

MY-SQL QUERIES

- CONVERTING (transaction_date) COLUMN TO PROPER DATE FORMAT-
USE coffeesales;

```
UPDATE coffee_shop_sales  
SET transaction_date= STR_TO_DATE(transaction_date,'%Y-%m-%d');
```

- ALTERING COLUMN TO DATE DATA TYPE-

```
ALTER TABLE coffee_shop_sales  
MODIFY COLUMN transaction_date DATE;
```

- CONVERTING (transaction_time) COLUMN TO PROPER TIME FORMAT-

```
UPDATE coffee_shop_sales  
SET transaction_time= TIME(transaction_time);
```

- ALTERING COLUMN TO TIME DATA TYPE-

```
ALTER TABLE coffee_shop_sales  
MODIFY COLUMN transaction_time TIME;
```

- TO OBSERVE THE COLUMN-

```
DESCRIBE coffee_shop_sales;
```

	Field	Type	Null	Key	Default	Extra
▶	transaction_id	int	YES		NULL	
	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	

- CHANGING COLUMN NAME FROM “transaction_id” to transaction_id

```
ALTER TABLE coffee_shop_sales  
CHANGE COLUMN transaction_id transaction_id INT ;
```

- **TOTAL SALES-**

```
SELECT MONTH(transaction_date), ROUND(SUM(unit_price*transaction_qty)) AS Total_sales
FROM coffee_shop_sales
WHERE MONTH(transaction_date)=5 #--For may month
GROUP BY MONTH(transaction_date);
```

	MONTH(transaction_date)	Total_sales
►	5	156728

- **TOTAL SALES- MONTH ON MONTH 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
GROUP BY
    MONTH(transaction_date)
ORDER BY
    MONTH(transaction_date);
```

	month	total_sales	mom_increase_percentage
►	1	81678	NULL
	2	76145	-6.773632571126168
	3	98835	29.79766679944006
	4	118941	20.34346648362807
	5	156728	31.769242384551315
	6	166486	6.226159296860083

- **TOTAL ORDERS-**

```
SELECT MONTH(transaction_date), (COUNT(transaction_id)) AS Total_Orders
FROM coffee_shop_sales
WHERE MONTH(transaction_date)=5 #--For may month
GROUP BY MONTH(transaction_date);
```

	MONTH(transaction_date)	Total_Orders
▶	5	33527

- **TOTAL ORDERS-- MONTH ON MONTH 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
GROUP BY
    MONTH(transaction_date)
ORDER BY
    MONTH(transaction_date);
```

	month	total_orders	mom_increase_percentage
▶	1	17314	NULL
	2	16359	-5.5158
	3	21229	29.7695
	4	25335	19.3415
	5	33527	32.3347
	6	35352	5.4434

- **TOTAL QUANTITY SOLD-**

```
SELECT MONTH(transaction_date), (SUM(transaction_qty)) AS total_quantity_sold
FROM coffee_shop_sales
WHERE MONTH(transaction_date)=5 --For may month
GROUP BY MONTH(transaction_date);
```

	MONTH(transaction_date)	total_quantity_sold
▶	5	48233

- **TOTAL QUANTITY-- MONTH ON MONTH 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)  -- for April and May
GROUP BY
    MONTH(transaction_date)
ORDER BY
    MONTH(transaction_date);
```

	month	total_quantity_sold	mom_increase_percentage
▶	4	36469	NULL
	5	48233	32.2575

- **FOR CALENDAR TABLE- DAILY SALES, QUANTITY AND TOTAL ORDER-**

```
SELECT ROUND(SUM(unit_price * transaction_qty),1) AS Total_sales,
SUM(transaction_qty) AS Total_Qty_Sold,
COUNT(transaction_id) AS Total_Orders
FROM coffee_shop_sales
WHERE
Transaction_date= '2023-05-18';
```

	month	total_quantity_sold	mom_increase_percentage
▶	4	36469	NULL
	5	48233	32.2575

- **SALES ANALYSIS BY WEEKDAYS AND WEEKENDS-**

