

SWIGGY PROJECT PRESENTATION

Presented by AKASH SINGH

INTRODUCTION

This is MS SQL PROJECT

My name is Akash singh. I am from Mathura and i have completed polytechnic diploma adn b tech from civil branch. and I have utilized real based swiggy project and i covered basic problem, intermediate problem and advance problem

THANK YOU

DATA VALIDATION AND CLEANING

1. Null check
2. Blank or Empty Strings data.
3. Duplicate detection and delete duplication

NULL CHECK

```
select
sum(CASE when [State] is null then 1 else 0 end) as null_state,
sum(CASE when City is null then 1 else 0 end) as null_city,
sum(CASE when Order_Date is null then 1 else 0 end) as null_Order_Date,
sum(CASE when Restaurant_Name is null then 1 else 0 end) as null_Restaurant_Name,
sum(CASE when [Location] is null then 1 else 0 end) as null_Location,
sum(CASE when Category is null then 1 else 0 end) as null_Category,
sum(CASE when Dish_Name is null then 1 else 0 end) as null_Dish_Name,
sum(CASE when Price_INR is null then 1 else 0 end) as null_Price_INR,
sum(CASE when Rating is null then 1 else 0 end) as null_Rating,
sum(CASE when Rating_Count is null then 1 else 0 end) as null_Rating_Count
from Swiggy_Data;
```

CHECK BLANK DATA

```
select * from Swiggy_Data  
where  
State = '' OR City = ''  
OR  
Restaurant_Name = ''  
OR  
Location = '' OR Dish_Name = '';
```

DETECT DUPLICATE

```
select
[State], City, Order_Date, Restaurant_Name,[Location],Category, Dish_Name,
Price_INR,Rating, Rating_Count, count(*) as CNT
from Swiggy_Data
group by
[State],City, Order_Date, Restaurant_Name,[Location],Category, Dish_Name,
Price_INR,Rating, Rating_Count
HAVING COUNT(*) > 1;
```

DELETE DUPLICATION

```
- with cte as(
    select *, ROW_NUMBER() OVER(PARTITION BY state,
    City, Order_Date, restaurant_name, Location, Category,
    Dish_name, Price_INR, rating, Rating_Count
    Order by (select Null)
)as rn
from Swiggy_Data
)
Delete from cte where rn > 1;
```

CREATING SCHEMA

1. Dimention table
2. Data table

1. Dimension tables are creating.

DIM_DATE TABLE

```
create table dim_date(
    date_id int identity(1,1) primary key,
    full_date date,
    year int,
    month int,
    month_name varchar(20),
    quarter int,
    day int,
    week int
);
```

DIM_LOCATION TABLE

```
create table dim_location(
    location_id int identity(1,1) primary key,
    state varchar(100),
    city varchar(100),
    location varchar(100)
);
```

DIM_RESTAURANT TABLE

```
|> create table dim_restaurant(
|>     restaurant_id int primary key identity(1,1),
|>     reataurant_name varchar(100)
|> );
```

DIM_CATEGORY TABLE

```
create table dim_category(
category_id int primary key identity(1,1),
category varchar(100)
);
```

DIM_DISH TABLE

```
/ create table dim_dish(
    dish_id int primary key identity(1,1),
    dish_name varchar(200)
);
```

2. Create data table

FACT TABLE

```
Create table fact_swiggy_orders(
    order_id int identity(1,1) primary key,
    price_inr decimal(10,2),
    rating decimal(4,2),
    rating_count int,

    date_id int,
    location_id int,
    restaurant_id int,
    category_id int,
    dish_id int

    foreign key (date_id) references dim_date(date_id),
    foreign key (location_id) references dim_location(location_id),
    foreign key (restaurant_id) references dim_restaurant(restaurant_id),
    foreign key (category_id) references dim_category(category_id),
    foreign key (dish_id) references dim_dish(dish_id)
);
```

Data Insert in all tables

INSERT DATA DIM_DATE

```
insert into dim_date(full_date, year, month, month_name, quarter, day, week)
select distinct
order_date,
YEAR(order_date),
MONTH(Order_Date),
DATENAME(MONTH, Order_Date),
DATEPART(QUARTER, Order_Date),
DAY(Order_Date),
DATEPART(WEEK, Order_Date)
from swiggy_data
where Order_Date is not null;
```

