detail
ORDER BY total_quantity_sold DESC;

--- Sales trends over time
```

Results | Chart

	PRODUCT_DETAIL	TOTAL_QUANTITY_SOLD
1	Earl Grey Rg	4708
2	Dark chocolate Lg	4668
3	Morning Sunrise Chai Rg	4643
4	Latte	4602
5	Peppermint Rg	4564
6	Columbian Medium Roast Rg	4547

Daily sales - this was a lot of data. I did another query to separate by month on another query.



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GROUP BY store_location, transaction_hour, product_category
ORDER BY store_location, transaction_hour;
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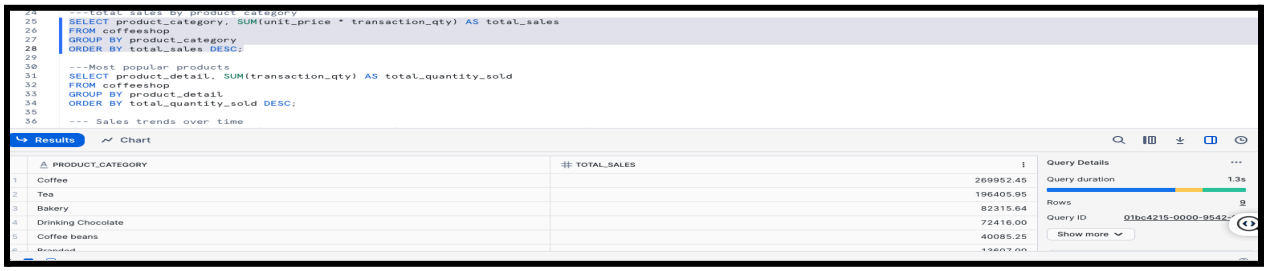
Sales by product category



```
---Total sales by product category
SELECT product_category, SUM(unit_price * transaction_qty) AS total_sales
FROM coffeeshop
GROUP BY product_category
ORDER BY total_sales DESC;

---Most popular products
SELECT product_detail, SUM(transaction_qty) AS total_quantity_sold
FROM coffeeshop
GROUP BY product_detail
ORDER BY total_quantity_sold DESC;

--- Sales trends over time
```

Results | Chart

	PRODUCT_CATEGORY	TOTAL_SALES
1	Coffee	269952.45
2	Tea	196405.95
3	Bakery	82315.64
4	Drinking Chocolate	72416.00
5	Coffee beans	40085.25
6	Branded	13697.00

Query Details
Query duration 1.3s
Rows 9
Query ID 01bc4215-0000-9542-
Show more

Lowest performing products

```
---Lowest performing products
SELECT product_detail, SUM(unit_price * transaction_qty) AS total_revenue
FROM coffeeshop
GROUP BY product_detail
ORDER BY total_revenue ASC
LIMIT 10;

----group by month
SELECT
    DATE(transaction_date) AS sales_day,
    SUM(unit_price * transaction_qty) AS daily_revenue
```

Results | Chart

	PRODUCT_DETAIL	TOTAL_REVENUE
1	Dark chocolate	755.20
2	Earl Grey	1270.90
3	Spicy Eye Opener Chai	1335.90
4	Guatemalan Sustainably Grown	1340.00
5	Lemon Grass	1360.40
6	Traditional Blend Chai	1369.35

Time buckets—to analyze of the peak sale times