```
SELECT SUM(unit_price * transaction_qty)
AS sales_by_weekend_weekdays
FROM coffee_shop_sales
WHERE MONTH(transaction_date) = 5
GROUP BY DAYOFWEEK(transaction_date) IN (1,7);
```

	sales_by_weekend_weekdays
▶	116627.840000000086
	40099.9199999999605

- **SALES ANALYSIS BY STORE LOCATION-**

```
SELECT store_location, SUM(unit_price * transaction_qty) AS total_sales
FROM coffee_shop_sales
WHERE MONTH(transaction_date) = 5 -- MAY
GROUP BY store_location
ORDER BY total_sales DESC;
```

	store_location	total_sales
▶	Hell's Kitchen	52598.9299999999375
	Astoria	52428.759999999932
	Lower Manhattan	51700.069999999959

- **DAILY SALES ANALYSIS-**

```
SELECT DAY(transaction_date) as day_of_month
,SUM(unit_price * transaction_qty) as sales
FROM coffee_shop_sales
WHERE MONTH (transaction_date)=5
GROUP BY DAY(transaction_date)
ORDER BY DAY(transaction_date);
```


	day_of_month	sales
▶	1	4731.449999999999
	2	4625.499999999997
	3	4714.599999999994
	4	4589.699999999995
	5	4700.999999999997
	6	4205.149999999998
	7	4542.699999999998
	8	5604.209999999995

	day_of_month	sales
	10	5256.329999999999
	11	4850.059999999996
	12	4681.1299999999965
	13	5511.529999999999
	14	5052.649999999999
	15	5384.9800000000005
	16	5542.129999999997
	17	5418.000000000001

	day_of_month ▲	sales
	19	5657.8800000000005
	20	5519.2800000000003
	21	5370.8100000000003
	22	5541.16
	23	5242.9100000000001
	24	5391.45
	25	5230.8499999999985
	26	5300.949999999998

	27	5559.15000000000015
	28	4338.6499999999998
	29	3959.4999999999998
	30	4835.479999999997
	31	4684.1299999999993

- **SALES WRT PRODUCT CATEGORY-**

```
SELECT product_category, SUM(unit_price * transaction_qty) AS total_sales
FROM coffee_shop_sales
WHERE MONTH(transaction_date) = 5 -- MAY
GROUP BY product_category
ORDER BY total_sales DESC;
```

	product_category	total_sales
▶	Coffee	60362.849999999928
	Tea	44539.849999999951
	Bakery	18565.519999999997
	Drinking Chocolate	16319.75
	Coffee beans	8768.949999999997
	Branded	2889
	Loose Tea	2395.1500000000005
	Flavours	1905.5999999999476

- TOP 10 PRODUCTS-

```
SELECT product_type, SUM(unit_price * transaction_qty) AS total_sales
FROM coffee_shop_sales
WHERE MONTH(transaction_date) = 5 AND product_category="Coffee" -- MAY
GROUP BY product_type
ORDER BY total_sales LIMIT 10;
```

	product_type	total_sales
▶	Drip coffee	7290.5
	Organic brewed coffee	8350.199999999939
	Premium brewed coffee	8739.199999999973
	Gourmet brewed coffee	15559.200000000008
	Barista Espresso	20423.749999999993

- SALES ANALYSIS BY HOUR AND DAY-

```
select * FROM coffee_shop_sales;
SELECT SUM(unit_price * transaction_qty) AS total_sales
      ,SUM(transaction_qty)
      ,COUNT(transaction_id)
FROM coffee_shop_sales
WHERE MONTH(transaction_date) =5
AND DAYOFWEEK(transaction_date) =2
AND HOUR(transaction_time) =8;
```

	total_sales	SUM(transaction_qty)	COUNT(transaction_id)
▶	2697.0299999999999	819	572