INSERT DATA DIM_LOCATION

```
insert into dim_location(state, city, location)
select distinct
    state, city, location
from Swiggy_Data;
```

INSERT DATA DIM_RESTAURANT

```
insert into dim_restaurant(restaurant_name)
select distinct
    restaurant_name
from Swiggy_Data;
```

INSERT DATA DIM_CATEGORY

```
insert into dim_category(category)
  select distinct
    category
  from Swiggy_Data;
```

INSERT DATA DIM_DISH

```
insert into dim_dish(Dish_name)
select distinct
    Dish_name
from Swiggy_Data;
```

INSERT DATA FACT_SWIGGY_ORDERS

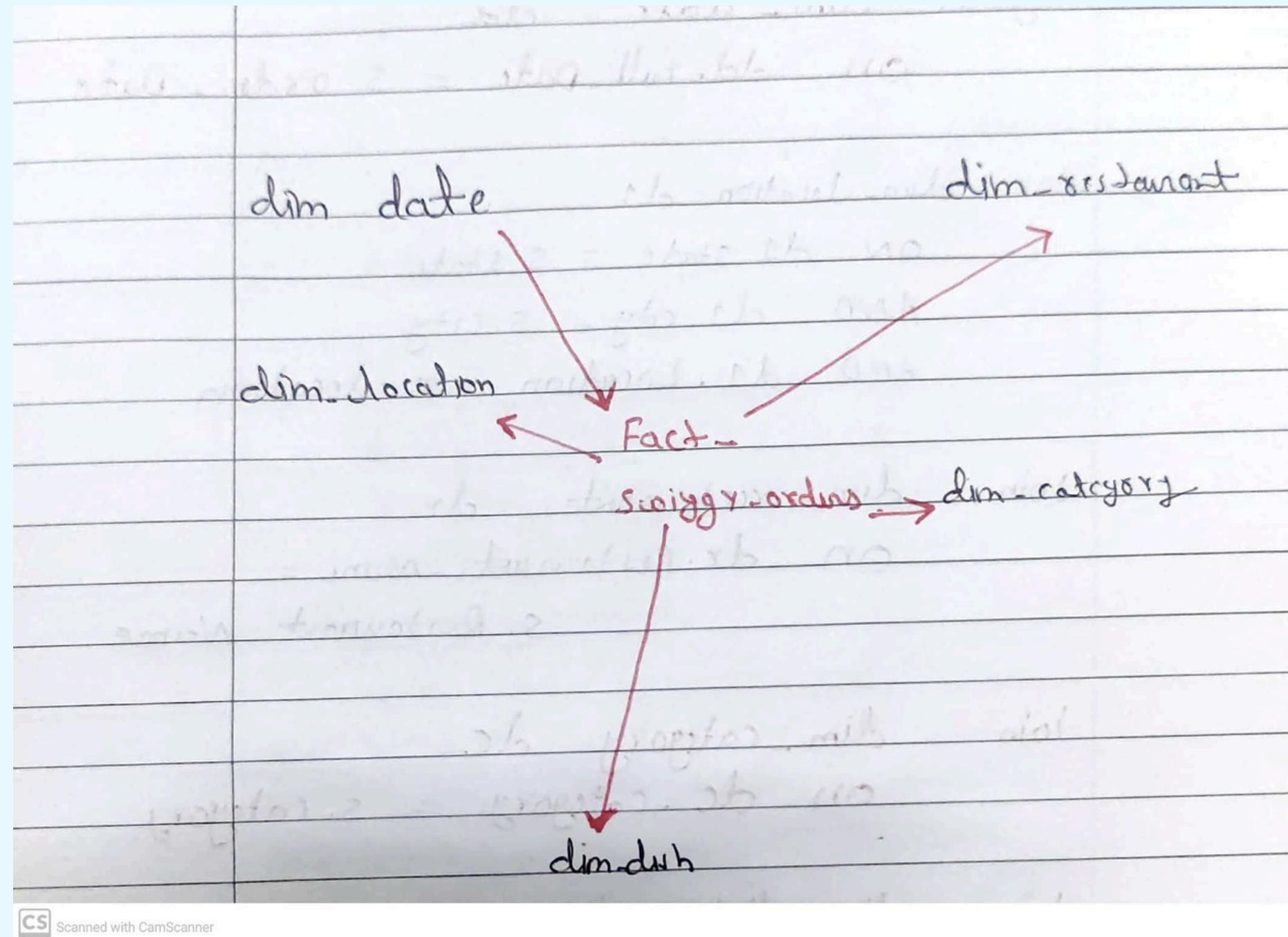
```
insert into fact_swiggy_orders
(date_id,price_inr,rating,rating_count,
location_id,restaurant_id,category_id,dish_id)
select
dd.date_id,s.Price_INR,s.Rating,s.Rating_Count,
d1.location_id,dr.restaurant_id,dc.category_id,
dsh.dish_id
from Swiggy_Data s

join dim_date dd
on dd.full_date = s.Order_Date
join dim_location d1
on d1.state = s.State
and d1.city = s.City
and d1.location = s.Location
join dim_restaurant dr
on dr.Restaurant_name = s.Restaurant_Name
join dim_category dc
on dc.category = s.Category
join dim_dish dsh
on dsh.dish_name = s.Dish_Name;
```