```
---SALES BY TIME BUCKETS
SELECT
    store_location,
    product_category,
    CASE
        WHEN HOUR(transaction_time) BETWEEN 6 AND 8 THEN 'Early Morning'
        WHEN HOUR(transaction_time) BETWEEN 9 AND 12 THEN 'Morning'
        WHEN HOUR(transaction_time) BETWEEN 13 AND 16 THEN 'Afternoon'
        ELSE 'Late Day'
    END AS time_period,
    COUNT(transaction_id) AS total_transactions
FROM COFFEESHOP
WHERE HOUR(transaction_time) BETWEEN 6 AND 20
GROUP BY store_location, product_category, time_period
ORDER BY store_location, time_period;
```

Results | Chart

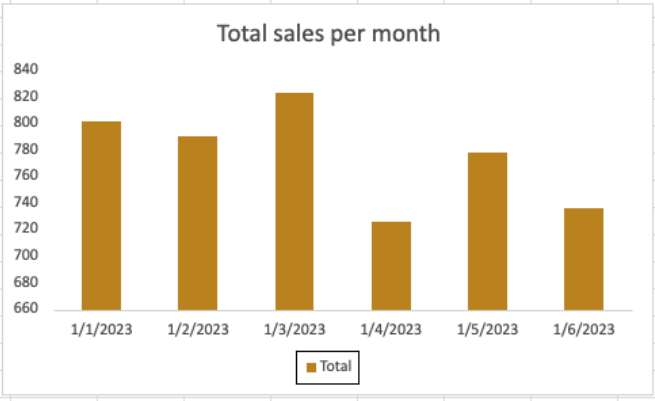
	STORE_LOCATION	PRODUCT_CATEGORY	TIME_PERIOD	TOTAL_TRANSACTIONS
1	Astoria	Branded	Afternoon	62
2	Astoria	Bakery	Afternoon	1986
3	Astoria	Tea	Afternoon	4610
4	Astoria	Coffee	Afternoon	5542
5	Astoria	Loose Tea	Afternoon	63
6	Astoria	Drinking Chocolate	Afternoon	1208

Sum of transaction_id	store_location			
product_category	Astoria	Hell's Kitchen	Lower Manhattan	Grand Total
Coffee	1509318983	1501423236	1363274245	4374016464
Tea	1222420850	1125742267	1034149576	3382312693
Bakery	542514440	571213555	587581879	1701309874
Drinking Chocolate	320779246	280068482	251761984	852609712
Flavours	111131904	181089436	225958098	518179438
Coffee beans	37511947	54064352	39484128	131060427
Loose Tea	25246818	37388870	28855404	91491092
Branded	20524622	9235458	27355859	57115939
Packaged Chocolate	7804879	15053352	13584074	36442305
Grand Total	**3797253689**	**3775279008**	**3572005247**	**11144537944**
	3274254273	3198379058	2985005700	9457639031

Coffee	Tea	Bakery	
#REF!	#REF!	#REF!	#REF!

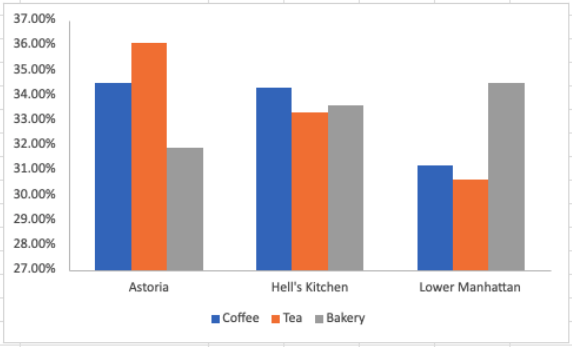
STORE_LOCATION	TOTAL_REVENUE
Hell's Kitchen	236511.17
Astoria	232243.91
Lower Manhattan	230057.25

transaction_date	Sum of transaction_qty
1/1/2023	802
1/2/2023	790
1/3/2023	823
1/4/2023	726
1/5/2023	778
1/6/2023	736
Grand Total	**4655**

