MySQL Queries

Cafe Coffee Day 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');

ALTER DATE (transaction_date) COLUMN TO DATE DATA

TYPE alter table coffee_sales

modify column transaction_date date;

CONVERT TIME (transaction_time) COLUMN TO PROPER DATE FORMAT

UPDATE coffee_sales

SET transaction_time = STR_TO_DATE(transaction_time, '%H:%i:%s');

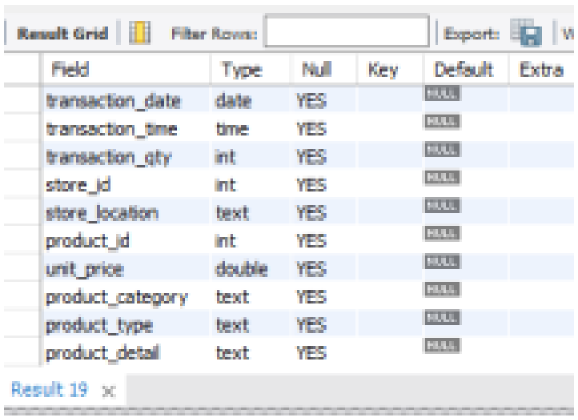
ALTER TIME (transaction_time) COLUMN TO DATE DATA

TYPE Alter table coffee_sales

Modify column transaction_time Time;

DATA TYPES OF DIFFERENT COLUMNS

describe coffee_sales;



Field	Type	Null	Key	Default	Extra
transaction_date	date	YES		NULL	
transaction_time	time	YES		NULL	
transaction_qty	int	YES		NULL	
store_id	int	YES		NULL	
store_location	text	YES		NULL	
product_id	int	YES		NULL	
unit_price	double	YES		NULL	
product_category	text	YES		NULL	
product_type	text	YES		NULL	
product_detail	text	YES		NULL	

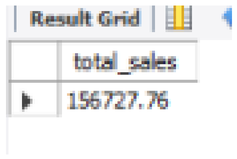
TOTAL SALES

select

round(sum(transaction_qty * unit_price),3) as total_sales

from coffee_sales

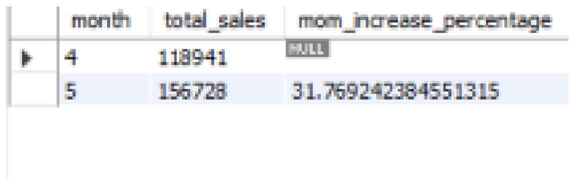
```
where month(transaction_date)=4 - - - for April month
```


Result Grid

	total_sales
▶	156727.76

TOTAL SALES KPI - MOM DIFFERENCE AND MOM GROWTH

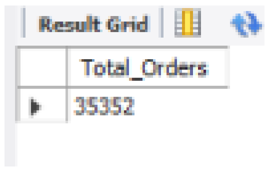
```
SELECT
    MONTH(transaction_date) AS month,
    ROUND(SUM(unit_price * transaction_qty)) AS total_sales,
    (SUM(unit_price * transaction_qty) - LAG(SUM(unit_price * transaction_qty), 1) OVER
(ORDER BY MONTH(transaction_date))) / LAG(SUM(unit_price * transaction_qty), 1) OVER
(ORDER BY MONTH(transaction_date)) * 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)
```



	month	total_sales	mom_increase_percentage
▶	4	118941	NULL
	5	156728	31.769242384551315

TOTAL ORDERS

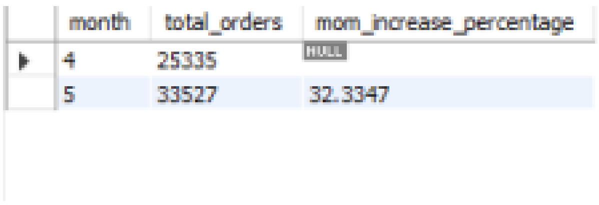
```
SELECT COUNT(transaction_id) as Total_Orders
FROM coffee_sales
WHERE MONTH (transaction_date)= 6 -- for month of June
```


