**MY SQL QUERIES**

**COFFEE SHOP SALES PROJECT**

**CONVERT DATE (transaction\_date) COLUMN TO PROPER DATE FORMAT:**

UPDATE coffee\_sales

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

**CONVERT TIME (transaction\_time) COLUMN TO PROPER DATE FORMAT:**

UPDATE coffee\_sales

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

**CHANGING DATA TYPE OF COLUMNS:**

ALTER TABLE coffee\_sales

MODIFY COLUMN transaction\_date date,

MODIFY COLUMN transaction\_time time,

MODIFY COLUMN transaction\_id INT,

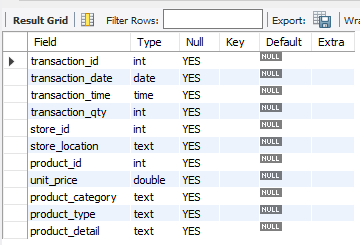
MODIFY COLUMN transaction\_qty INT,

MODIFY COLUMN store\_id INT,

MODIFY COLUMN product\_id INT;

**DATA TYPES OF DIFFERENT COLUMNS:**

DESCRIBE coffee\_sales;



**TOTAL SALES:**

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

FROM coffee\_sales

WHERE MONTH(transaction\_date) = 5; -- for month of (CM-May)



**TOTAL SALES KPI - 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\_sales

WHERE

MONTH(transaction\_date) IN (4, 5) -- for months of April and May

GROUP BY

MONTH(transaction\_date)

ORDER BY

MONTH(transaction\_date);



**TOTAL ORDERS:**

SELECT COUNT(transaction\_id) as Total\_Orders

FROM coffee\_sales

WHERE MONTH (transaction\_date)= 5 ; -- for month of (CM-May)



**TOTAL ORDERS KPI - 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\_sales

WHERE

MONTH(transaction\_date) IN (4, 5) -- for April and May

GROUP BY

MONTH(transaction\_date)

ORDER BY

MONTH(transaction\_date);



**TOTAL QUANTITY SOLD:**

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

FROM coffee\_sales

WHERE MONTH(transaction\_date) = 5; -- for month of (CM-May)



**TOTAL QUANTITY SOLD KPI - 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\_sales

WHERE

MONTH(transaction\_date) IN (4, 5) -- for April and May

GROUP BY

MONTH(transaction\_date)

ORDER BY

MONTH(transaction\_date);



**CALENDAR TABLE – DAILY SALES, QUANTITY and TOTAL ORDERS:**

SELECT

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

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

COUNT(transaction\_id) AS total\_orders

FROM

coffee\_sales

WHERE

transaction\_date = '2023-05-18'; --For 18 May 2023



***Below query can be used to Round off the values:***

SELECT

CONCAT(ROUND(SUM(unit\_price \* transaction\_qty) / 1000, 1),'K') AS total\_sales,

CONCAT(ROUND(COUNT(transaction\_id) / 1000, 1),'K') AS total\_orders,

CONCAT(ROUND(SUM(transaction\_qty) / 1000, 1),'K') AS total\_quantity\_sold

FROM

coffee\_sales

WHERE

transaction\_date = '2023-05-18'; --For 18 May 2023



**SALES TREND OVER PERIOD:**

SELECT AVG(total\_sales) AS average\_sales

FROM (

SELECT

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

FROM

coffee\_sales

WHERE

MONTH(transaction\_date) = 5 -- Filter for May

GROUP BY

transaction\_date

) AS internal\_query;



**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\_sales

WHERE

MONTH(transaction\_date) = 5 -- Filter for May

GROUP BY

DAY(transaction\_date)

ORDER BY

DAY(transaction\_date);

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

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\_sales

WHERE

MONTH(transaction\_date) = 5 -- Filter for May

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\_sales

WHERE

MONTH(transaction\_date) = 5 -- Filter for May

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\_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\_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\_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\_sales

WHERE

DAYOFWEEK(transaction\_date) = 3 -- Filter for Tuesday (1 is Sunday, 2 is Monday, ..., 7 is Saturday)

AND HOUR(transaction\_time) = 8 -- Filter for hour number 8

AND MONTH(transaction\_date) = 5; -- Filter for May (month number 5)



***TO GET SALES FROM MONDAY TO SUNDAY FOR MONTH OF 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\_sales

WHERE

MONTH(transaction\_date) = 5 -- Filter for May (month number 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;



***TO GET SALES FOR ALL HOURS FOR MONTH OF MAY***

SELECT

HOUR(transaction\_time) AS Hour\_of\_Day,

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

FROM

coffee\_sales

WHERE

MONTH(transaction\_date) = 5 -- Filter for May (month number 5)

GROUP BY

HOUR(transaction\_time)

ORDER BY

HOUR(transaction\_time);