JOIN ALL TABLES

```
select * from fact_swiggy_orders f
join dim_date d
on f.date_id = d.date_id
join dim_location l
on l.location_id = f.location_id
join dim_restaurant r
on r.restaurant_id = f.restaurant_id
join dim_category c
on c.category_id = f.category_id
join dim_dish di
on di.dish_id = f.dish_id;
```

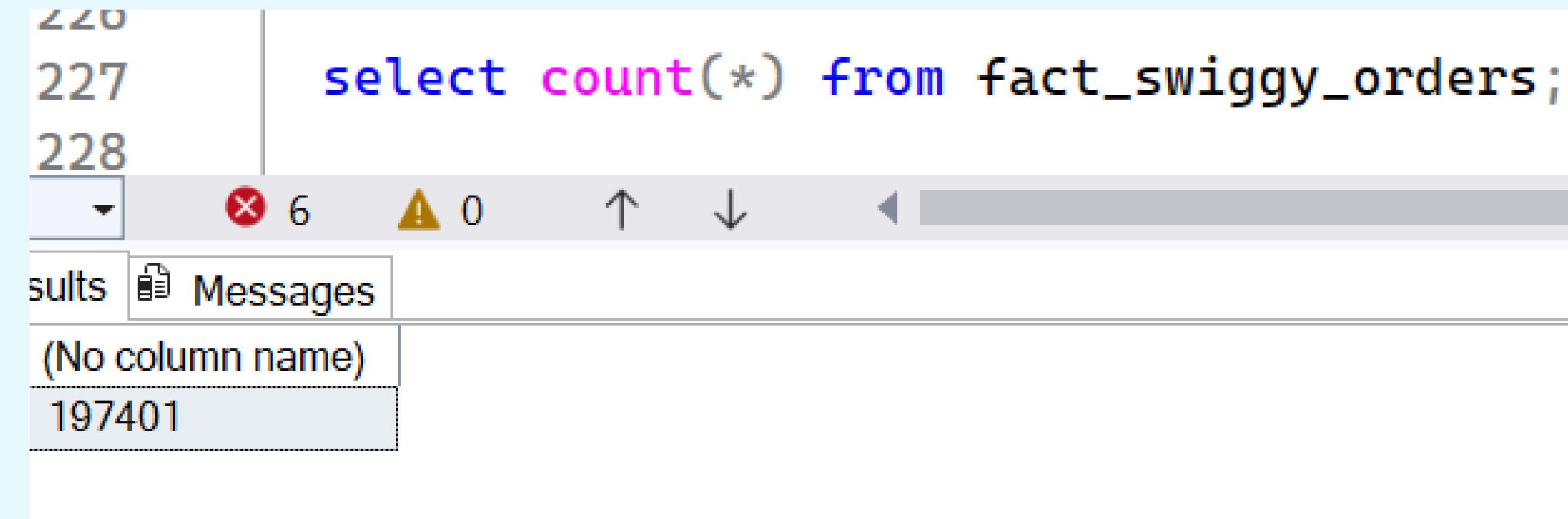
ALL JOIN TABLE DAIGRAM





→ BASIC KPIs

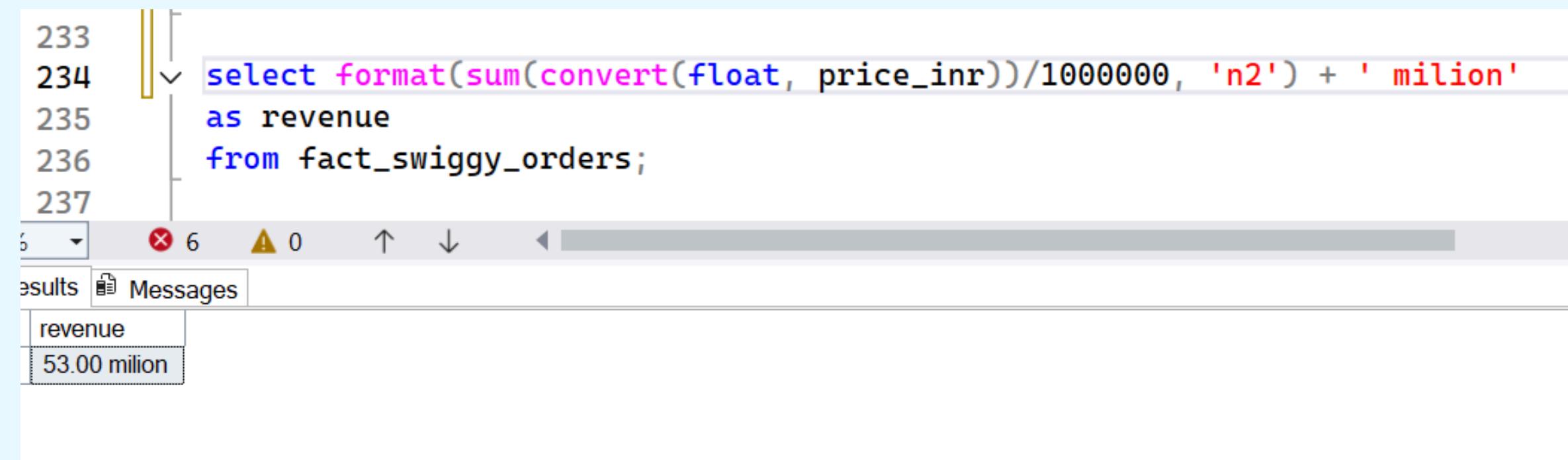
TOTAL ORDERS



A screenshot of a MySQL command-line interface window. The window has a title bar with the number 220. Below the title bar, there are three lines of text: 