Result Grid

	Total_Orders
▶	35352

TOTAL ORDERS KPI - MOM DIFFERENCE AND MOM GROWTH

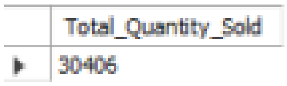
```
SELECT
   MONTH(transaction_date) AS month,
   ROUND(COUNT(transaction_id)) AS total_orders,
   (COUNT(transaction_id) - LAG(COUNT(transaction_id), 1)
   OVER (ORDER BY MONTH(transaction_date))) / LAG(COUNT(transaction_id), 1)
OVER (ORDER BY MONTH(transaction_date)) * 100 AS mom_increase_percentage
FROM
   coffee_shop_sales
WHERE
   MONTH(transaction_date) IN (4, 5) -- for April and May
GROUP BY
   MONTH(transaction_date)
ORDER BY
   MONTH(transaction_date);
```



month	total_orders	mom_increase_percentage
4	25335	NULL
5	33527	32.3347

TOTAL QUANTITY SOLD

```
SELECT SUM(transaction_qty) as Total_Quantity_Sold
FROM coffee_sales
WHERE MONTH(transaction_date) = 3; (For the month of
```



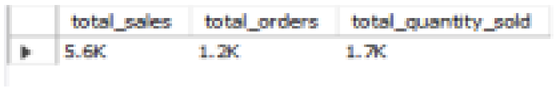
Total_Quantity_Sold
30406

March)

CALENDAR TABLE – DAILY SALES, QUANTITY and TOTAL 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
```

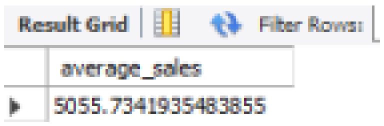
```
    coffee_sales
WHERE
    transaction_date = '2023-05-18'; --For 18 May 2023
```



```
total_sales   total_orders   total_quantity_sold
5.6K          1.2K           1.7K
```

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;
```

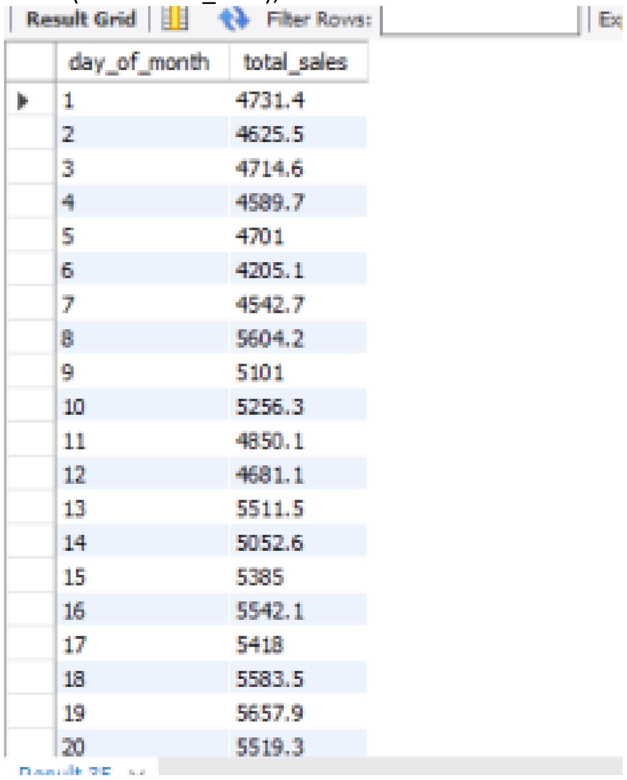


```
Result Grid | Filter Rows:
average_sales
5055.7341935483855
```

