**MY SQL QUERIES**

**COFFEE\_SHOP\_SALES\_PROJECT**

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

UPDATE coffee\_shop\_sales

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

**ALTER DATE (transaction\_date) COLUMN TO DATE DATA TYPE**

ALTER TABLE coffee\_shop\_sales

MODIFY COLUMN transaction\_date DATE;

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

UPDATE coffee\_shop\_sales

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

**ALTER TIME (transaction\_time) COLUMN TO DATE DATA TYPE**

ALTER TABLE coffee\_shop\_sales

MODIFY COLUMN transaction\_time TIME;

**DATA TYPES OF DIFFERENT COLUMNS**

DESCRIBE coffee\_shop\_sales;

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**RENAME COLUMN NAME `ï»¿transaction\_id` to transaction\_id**

ALTER TABLE coffee\_shop\_sales

RENAME COLUMN `ï»¿transaction\_id` transaction\_id ;

**-- 1. Calculate the Total\_sales for Respective Month**

SELECT ROUND(SUM(transaction\_qty\*unit\_price),0) as Total\_Sales

FROM coffee\_shop\_sales

Where

month(transaction\_date)= 5; -- May month



**-- 2. Calculate the TOTAL SALES KPI and diff in sales b/w the selected month and the previous month**

SELECT

MONTH(transaction\_date) as Month,

ROUND(SUM(transaction\_qty\*unit\_price),0) as Total\_Sales,

(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 AS mom\_increase\_percentage -- Percentage

FROM

coffee\_shop\_sales

WHERE

MONTH(transaction\_date) IN (4,5) -- For month of April(PM) and May(CM)

GROUP BY

MONTH(transaction\_date)

ORDER BY

MONTH(transaction\_date);



**-- 3. Calculate the Total Number of Order for Respective months**

SELECT

COUNT(transaction\_id) as Total\_Orders

FROM

coffee\_shop\_sales

WHERE

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



**-- 4. Calculate the TOTAL ORDERS KPI and diff in Number Of Orders b/w the selected month and the previous month**

SELECT

MONTH(transaction\_date) as Month,

ROUND(COUNT(transaction\_qty\*unit\_price),2) as Total\_Sales, -- Total\_Ordes

(COUNT(transaction\_qty\*unit\_price) - LAG(COUNT(transaction\_qty\*unit\_price),1)

OVER (ORDER BY MONTH(transaction\_date))) / LAG(COUNT(transaction\_qty\*unit\_price),1)

OVER (ORDER BY MONTH(transaction\_date))\*100 AS mom\_increase\_percentage -- Percentage

FROM

coffee\_shop\_sales

WHERE

MONTH(transaction\_date) IN (4,5) -- For month of April(PM) and May(CM)

GROUP BY

MONTH(transaction\_date)

ORDER BY

month(transaction\_date);



**-- 5.Calculate the Total Quantity Sold for Respective months**

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

FROM coffee\_shop\_sales

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



**-- 6. Calculate the TOTAL QUANTITY SOLD KPI and diff in Number Of Orders b/w the selected month and the previous month**

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(transaction\_date);



**CALENDAR TABLE - 7. On Daily Basis Total Sales,Quantity and Orders**

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\_shop\_sales

WHERE

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



**-- 8. Sales Trends Over a Periods**

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;



**-- 9. Total Sales on Daily Basis for respective Months**

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);

 

**-- 10. 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\_shop\_sales

WHERE

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

GROUP BY

DAY(transaction\_date)

) AS sales\_data

ORDER BY

day\_of\_month;

 

**-- 11. Sales on Weekdays and 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 -- for May

GROUP BY

CASE

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

ELSE 'Weekdays'

END;



**--12 Sales by Store Location for respective months**

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



**-- 13. Total 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 -- 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\_shop\_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\_shop\_sales

WHERE

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

GROUP BY

HOUR(transaction\_time)

ORDER BY

HOUR(transaction\_time);