227 and 228, followed by a SQL query. The SQL query is: `select count(*) from fact_swiggy_orders;`. The results section shows one row with the column name '(No column name)' and the value '197401'. The status bar at the bottom of the window shows 'x 6' errors and '0' warnings.

(No column name)
197401

TOTAL REVENUE(INR MILLION)



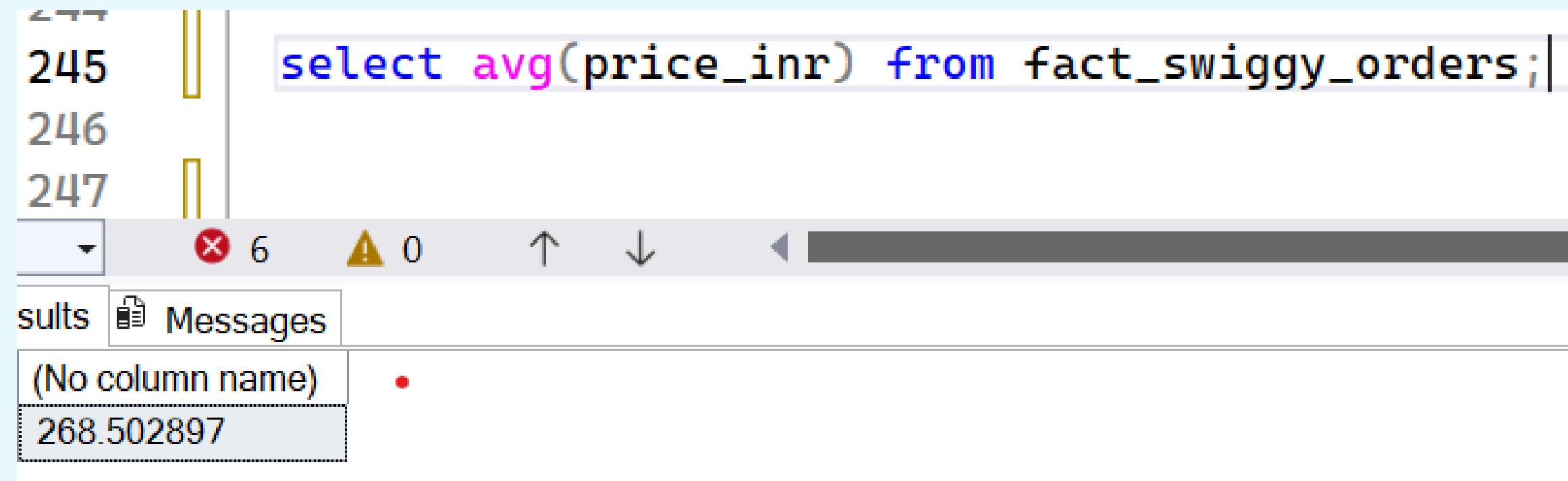
The screenshot shows a SQL query being run in a database environment. The query is:

```
233
234     select format(sum(convert(float, price_inr))/1000000, 'n2') + ' milion'
235     as revenue
236    from fact_swiggy_orders;
237
```

