



COFFEE SHOP SALES

BUSINESS REQUIREMENTS



- Total sales
- Total orders
- Total quantity sold
- Calendar table - daily sales, quantity and total orders
- Sales analysis by weekdays & weekend
- Sales analysis by store location
- Daily sales analysis with average line
- Sales analysis by product category
- Top 10 products by sales
- Sales analysis by hours

DATA CLEANING

```
• create database coffee_shop_sales_db;
• set sql_safe_updates = 0;
• UPDATE coffee_shop_sales
SET
    tranaction_date = STR_TO_DATE(transaction_date, '%m,%d,%Y');
• set sql_safe_updates = 1;
• alter table coffee_shop_sales
modify column transaction_date date;
• set sql_safe_updates = 0;
• UPDATE coffee_shop_sales
SET
    transaction_time = STR_TO_DATE(transaction_time, '%H:%i:%s');
• set sql_safe_updates = 1;
• alter table coffee_shop_sales
modify column transaction_time time;
• alter table coffee_shop_sales
change column transaction_id transaction_id int;
```

TOTAL SALES

- **SELECT**

```
    ROUND(SUM(unit_price * transaction_qty)) AS total_sales  
FROM  
    coffee_shop_sales  
WHERE  
    MONTH(transaction_date) = 3
```

total_sales
98835

TOTAL ORDERS

```
SELECT  
    COUNT(transaction_id) AS total_orders  
FROM  
    coffee_shop_sales  
WHERE  
    MONTH(transaction_date) = 5
```

TOTAL QUANTITY SOLD

```
SELECT SUM(transaction_qty) as Total_Quantity_Sold  
FROM coffee_shop_sales  
WHERE MONTH(transaction_date) = 5 --- for month of (CM-May)
```

Total_Quantity_Sold
48233

TOTAL SALES

MOM DIFFERENCE AND MOM GROWTH

```
SELECT
    MONTH(transaction_date) AS month,
    ROUND(SUM(unit_price * transaction_qty)) AS total_sales,
    (SUM(unit_price * transaction_qty) - LAG(SUM(unit_price * transaction_qty), 1)
    OVER (ORDER BY MONTH(transaction_date))) / LAG(SUM(unit_price * transaction_qty), 1)
    OVER (ORDER BY MONTH(transaction_date)) * 100 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	total_sales	mom_increase_percentage
4	118941	NULL
5	156728	31.769242384551315

TOTAL ORDERS

MOM DIFFERENCE AND MOM GROWTH

```
SELECT
    MONTH(transaction_date) AS month,
    ROUND(COUNT(transaction_id)) AS total_orders,
    (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) -- for April and May
GROUP BY
    MONTH(transaction_date)
ORDER BY
```

month	total_orders	mom_increase_percentage
4	25335	HULL
5	33527	32.3347

TOTAL QUANTITY SOLD MOM DIFFERENCE AND MOM GROWTH

```
SELECT
    MONTH(transaction_date) AS month,
    ROUND(SUM(transaction_qty)) AS total_quantity_sold,
    (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_increase_percentage
FROM
    coffee_shop_sales
WHERE
    MONTH(transaction_date) IN (4, 5)    -- for April and May
GROUP BY
    MONTH(transaction_date)
ORDER BY
```

	month	total_quantity_sold	mom_increase_percentage
▶	4	36469	NULL
	5	48233	32.2575

CALENDAR TABLE

```
SELECT
    round(SUM(unit_price * transaction_qty)) AS total_sales,
    round(SUM(transaction_qty)) AS total_quantity_sold,
    round(COUNT(transaction_id)) AS total_orders
FROM
    coffee_shop_sales
WHERE
    transaction_date = '2023-05-18';
```

total_sales	total_quantity_sold	total_orders
5583	1659	1192

SALES BY WEEKDAY/ WEEKEND

