

COFFEE SHOP SALES ANALYSIS

Q) VIEW DATASET

```
select * from Coffee_Shop_Sales
```

Results		Messages										
	transaction_id	transaction_date	transaction_time	transaction_qty	store_id	store_location	product_id	unit_price	product_category	product_type	product_detail	
1	1	2023-01-01 00:00:00.0000000	07:06:11.0000000	2	5	Lower Manhattan	32	3	Coffee	Gourmet brewed coffee	Ethiopia Rg	
2	2	2023-01-01 00:00:00.0000000	07:08:56.0000000	2	5	Lower Manhattan	57	3.1	Tea	Brewed Chai tea	Spicy Eye Opener Chai Lg	
3	3	2023-01-01 00:00:00.0000000	07:14:04.0000000	2	5	Lower Manhattan	59	4.5	Drinking Chocolate	Hot chocolate	Dark chocolate Lg	
4	4	2023-01-01 00:00:00.0000000	07:20:24.0000000	1	5	Lower Manhattan	22	2	Coffee	Drip coffee	Our Old Time Diner Blend Sm	
5	5	2023-01-01 00:00:00.0000000	07:22:41.0000000	2	5	Lower Manhattan	57	3.1	Tea	Brewed Chai tea	Spicy Eye Opener Chai Lg	
6	6	2023-01-01 00:00:00.0000000	07:22:41.0000000	1	5	Lower Manhattan	77	3	Bakery	Scone	Oatmeal Scone	
7	7	2023-01-01 00:00:00.0000000	07:25:49.0000000	1	5	Lower Manhattan	22	2	Coffee	Drip coffee	Our Old Time Diner Blend Sm	
8	8	2023-01-01 00:00:00.0000000	07:33:34.0000000	2	5	Lower Manhattan	28	2	Coffee	Gourmet brewed coffee	Columbian Medium Roast Sm	
9	9	2023-01-01 00:00:00.0000000	07:39:13.0000000	1	5	Lower Manhattan	39	4.25	Coffee	Barista Espresso	Latte Rg	
10	10	2023-01-01 00:00:00.0000000	07:39:34.0000000	2	5	Lower Manhattan	58	3.5	Drinking Chocolate	Hot chocolate	Dark chocolate Rg	
11	11	2023-01-01 00:00:00.0000000	07:43:05.0000000	1	5	Lower Manhattan	56	2.55	Tea	Brewed Chai tea	Spicy Eye Opener Chai Rg	
12	12	2023-01-01 00:00:00.0000000	07:44:35.0000000	2	5	Lower Manhattan	33	3.5	Coffee	Gourmet brewed coffee	Ethiopia Lg	
13	13	2023-01-01 00:00:00.0000000	07:45:51.0000000	1	5	Lower Manhattan	51	3	Tea	Brewed Black tea	Earl Grey Lg	
14	14	2023-01-01 00:00:00.0000000	07:48:19.0000000	1	5	Lower Manhattan	57	3.1	Tea	Brewed Chai tea	Spicy Eye Opener Chai Lg	
15	15	2023-01-01 00:00:00.0000000	07:52:36.0000000	2	5	Lower Manhattan	87	3	Coffee	Barista Espresso	Ouro Brasileiro shot	
16	16	2023-01-01 00:00:00.0000000	07:59:58.0000000	2	5	Lower Manhattan	47	3	Tea	Brewed Green tea	Serenity Green Tea Lg	
17	17	2023-01-01 00:00:00.0000000	07:59:58.0000000	1	5	Lower Manhattan	78	2.75	Bakery	Scone	Apple Cinnamon	

Q) Total Sales For Month May

```
SELECT  
    ROUND(SUM(transaction_qty * unit_price),1) as total_Sales  
FROM  
    Coffee_Shop_Sales  
WHERE  
    month(transaction_date) = 5  -- MAY Month
```

 Results  Messages

	total_Sales
1	156727.8

Q) TOTAL SALES KPI - MOM DIFFERENCE AND MOM GROWTH

```
SELECT  
    MONTH(transaction_date) as Month ,  
    ROUND(SUM(transaction_qty*unit_price),1) as Total_Sales,  
    ROUND((SUM(transaction_qty*unit_price) -  
    LAG(SUM(transaction_qty*unit_price),1) OVER(ORDER BY MONTH(transaction_date)))  
    /  
    LAG(SUM(transaction_qty*unit_price),1) OVER(ORDER BY MONTH(transaction_date)) *100,1) AS Mom_increase_percentage  
FROM Coffee_Shop_Sales  
WHERE  
    MONTH(transaction_date) IN (4, 5) -- for months of April and May  
GROUP BY MONTH(transaction_date)  
ORDER BY MONTH(transaction date)
```