The results pane displays a single row with the column name "revenue" and the value "53.00 milion".

revenue
53.00 milion

AVG DISH PRICE



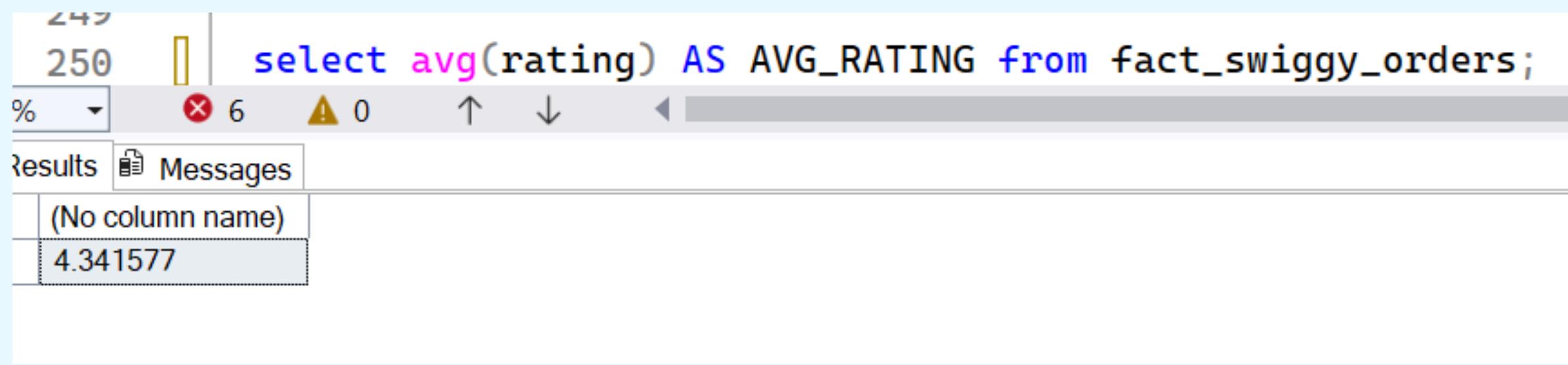
A screenshot of a SQL query results window. The query is:

```
select avg(price_inr) from fact_swiggy_orders;
```

The results table shows one row with the value 268.502897.

(No column name)
268.502897

AVG RATING



A screenshot of a SQL query results window. The query is:

```
250 | select avg(rating) AS AVG_RATING from fact_swiggy_orders;
```

The results show one row:

(No column name)
4.341577

DEEP DIVE BUSINESS ANALYSIS (DATE BASIS ANALYSIS)

MONTHLY ORDER TRENDS

```
259  |  select top 3 dd.month, dd.month_name, count(*) as total_orders
260  |  from fact_swiggy_orders fso
261  |  join dim_date dd
262  |  on dd.date_id = fso.date_id
263  |  group by dd.month, dd.month_name
264  |  order by total_orders desc;
265
6  ▾  × 6  ▲ 0  ↑  ↓  ◀  ▶
results Messages


| month | month_name | total_orders |
|-------|------------|--------------|
| 1     | January    | 25393        |
| 8     | August     | 25227        |
| 5     | May        | 25188        |