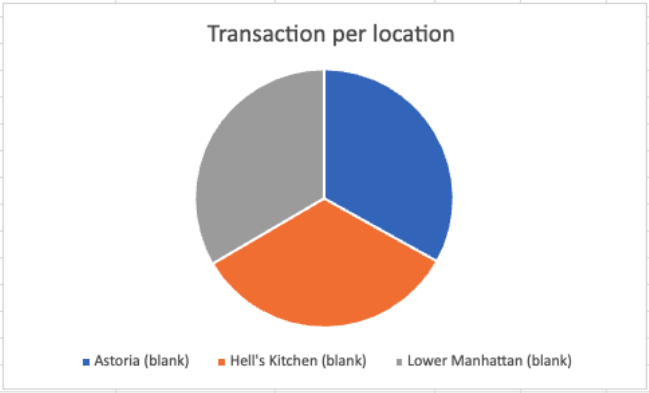


Sum of transaction_i	store_location			
product_category	Astoria	Hell's Kitchen	Lower Manhatt	Grand Total
Coffee	1509318983.0	1501423236.0	1363274245.0	4374016464.0
Tea	1222420850.0	1125742267.0	1034149576.0	3382312693.0
Bakery	542514440.0	571213555.0	587581879.0	1701309874.0

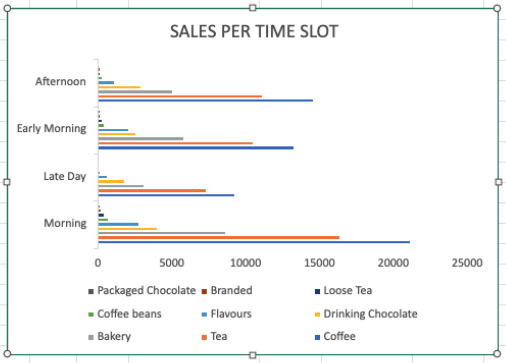
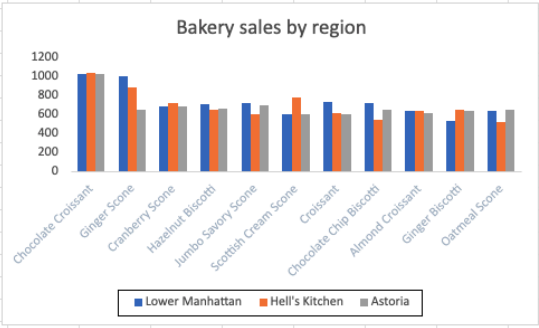
	Astoria	Hell's Kitch	Lower Manhattan
Coffee	34.50%	34.30%	31.20%
Tea	36.10%	33.30%	30.60%
Bakery	31.90%	33.60%	34.50%



store_location	Total_amount	Sum of transaction_qty	Sum of unit_price
⊟Astoria	(blank)	70991	171272.41
Astoria Total		**70991**	**171272.41**
⊟Hell's Kitchen	(blank)	71737	172205.67
Hell's Kitchen Total		**71737**	**172205.67**
⊟Lower Manhattan	(blank)	71742	160864.95
Lower Manhattan Total		**71742**	**160864.95**
Grand Total		**214470**	**504343.03**



Sum of TOTAL_TRANSACTIONS	PRODUCT_CATEGORY									
TIME_PERIOD	Coffee	Tea	Bakery	Drinking Chocolate	Flavours	Coffee beans	Loose Tea	Branded	Packaged Chocolate	Grand Total
Morning	21175	16402	8682	4026	2811	751	498	269	169	54783
Late Day	9335	7381	3158	1874	687	197	151	96	59	22938
Early Morning	13313	10525	5830	2635	2146	490	351	219	167	35676
Afternoon	14593	11141	5126	2933	1146	315	210	163	92	35719
Grand Total	**58416**	**45449**	**22796**	**11468**	**6790**	**1753**	**1210**	**747**	**487**	**149116**



Sum of TOTAL_SOLD	STORE_LOCATION			
PRODUCT_DETAIL	Lower Manhattan	Hell's Kitchen	Astoria	Grand Total
Chocolate Croissant	1031	1042	1023	3096
Ginger Scone	1001	891	648	2540
Cranberry Scone	687	720	685	2092
Hazelnut Biscotti	709	655	664	2028
Jumbo Savory Scone	721	607	700	2028
Scottish Cream Scone	601	781	603	1985
Croissant	736	612	606	1954
Chocolate Chip Biscotti	726	546	652	1924
Almond Croissant	642	646	623	1911
Ginger Biscotti	540	657	639	1836
Oatmeal Scone	646	521	653	1820
Grand Total	**8040**	**7678**	**7496**	**23214**