```
SELECT
CASE
    WHEN DAYOFWEEK(transaction_date) IN (1, 7) THEN 'Weekends'
    ELSE 'Weekdays'
END AS day_type,
ROUND(SUM(unit_price * transaction_qty),2) AS total_sales
FROM
    coffee_shop_sales
WHERE
    MONTH(transaction_date) = 5 -- Filter for May
GROUP BY
CASE
    WHEN DAYOFWEEK(transaction_date) IN (1, 7) THEN 'Weekends'
```

day_type	total_sales
Weekdays	116627.84
Weekends	40099.92

SALES BY STORE LOCATION

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

store_location	Total_Sales
Hell's Kitchen	52598.929999999375
Astoria	52428.75999999932
Lower Manhattan	51700.06999999959

SALES TREND OVER PERIOD

```
SELECT AVG(total_sales) AS average_sales
FROM (
    SELECT
        SUM(unit_price * transaction_qty) AS total_sales
    FROM
        coffee_shop_sales
    WHERE
        MONTH(transaction_date) = 5 -- Filter for May
    GROUP BY
        transaction_date
) AS internal_query;
```

average_sales
5055.7341935483855

DAILY SALES FOR MONTH SELECTED

```
SELECT  
    DAY(transaction_date) AS day_of_month,  
    ROUND(SUM(unit_price * transaction_qty),1) AS total_sales  
FROM  
    coffee_shop_sales  
WHERE  
    MONTH(transaction_date) = 5 -- Filter for May  
GROUP BY  
    DAY(transaction_date)  
ORDER BY  
    DAY(transaction_date);
```

day_of_month	total_sales
1	4731.4
2	4625.5
3	4714.6
4	4589.7
5	4701

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 SUM(unit_price * transaction_qty) DESC
```

product_category	Total_Sales
Coffee	60362.8
Tea	44539.8
Bakery	18565.5
Drinking Chocolate	16319.8
Coffee beans	8768.9

SALES BY PRODUCTS

SELECT

```
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 SUM(unit_price * transaction_qty) DESC  
LIMIT 10
```

product_type	Total_Sales
Barista Espresso	20423.7
Brewed Chai tea	17427.4
Hot chocolate	16319.8
Gourmet brewed coffee	15559.2
Brewed herbal tea	10930

SALES BY DAY/ HOUR

SELECT

```
    ROUND(SUM(unit_price * transaction_qty)) AS Total_Sales,  
    SUM(transaction_qty) AS Total_Quantity,  
    COUNT(*) AS Total_Orders
```

FROM

```
coffee_shop_sales
```

WHERE

```
    DAYOFWEEK(transaction_date) = 3  
    AND HOUR(transaction_time) = 8  
    AND MONTH(transaction_date) = 5;
```

Total_Sales	Total_Quantity	Total_Orders
2969	874	612

SALES FOR ALL HOURS OF MAYMONTH

```
SELECT  
    HOUR(transaction_time) AS Hour_of_Day,  
    ROUND(SUM(unit_price * transaction_qty)) AS Total_Sales  
FROM  
    coffee_shop_sales  
WHERE  
    MONTH(transaction_date) = 5 -- Filter for May (month number 5)  
GROUP BY  
    HOUR(transaction_time)  
ORDER BY  
    HOUR(transaction_time);
```

	Hour_of_Day	Total_Sales
▶	6	4913
	7	14351
	8	18822
	9	19145
	10	19639

KEY INSIGHTS

- **Highest sales** - June 2023, \$166K saw a 6.2% growth in sales compared to May 2023.
- **Top Locations** - Hell's Kitchen led with \$52.60K, followed by Astoria & Lower Manhattan.
- **Top Selling Product** - Coffee dominated sales with \$60.36K revenue
- **Best-Selling Products Type** - Barista Espresso & Brewed chai tea lead the table.
- **Weekday vs Weekend Sales** - 74% of sales happen on weekdays.
- **Peak Sales Hours** - Highest sales were recorded between 8am to 10am on weekdays.

THANK
YOU