```

TOP 3 MONTH REVENUE

```
268  |  select top 3 dd.month, dd.month_name, sum(fso.price_inr)/1000000
269  |  as total_revenue_month_in_milion from fact_swiggy_orders fso
270  |  join dim_date dd
271  |  on dd.date_id = fso.date_id
272  |  group by dd.month, dd.month_name
273  |  order by total_revenue_month_in_milion desc;
274
```

The screenshot shows a SQL query being run in a database environment. The query retrieves the top three months with the highest revenue from the fact_swiggy_orders fact table, joining it with the dim_date dimension table to get month names. The results are ordered by total revenue in million, descending.

month	month_name	total_revenue_month_in_milion
1	January	6.823981
5	May	6.792621
8	August	6.790899

QUARTER TREND

```
--  
279  |> select dd.quarter, count(*) from fact_swiggy_orders fso  
280  |   join dim_date dd  
281  |   on dd.date_id = fso.date_id  
282  |   group by dd.quarter  
283  
|  
✖ 6  ⚠ 0  ↑ ↓ <  
Results Messages  


| quarter | (No column name) |
|---------|------------------|
| 1       | 73084            |
| 2       | 74154            |
| 3       | 50163            |


```

YEARLY TREND

```
289  ||| select dd.year, count(*)as total_order_in_year  
290  ||| from fact_swiggy_orders  fso  
291  ||| join dim_date dd  
292  ||| on dd.date_id = fso.date_id  
293  ||| group by dd.year;  
294  
; 6  0  ↑  ↓  ◀  ▶  
results Messages  


| year | total_order_in_year |
|------|---------------------|
| 2025 | 197401              |


```

ORDER DAY OF WEEK

```
297  
298 |> select  
299 | DATENAME(WEEKDAY, dd.full_date) as day_name,  
300 | count(*) as total_orders  
301 | from fact_swiggy_orders fso  
302 | join dim_date dd  
303 | on dd.date_id = fso.date_id  
304 | group by DATENAME(WEEKDAY, dd.full_date)|  
305 | order by total_orders desc;  
306
```

% 6 0 ↑ ↓ ◀

Results Messages

day_name	total_orders
Saturday	28933
Sunday	28469
Thursday	28450
Friday	28284
Wednesday	28284
Monday	27568
Tuesday	27413

LOCATION BASED PROBLEM

HIGHEST TOP 10 CITY ORDERS

```
310      ↓ select top 10 dl.city, COUNT(*) as tot_orders from fact_swiggy_orders fso
311      | join dim_location dl
312      | on dl.location_id = fso.location_id
313      | group by dl.city
314      | order by COUNT(*) desc;
315
```

% 6 0 ↑ ↓ Results Messages

city	tot_orders
Bengaluru	20072
Mumbai	10507
Hyderabad	10308
Jaipur	10285
Lucknow	10192
New Delhi	10191
Ahmedabad	10175
Chandigarh	10060
Kolkata	10044
Chennai	10042

Query executed successfully. | AKASH\SQLEXPRESS (16.0 RTM) | AKASH'

HIGHEST TOP 10 CITY REVENUE

```
317      select top 10 dl.city, sum(fso.price_inr) as tot_revenue from fact_swiggy_orders fso  
318      join dim_location dl  
319      on dl.location_id = fso.location_id  
320      group by dl.city  
321      order by tot_revenue desc;  
322
```

09 % 6 0 ↑ ↓ ⟲ ⟳

Results Messages

	city	tot_revenue
1	Bengaluru	5455887.73
2	Lucknow	3117359.65
3	Hyderabad	3021656.62
4	Mumbai	3015573.35
5	New Delhi	2829180.60
6	Ahmedabad	2815536.27
7	Chandigarh	2804991.82
8	Kolkata	2662213.76
9	Chennai	2642594.63
10	Jaipur	2502833.61

Query executed successfully.