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_sales
```

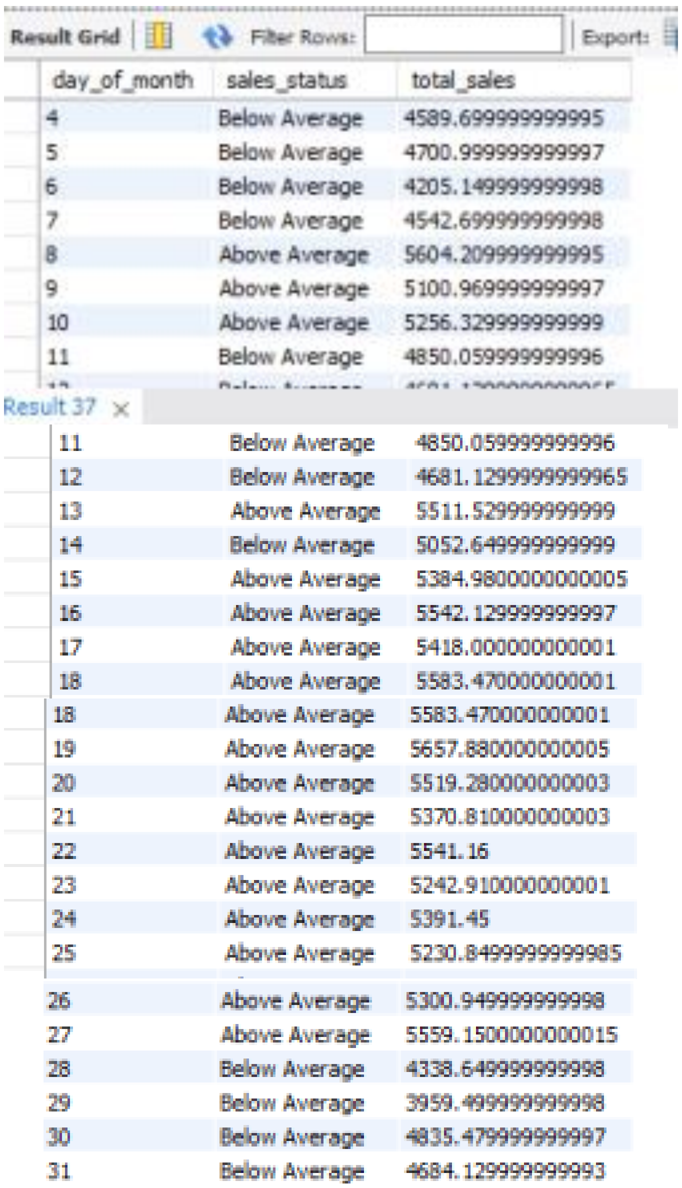
```
WHERE
   MONTH(transaction_date) = 5 -- Filter for May
GROUP BY
   DAY(transaction_date)
ORDER BY
   DAY(transaction_date);
```



day_of_month	total_sales
1	4731.4
2	4625.5
3	4714.6
4	4589.7
5	4701
6	4205.1
7	4542.7
8	5604.2
9	5101
10	5256.3
11	4850.1
12	4681.1
13	5511.5
14	5052.6
15	5385
16	5542.1
17	5418
18	5583.5
19	5657.9
20	5519.3

COMPARING DAILY SALES WITH AVERAGE SALES – IF GREATER THAN "ABOVE AVERAGE" and LESSER THAN "BELOW AVERAGE"

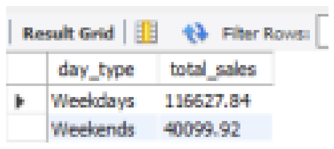
```
SELECT
   day_of_month,
   CASE
      WHEN total_sales > avg_sales THEN 'Above Average'
      WHEN total_sales < avg_sales THEN 'Below Average'
      ELSE 'Average'
   END AS sales_status,
   total_sales
FROM (
   SELECT
      DAY(transaction_date) AS day_of_month,
      SUM(unit_price * transaction_qty) 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;
```



day_of_month	sales_status	total_sales
4	Below Average	4589.699999999995
5	Below Average	4700.999999999997
6	Below Average	4205.149999999998
7	Below Average	4542.699999999998
8	Above Average	5604.209999999995
9	Above Average	5100.969999999997
10	Above Average	5256.329999999999
11	Below Average	4850.059999999996
11	Below Average	4850.059999999996
12	Below Average	4681.1299999999965
13	Above Average	5511.529999999999
14	Below Average	5052.649999999999
15	Above Average	5384.9800000000005
16	Above Average	5542.129999999997
17	Above Average	5418.000000000001
18	Above Average	5583.470000000001
18	Above Average	5583.470000000001
19	Above Average	5657.880000000005
20	Above Average	5519.280000000003
21	Above Average	5370.810000000003
22	Above Average	5541.16
23	Above Average	5242.910000000001
24	Above Average	5391.45
25	Above Average	5230.8499999999985
26	Above Average	5300.949999999998
27	Above Average	5559.1500000000015
28	Below Average	4338.649999999998
29	Below Average	3959.499999999998
30	Below Average	4835.479999999997
31	Below Average	4684.129999999993

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;
```



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_sales
WHERE
        MONTH(transaction_date) =5
GROUP BY store_location
ORDER BY Total_Sales 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 Total_Sales 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_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_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);
```