Results		Messages	
	Month	Total_Sales	Mom_increase_percentage
1	4	118941.1	NULL
2	5	156727.8	31.8

Q) TOTAL ORDERS FOR MONTH MAY

```
SELECT  
    COUNT(*) AS total_orders  
FROM  
    Coffee_shop_sales  
WHERE  
    MONTH(transaction_date) = 5;
```

Results Messages

	total_orders
1	33527

Q) TOTAL ORDERS KPI - MOM DIFFERENCE AND MOM GROWTH

```
SELECT
    MONTH(transaction_date) AS month,
    COUNT(transaction_id) as total_orders,
    1.0 * (COUNT(transaction_id) - LAG(COUNT(transaction_id),1) OVER(ORDER BY MONTH(transaction_date))) /
    LAG(COUNT(transaction_id),1) OVER(ORDER BY MONTH(transaction_date)) * 100 As mom_increase_percentage
FROM
    Coffee_Shop_Sales
WHERE
    MONTH(transaction_date) IN (4,5)
GROUP BY MONTH(transaction_date)
ORDER BY MONTH(transaction_date)
```

Results Messages

	month	total_orders	mom_increase_percentage
1	4	25335	NULL
2	5	33527	32.334714821300

Q) TOTAL QUANTITY SOLD IN MONTH MAY

```
SELECT
    SUM(transaction_qty) AS Total_quantity_Sold
FROM
    Coffee_Shop_Sales
WHERE
    MONTH(transaction_date) = 5 -- MAY MONTH
```

Results		Messages	
Total_quantity_Sold			
1	48233		

Q) TOTAL QUANTITY SOLD KPI - MOM DIFFERENCE AND MOM GROWTH

```
SELECT MONTH(transaction_date) as month ,  
       SUM(transaction_qty) as Total_quantity_sold,  
       1.0 * (SUM(transaction_qty) - LAG(SUM(transaction_qty),1) OVER(ORDER BY MONTH(transaction_date)))/  
       LAG(SUM(transaction_qty),1) OVER(ORDER BY MONTH(transaction_date)) * 100 AS mom_percentage_increase  
From  
  Coffee_Shop_Sales  
WHERE  
  MONTH(transaction_date) IN (4,5)  
GROUP BY MONTH(transaction_date)  
ORDER BY MONTH(transaction_date)
```

Results		Messages	
	month	Total_quantity_sold	mom_percentage_increase
1	4	36469	NULL
2	5	48233	32.257533795800

Q) CALENDAR TABLE – DAILY SALES, QUANTITY and TOTAL ORDERS

```
select
    CONCAT(ROUND(SUM (transaction_qty * unit_price)/1000,1),'k') AS Daily_sales,
    CONCAT(ROUND(SUM(transaction_qty)/1000,2),'k') AS Quantity,
    CONCAT(ROUND(COUNT(transaction_id)/1000,2),'k') AS Orders
FROM
    coffee_shop_sales
WHERE
    transaction_date = '2023-05-18';
```

Results		Messages	
	Daily_sales	Quantity	Orders
1	5583.47	1659	1192

Q) SALES TREND OVER PERIOD

```
SELECT
    AVG(total_Sales) AS average_Sales
FROM
    (SELECT
        SUM(transaction_qty * unit_price) AS total_Sales
    FROM
        coffee_shop_sales
    WHERE
        MONTH(transaction_date) = 5
    GROUP BY
        transaction_date ) AS internal_query
```

Results		Messages
	average_Sales	
1	5055.73419354838	

Q) Daily Sales for MAY Month selected

```
SELECT
    DAY(transaction_date) AS Day_of_month ,
    SUM(unit_price*transaction_qty) AS total_Sales
FROM
    coffee_shop_sales
WHERE
    MONTH(transaction_date) = 5
GROUP BY
    DAY(transaction_date)
ORDER BY
    DAY(transaction_date)
```

Results		Messages
	Day_of_month	total_Sales
1	1	4731.45
2	2	4625.5
3	3	4714.599999999999
4	4	4589.7
5	5	4701
6	6	4205.15
7	7	4542.7
8	8	5604.209999999999
9	9	5100.97
10	10	5256.33
11	11	4850.06
12	12	4681.13
13	13	5511.53
14	14	5052.65
15	15	5384.98
16	16	5542.13
17	17	5418