AKASH\SQLEXPRESS (16.0 RTM) | AKASH\alesh (77)

FOOD PERFORMANCE

TOP 10 RESTAURANT BY ORDERS

```
550
337 |> select top 10 dr.Restaurant_name, COUNT(*) as tot_orders
338 |  from fact_swiggy_orders fso
339 |  join dim_restaurant dr
340 |  on dr.restaurant_id = fso.restaurant_id
341 |  group by dr.Restaurant_name
342 |  order by tot_orders desc;
343
```

Results Messages

Restaurant_name	tot_orders
McDonald's	13528
KFC	12957
Burger King	7115
Pizza Hut	6529
Domino's Pizza	5489
LunchBox - Meals and Thalis	4700
Baskin Robbins - Ice Cream Desserts	4197
Faasos - Wraps, Rolls & Shawarma	3256
Olio - The Wood Fired Pizzeria	3239
) The Good Bowl	2665

Query executed successfully. | AKASH\SQLI

TOP CATEGORIES (INDIS, CHINESE ETC)

```
555
356     select dc.category, COUNT(*) as tot_category from fact_swiggy_orders fso
357     join dim_category dc
358     on dc.category_id = fso.category_id
359     group by dc.category|
360     order by tot_category desc
361
```

Results Messages

category	tot_category
Recommended	24097
Desserts	3582
Main Course	2983
Beverages	2682
BURGERS	2538
Sweets	1954
McSaver Combos (2 Pc Meals)	1884
Exclusive Deals (Save upto 40%)	1717
Starters	1692
ROLLS	1652

MOST ORDERED DISHES

```
364
365     select top 10 dd.dish_name, count(*) as order_count
366     from fact_swiggy_orders fso
367     join dim_dish dd
368     on dd.dish_id = fso.dish_id
369     group by dd.dish_name
370     order by order_count desc;
```

09 % 6 0 ↑ ↓ ↶

Results Messages

	dish_name	order_count
1	Veg Fried Rice	321
2	Choco Lava Cake	303
3	Jeera Rice	265
4	Paneer Butter Masala	262
5	French Fries	248
6	Chicken Sausage	230
7	Chicken Fried Rice	228
8	Butter Naan	218
9	Margherita Pizza	203
10	Green Salad	197

ORDERS+RATINGS

```
376  select dd.dish_name, COUNT(*) as order_count,
377  AVG(fso.rating) as order_rating from fact_swiggy_orders fso
378  join dim_dish dd
379  on dd.dish_id = fso.dish_id
380  group by dd.dish_name
381  order by order_rating desc;
```

109 % 6 0 ↑ ↓ ↶

Results Messages

	dish_name	order_count	order_rating
1	Moongfali Kebab	2	5.000000
2	Jalli Weffers Pkt 200 Gm	1	5.000000
3	Chocolate Cake (500Gm.)	1	5.000000
4	Veg Kathi Roll Paneer Capsicum	1	5.000000
5	Cinnabon Stix - Pack Of 2 (8Pcs)	1	5.000000
6	Butter Cheese Onion Uttapam	1	5.000000
7	Jumbo Prawns Kebabs	1	5.000000
8	Khejur Dry Fruit	1	5.000000
9	Paneer Smoked Skewers [10 Pcs]	1	5.000000
10	Kulhad Rabri Lassi 5 Glass	1	5.000000

