**MY SQL QUERIES**

**COFFEE SHOP SALES PROJECT**

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

**update coffee**

**set transaction\_date = str\_to\_date(transaction\_date, "%d-%m-%Y");**

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

**Alter table coffee**

**modify column transaction\_date date;**

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

**update coffee**

**set transaction\_time = str\_to\_date(transaction\_time, "%H:%i:%s");**

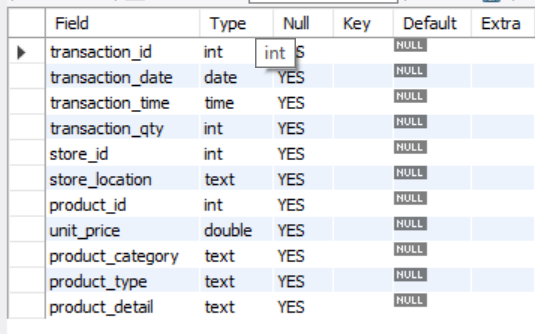
**ALTER TIME (transaction\_time) COLUMN TO DATE DATA TYPE**

**Alter table coffee**

**modify column transaction\_time time;**

**DATA TYPES OF DIFFERENT COLUMNS**

**describe coffee;**

****

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

**ALTER TABLE coffee**

**CHANGE COLUMN `¿transaction\_id` transaction\_id INT;**

**TOTAL SALES**

**select sum(transaction\_qty \* unit\_price) as total\_sales from coffee;**

**TOTAL SALES KPI - MOM DIFFERENCE AND MOM GROWTH**

**select**

**month(transaction\_date) as month, --- no of months**

**round(sum(transaction\_qty \* unit\_price)) as total\_sales, -- total sales column**

**(sum(unit\_price \* transaction\_qty) - lag(sum(unit\_price \* transaction\_qty) , 1) -- previous month sales difference**

**over (order by month(transaction\_date))) / lag(sum(unit\_price \* transaction\_qty) , 1) -- division by pm sales**

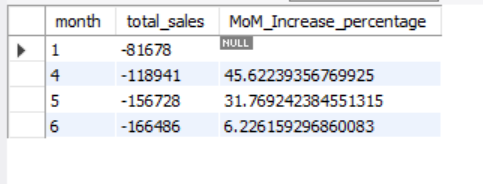
**over (order by month(transaction\_date)) \* 100 as MoM\_Increase\_percentage -- percentage**

**from coffee**

**where month(transaction\_date) in (1,4,5,6)**

**group by month(transaction\_date)**

**order by month(transaction\_date);**

****

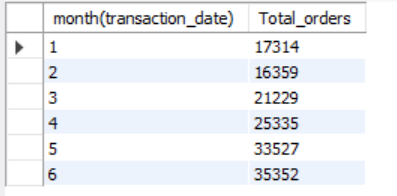
**TOTAL ORDERS**

**select month(transaction\_date), count(transaction\_id) as Total\_orders**

**from coffee**

**where month(transaction\_date)**

**group by month(transaction\_date);**

****

**TOTAL ORDERS KPI - MOM DIFFERENCE AND MOM GROWTH**

**select**

**month(transaction\_date) as month,**

**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)**

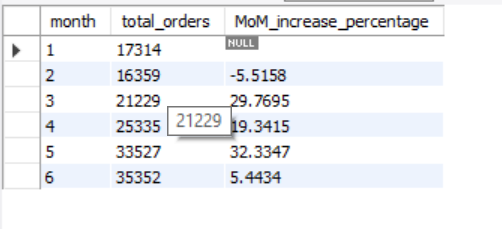
**over(order by month(transaction\_date)) \* 100 as MoM\_increase\_percentage**

**from coffee**

**where month(transaction\_date)**

**group by month(transaction\_date)**

**order by month(transaction\_date);**

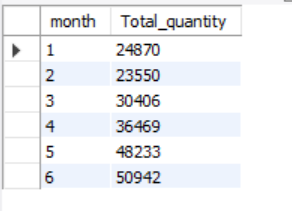
****

**TOTAL QUANTITY SOLD**

**select month(transaction\_date) as month, sum(transaction\_qty) as Total\_quantity from coffee**

**where month(transaction\_date)**

**group by month(transaction\_date);**

****

**TOTAL QUANTITY SOLD KPI - MOM DIFFERENCE AND MOM GROWTH**

**select**

**month(transaction\_date) as month,**

**sum(transaction\_qty) as total\_Qty,**

**(sum(transaction\_qty) - lag(sum(transaction\_qty),1)**

**over(order by month(transaction\_date))) / lag(count(transaction\_id),1)**

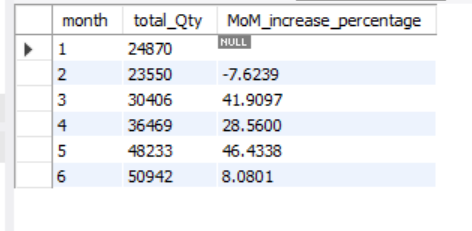
**over(order by month(transaction\_date)) \* 100 as MoM\_increase\_percentage**