Q) COMPARING DAILY SALES WITH AVERAGE SALES – IF GREATER THAN “ABOVE AVERAGE” and LESSER THAN “BELOW AVERAGE”

```
SELECT
    DAY(transaction_date) AS Day_of_month,
    AVG(SUM(transaction_qty * unit_price)) OVER() AS Average_Sales,
    SUM(transaction_qty * unit_price) AS Daily_sales,
    CASE
        WHEN SUM(transaction_qty * unit_price) > AVG(SUM(transaction_qty * unit_price)) OVER() THEN 'Above Average'
        When SUM(transaction_qty * unit_price) < AVG(SUM(transaction_qty * unit_price)) OVER() THEN 'Below Average'
        ELSE 'No Change'
    END AS Sales_Status
FROM
    coffee_shop_sales
WHERE
    MONTH(transaction_date) = 5
GROUP BY DAY(transaction_Date)
ORDER BY DAY(transaction_Date)
```

Results		Messages			
	Day_of_month	Average_Sales	Daily_sales	Sales_Status	
1	1	5055.73419354839	4731.45	Below Average	
2	2	5055.73419354839	4625.5	Below Average	
3	3	5055.73419354839	4714.59999999999	Below Average	
4	4	5055.73419354839	4589.7	Below Average	
5	5	5055.73419354839	4701	Below Average	
6	6	5055.73419354839	4205.15	Below Average	
7	7	5055.73419354839	4542.7	Below Average	
8	8	5055.73419354839	5604.20999999999	Above Average	
9	9	5055.73419354839	5100.97	Above Average	
10	10	5055.73419354839	5256.33	Above Average	
11	11	5055.73419354839	4850.06	Below Average	
12	12	5055.73419354839	4681.13	Below Average	
13	13	5055.73419354839	5511.53	Above Average	
14	14	5055.73419354839	5052.65	Below Average	
15	15	5055.73419354839	5384.98	Above Average	
16	16	5055.73419354839	5542.13	Above Average	

Q) SALES BY WEEKDAY / WEEKEND

```
SELECT
    CASE
        WHEN DATEPART (WEEKDAY,transaction_date) IN (1,7) THEN 'Weekends'
        ELSE 'Weekdays'
    END AS day_type,
    ROUND (SUM(transaction_qty * unit_price),2) AS Total_Sales
FROM
    coffee_Shop_Sales
WHERE
    MONTH(transaction_date) = 5
GROUP BY
    CASE WHEN DATEPART (WEEKDAY,transaction_date) IN (1,7) THEN 'Weekends'
    Else 'Weekdays'
END
```

Results		Messages
	day_type	Total_Sales
1	Weekends	40099.92
2	Weekdays	116627.84

Q) SALES BY STORE LOCATION

```
SELECT store_location ,  
       ROUND ( SUM (unit_price * transaction_qty),2) AS Total_Sales  
FROM  
       coffee_shop_sales  
WHERE  
       MONTH(transaction_date) = 5  
GROUP BY  
       store_location  
ORDER BY  
       Total_Sales DESC
```

Results Messages

	store_location	Total_Sales
1	Hell's Kitchen	52598.93
2	Astoria	52428.76
3	Lower Manhattan	51700.07

Q) SALES BY PRODUCT CATEGORY

```
SELECT product_category,  
       ROUND(SUM (unit_price * transaction_qty),1) AS Total_Sales  
FROM  
    coffee_shop_sales  
WHERE  
    MONTH(transaction_date) = 5  
GROUP BY  
    product_category  
ORDER BY  
    Total_Sales DESC
```

Results Messages

	product_category	Total_Sales
1	Coffee	60362.8
2	Tea	44539.8
3	Bakery	18565.5
4	Drinking Chocolate	16319.8
5	Coffee beans	8768.9
6	Branded	2889
7	Loose Tea	2395.2
8	Flavours	1905.6
9	Packaged Chocolate	981.1

Q) SALES BY PRODUCTS (TOP 10)

```
SELECT TOP 10 product_type,  
             ROUND(SUM (unit_price * transaction_qty),1) AS Total_Sales  
FROM  
    coffee_shop_sales  
WHERE  
    MONTH(transaction_date) = 5  
GROUP BY  
    product_type  
ORDER BY  
    Total_Sales DESC
```

Results		Messages
	product_type	Total_Sales
1	Barista Espresso	20423.7
2	Brewed Chai tea	17427.4
3	Hot chocolate	16319.8
4	Gourmet brewed coffee	15559.2
5	Brewed herbal tea	10930
6	Brewed Black tea	10778
7	Premium brewed coffee	8739.2
8	Organic brewed coffee	8350.2
9	Scone	8305.3
10	Drip coffee	7290.5