Query executed successfully. AKASH\SQLEXPR

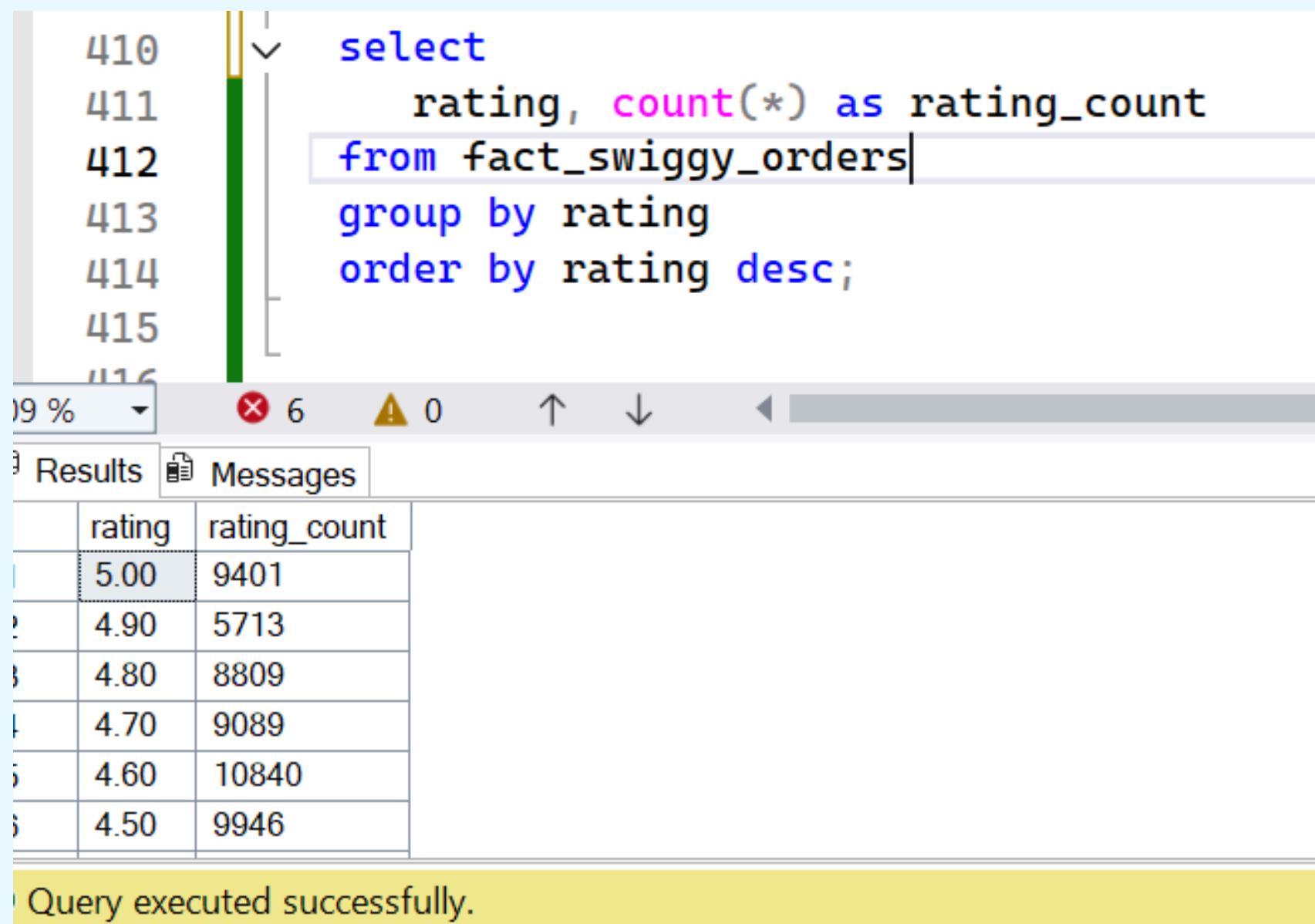
CUSTOMER SPENDING
TOTAL ORDER BY
PRICE RANKING

```
385      select
386          case
387              when CONVERT(float, price_inr)<100 then 'under 100'
388              when CONVERT(float, price_inr) between 100 and 199 then '100-199'
389              when CONVERT(float, price_inr) between 200 and 299 then '200 - 299'
390              when CONVERT(float, price_inr) between 300 and 499 then '300-499'
391              else '500+'
392          end as price_range, COUNT(*) as total_orders
393      from fact_swiggy_orders
394      group by
395          case
396              when CONVERT(float, price_inr)<100 then 'under 100'
397              when CONVERT(float, price_inr) between 100 and 199 then '100-199'
398              when CONVERT(float, price_inr) between 200 and 299 then '200 - 299'
399              when CONVERT(float, price_inr) between 300 and 499 then '300-499'
400              else '500+'
401          end
402      order by total_orders desc
403
```

--Rating count distribution

price_range	total_orders
100-199	56189
200 - 299	54567
300-499	43758
under 100	26795
500+	16092

RATING COUNT DISTRIBUTION(1 TO 5)



The screenshot shows a database query interface with the following details:

- Query:**

```
410      select
411          rating, count(*) as rating_count
412      from fact_swiggy_orders|
413      group by rating
414      order by rating desc;
```
- Status Bar:** Shows progress at 0% completion, 6 errors, and 0 warnings.
- Results Tab:** Selected tab, showing the output of the query.
- Output:**

	rating	rating_count
1	5.00	9401
2	4.90	5713
3	4.80	8809
4	4.70	9089
5	4.60	10840
6	4.50	9946
- Message Bar:** Displays the message "Query executed successfully."

**THANK
YOU**