COFFEE SHOP SALES PROJECT

Convert `transaction\_date` column to proper date format:

UPDATE coffee\_shop\_sales

SET transaction\_date = STR\_TO\_DATE(transaction\_date, '%d-%m-%Y');

Alter `transaction\_date` column to date data type:

ALTER TABLE coffee\_shop\_sales

MODIFY COLUMN transaction\_date DATE;

Convert `transaction\_time` column to proper time format:

UPDATE coffee\_shop\_sales

SET transaction\_time = STR\_TO\_DATE(transaction\_time, '%H:%i:%s');

Alter `transaction\_time` column to time data type:

ALTER TABLE coffee\_shop\_sales

MODIFY COLUMN transaction\_time TIME;

Check data types of different columns:

DESCRIBE coffee\_shop\_sales;

KPI Calculations and Sales Analysis

Total Sales for May:

SELECT ROUND(SUM(unit\_price \* transaction\_qty)) AS Total\_Sales

FROM coffee\_shop\_sales

WHERE MONTH(transaction\_date) = 5;

Total Sales KPI - Month-on-Month (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)

GROUP BY MONTH(transaction\_date)

ORDER BY MONTH(transaction\_date);

Total Orders for May:

SELECT COUNT(transaction\_id) AS Total\_Orders

FROM coffee\_shop\_sales

WHERE MONTH(transaction\_date) = 5;

Total Orders KPI - Month-on-Month (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)

GROUP BY MONTH(transaction\_date)

ORDER BY MONTH(transaction\_date);

Total Quantity Sold for May:

SELECT SUM(transaction\_qty) AS Total\_Quantity\_Sold

FROM coffee\_shop\_sales

WHERE MONTH(transaction\_date) = 5;

Total Quantity Sold KPI - Month-on-Month (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)

GROUP BY MONTH(transaction\_date)

ORDER BY MONTH(transaction\_date);

Additional Queries

Calendar Table - Daily Sales, Quantity, and Total Orders for a Specific Date:

SELECT

SUM(unit\_price \* transaction\_qty) AS total\_sales,

SUM(transaction\_qty) AS total\_quantity\_sold,

COUNT(transaction\_id) AS total\_orders

FROM coffee\_shop\_sales

WHERE transaction\_date = '2023-05-18';

Sales Trend Over May:

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

GROUP BY transaction\_date

) AS internal\_query;

Daily Sales for May:

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

GROUP BY DAY(transaction\_date)

ORDER BY DAY(transaction\_date);

Comparing Daily Sales with Average Sales:

SELECT

day\_of\_month,

CASE

WHEN total\_sales > avg\_sales THEN 'Above Average'

WHEN total\_sales < avg\_sales THEN 'Below Average'

ELSE 'Average'

END AS sales\_status,

total\_sales

FROM (

SELECT

DAY(transaction\_date) AS day\_of\_month,

SUM(unit\_price \* transaction\_qty) AS total\_sales,

AVG(SUM(unit\_price \* transaction\_qty)) OVER () AS avg\_sales

FROM coffee\_shop\_sales

WHERE MONTH(transaction\_date) = 5

GROUP BY DAY(transaction\_date)

) AS sales\_data

ORDER BY day\_of\_month;

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

GROUP BY CASE

WHEN DAYOFWEEK(transaction\_date) IN (1, 7) THEN 'Weekends'

ELSE 'Weekdays'

END;

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;

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;

Sales by Products (Top 10):

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;

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 -- Tuesday

AND HOUR(transaction\_time) = 8 -- 8 AM

AND MONTH(transaction\_date) = 5; -- May

Sales from Monday to Sunday for May:

SELECT

CASE

WHEN DAYOFWEEK(transaction\_date) = 2 THEN 'Monday'

WHEN DAYOFWEEK(transaction\_date) = 3 THEN 'Tuesday'

WHEN DAYOFWEEK(transaction\_date) = 4 THEN 'Wednesday'

WHEN DAYOFWEEK(transaction\_date) = 5 THEN 'Thursday'

WHEN DAYOFWEEK(transaction\_date) = 6 THEN 'Friday'

WHEN DAYOFWEEK(transaction\_date) = 7 THEN 'Saturday'

ELSE 'Sunday'

END AS Day\_of\_Week,

ROUND(SUM(unit\_price \* transaction\_qty)) AS Total\_Sales

FROM coffee\_shop\_sales

WHERE MONTH(transaction\_date) = 5

GROUP BY CASE

WHEN DAYOFWEEK(transaction\_date) = 2 THEN 'Monday'

WHEN DAYOFWEEK(transaction\_date) = 3 THEN 'Tuesday'

WHEN DAYOFWEEK(transaction\_date) = 4 THEN 'Wednesday'

WHEN DAYOFWEEK(transaction\_date) = 5 THEN 'Thursday'

WHEN DAYOFWEEK(transaction\_date) = 6 THEN 'Friday'

WHEN DAYOFWEEK(transaction\_date) = 7 THEN 'Saturday'

ELSE 'Sunday'

END;

Sales for All Hours in May:

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

GROUP BY HOUR(transaction\_time)

ORDER BY HOUR(transaction\_time);