Q) SALES BY DAY | HOUR

```
Select  ROUND (SUM(unit_price * transaction_qty),1) AS Total_Sales ,  
        SUM(transaction_qty) AS Total_Quantity ,  
        COUNT(*) AS Total_Orders  
FROM  
    coffee_shop_sales  
WHERE  
    DATEPART(WEEKDAY , transaction_date) = 3  -- Tuesday ( 1 - Sunday to 7 - Saturday)  
    AND DATEPART (HOUR ,transaction_time) = 8  
    AND Month(transaction_date) = 5;
```

Results		Messages	
	Total_Sales	Total_Quantity	Total_Orders
1	2968.9	874	612

Q) TO GET SALES FROM MONDAY TO SUNDAY FOR MONTH OF MAY

```
SELECT
CASE
  WHEN Datepart(weekday,transaction_date) = 2 THEN 'Monday'
  WHEN Datepart(weekday,transaction_date) = 3 THEN 'Tuesday'
  WHEN Datepart(weekday,transaction_date) = 4 THEN 'Wednesday'
  WHEN Datepart(weekday,transaction_date) = 5 THEN 'Thursday'
  WHEN Datepart(weekday,transaction_date) = 6 THEN 'Friday'
  WHEN Datepart(weekday,transaction_date) = 7 THEN 'Saturday'
  ELSE 'Sunday'
END AS Day_of_Week,
ROUND(SUM(unit_price * transaction_qty),2) AS Total_Sales
FROM
  coffee_shop_sales
WHERE
  MONTH(transaction_date) = 5 -- Filter for May (month number 5)
GROUP BY
CASE
  WHEN Datepart(weekday,transaction_date) = 2 THEN 'Monday'
  WHEN Datepart(weekday,transaction_date) = 3 THEN 'Tuesday'
  WHEN Datepart(weekday,transaction_date) = 4 THEN 'Wednesday'
  WHEN Datepart(weekday,transaction_date) = 5 THEN 'Thursday'
  WHEN Datepart(weekday,transaction_date) = 6 THEN 'Friday'
  WHEN Datepart(weekday,transaction_date) = 7 THEN 'Saturday'
  ELSE 'Sunday'
END;
```

Results			Messages
	Day_of_Week	Total_Sales	
1	Tuesday	25346.99	
2	Thursday	20254.08	
3	Sunday	19304.81	
4	Wednesday	25464.51	
5	Friday	20340.96	
6	Monday	25221.3	
7	Saturday	20795.11	

Q) TO GET SALES FOR ALL HOURS FOR MONTH OF MAY

```
SELECT Datepart(HOUR,transaction_time) AS Hour,  
       ROUND(SUM(unit_price* transaction_qty),1) AS Total_Sales  
FROM  
    coffee_shop_sales  
WHERE  
    MONTH(transaction_date) = 5  
GROUP BY  
    Datepart(HOUR,transaction_time)  
ORDER BY  
    Datepart(HOUR,transaction_time)
```

Results		Messages
	Hour	Total_Sales
1	6	4912.9
2	7	14350.7
3	8	18822.3
4	9	19145.3
5	10	19639.1
6	11	10312.2
7	12	8869.8
8	13	9379.2
9	14	9057.7
10	15	9525.2
11	16	9154.3
12	17	8966.9
13	18	7679.9
14	19	6256.5
15	20	655.9

COFFEE SHOP SALES

Sales Report

Filter Panel

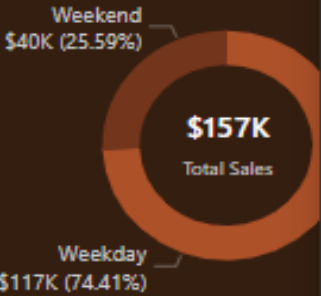
Month May 2023

May 2023

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19		
22	23	24	25	26		
29	30	31				

Hover on this vis

Sales by Weekday / Weekend



Sales by Store location

Hell's Kitchen \$52.60K	▲ +30.5%
Astoria \$52.43K	▲ +32.8% +13.1K vs LM
Lower Manhattan \$51.70K	▲ +32.0% +12.5K vs LM

Total Sales

\$157K

▲ +31.8% | +37.8K vs LM



Total Orders

33527

▲ +32.3% | +8.2K vs LM



Total Quantity Sold

48233

▲ +32.3% | +11.8K vs LM



Sales Trend Over The Period



Total Sales

\$5,231

25 May 2023

Total Orders

1043

Total Quantity Sold

1613



- Sales
- Orders
- Qty

▲ +27.9% | +28.5K vs L...

Product Category

Loose Tea \$2.40K	▲ +30.9%
Organic brewed coffee \$8.35K	▲ +26.3%
Flavours \$1.91K	▲ +34.3%
Scone \$8.31K	▲ +29.2%
Packaged Chocolate \$0.98K	▲ +12.4%
Drip coffee \$7.29K	▲ +34.6%

Sales by Day | Hour