**from coffee**

**where month(transaction\_date)**

**group by month(transaction\_date)**

**order by month(transaction\_date);**

****

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

select transaction\_date,

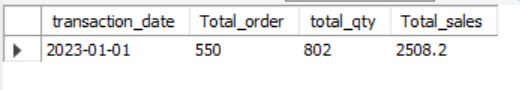
count(transaction\_id) as Total\_order,

sum(transaction\_qty) as total\_qty,

round(sum(unit\_price \* transaction\_qty),1) as Total\_sales

from coffee

where transaction\_date= '2023-01-01';

****

**SALES TREND OVER PERIOD**

**DAILY SALES FOR MONTH SELECTED**

**select**

**day(transaction\_date) as day\_of\_month,**

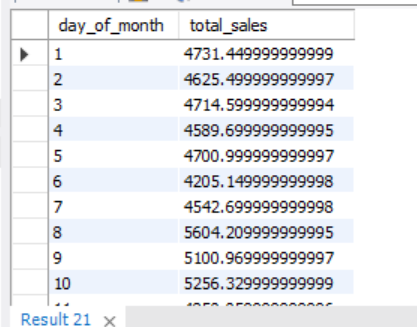
**sum(transaction\_qty \* unit\_price) as total\_sales**

**from coffee**

**where month(transaction\_date)= 5**

**group by day(transaction\_date)**

**order by day(transaction\_date) asc;**

****

***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

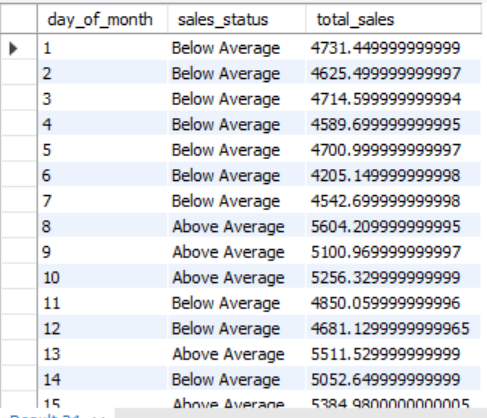
GROUP BY

DAY(transaction\_date)

) AS sales\_data

ORDER BY

day\_of\_month;



**SALES BY WEEKDAY / WEEKEND:**

**-- weekdays - Monday - Friday**

**-- weekends -- Saturday and Sunday -- Sun = 1 Saturday= 7**

select

case when dayofweek(transaction\_date) in (1,7) then 'weekends'

else 'weekdays'

end as daytype,

sum(transaction\_qty \* unit\_price) as total\_sales

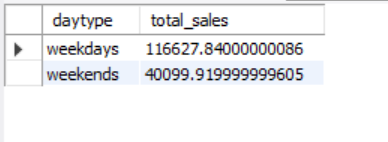
from coffee

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,**

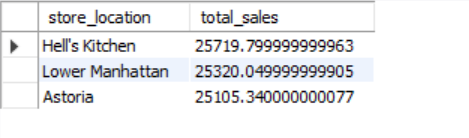
**sum(transaction\_qty \* unit\_price) as total\_sales**

**from coffee**

**where month(transaction\_date)= 2**

**group by store\_location**

**order by total\_sales desc;**

****

**SALES BY PRODUCT CATEGORY**

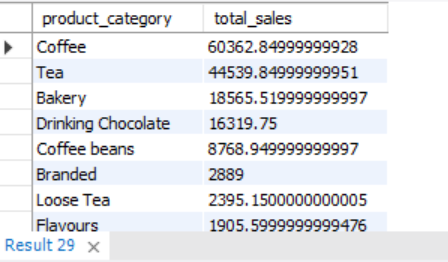
select product\_category,

sum(transaction\_qty \* unit\_price) as total\_sales from coffee

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,

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

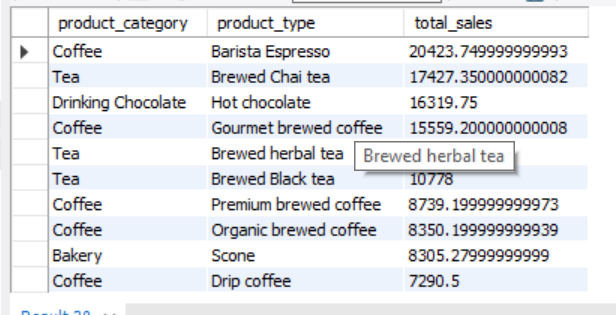
FROM coffee\_shop\_sales

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 FOR ALL HOURS 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);



**Thank You**