SWIGGY SALES REPORT QUERY DOCUMENT

A) SWIGGY REPORT | DATA VALIDATION & CLEANING

Check for null values in each column

```
select
	COUNT(*) as total_rows,
	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,
	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,
	sum(case when Price_INR IS NULL then 1 else 0 end) as null_price,
	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;
```

total_rows	null_state	null_city	null_order_date	null_restaurant	null_location	null_category	null_dish	null_price	null_rating	null_rating_count
197401	0	0	0	0	0	0	0	0	0	0

Blank or Empty Strings

```
select *
from swiggy_data
where State = '' or City = '' or Order_Date = '' or Restaurant_Name = '' or Location = '' or
Category = '' or Dish_Name = '';
```

State	City	Order_Date	Restaurant_Name	Location	Category	Dish_Name	Price_INR	Rating	Rating_Count

Duplicate Detection

```
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
order by cnt desc;
```

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;
```

B) SWIGGY REPORT | CREATING SCHEMA (STAR SCHEMA)

DIMENSION TABLES:

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,
weeks int
);
```

LOCATION TABLE:

```
create table dim_location (
location_id int identity(1,1) primary key,
state varchar(100),
city varchar(100),
location varchar(500)
);
```

RESTAURANT TABLE:

```
create table dim_restaurant (
restaurant_id int identity(1,1) primary key,
restaurant_name varchar(200)
);
```

CATEGORY TABLE:

```
create table dim_category (
category_id int identity(1,1) primary key,
category varchar(200),
);
```

DISH_NAME TABLE:

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

FACT TABLE:

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

INSERT DATA IN TABLES:

dim_date

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

dim_location

```
insert into dim_location (state, city, location)
select distinct
State, City, Location
from swiggy_data;
```

dim_restaurant

```
insert into dim_restaurant (restaurant_name)
select distinct
Restaurant_Name
from swiggy_data;
```

dim_category

```
insert into dim_category (category)
select distinct
Category
from swiggy_data;
```

dim_dish

```
insert into dim_dish (dish_name)
select distinct
Dish_Name
from swiggy_data;
```

Fact_Table

```
insert into fact_swiggy_orders (
date_id, price_inr, rating, rating_count, location_id, restaurant_id, category_id, dish_id
)
select
d.date_id, s.Price_INR, s.Rating, s.Rating_Count,
l.location_id, r.restaurant_id, c.category_id, di.dish_id
from swiggy_data s
join dim_date d
on s.Order_Date = d.full_date

join dim_location l
on s.State = l.state
and s.City = l.city
and s.Location = l.location

join dim_restaurant r
on s.Restaurant_Name = r.restaurant_name

join dim_category c
on s.Category = c.category

join dim_dish di
on s.Dish_Name = di.dish_name;
```

Final Schema:

```
select *
from fact_swiggy_orders fso
join dim_date dd
on dd.date_id = fso.date_id
join dim_location dl
on dl.location_id = fso.location_id
join dim_restaurant dr
on dr.restaurant_id = fso.restaurant_id
join dim_category dc
on dc.category_id = fso.category_id
join dim_dish d
on d.dish_id = fso.dish_id;
```

C) SWIGGY REPORT | KPI'S

Basic KPI's:

Total Orders

```
select COUNT(*) as total_orders
from fact_swiggy_orders;
```

total_orders
197401

Total Revenue

```
select format(SUM(convert(float, price_inr)) / 1000000, 'N2') + ' INR Million' as total_revenue
from fact_swiggy_orders;
```

total_revenue
53.00 INR Million

Average Dish Price

```
select format(AVG(convert(float, price_inr)), 'N2') + ' INR' as avg_dish_price
from fact_swiggy_orders;
```

avg_dish_price
268.50 INR

Average Rating

```
select AVG(rating) as avg_rating
from fact_swiggy_orders;
```

avg_rating
4.341577

Deep-Dive Business Analysis:

Date-Based Analysis:

Monthly Order Trends

```
select d.year, d.month, d.month_name, COUNT(*) as total_orders from
fact_swiggy_orders f
join dim_date d on f.date_id = d.date_id
group by d.year, d.month, d.month_name
order by total_orders desc;
```

	year	month	month_name	total_orders
1	2025	1	January	25393
2	2025	8	August	25227
3	2025	5	May	25188
4	2025	7	July	24936
5	2025	4	April	24584
6	2025	3	March	24400
7	2025	6	June	24382
8	2025	2	February	23291

Quarterly Order Trends

```
select d.year, d.quarter, COUNT(*) as total_orders
from fact_swiggy_orders f
join dim_date d on f.date_id = d.date_id
group by d.year, d.quarter
order by total_orders desc;
```

	year	quarter	total_orders
1	2025	2	74154
2	2025	1	73084
3	2025	3	50163

Yearly Orders

```
select d.year, COUNT(*) as total_orders
from fact_swiggy_orders f
join dim_date d on f.date_id = d.date_id
group by d.year;
```

year	total_orders
2025	197401

Orders by Day of Week

```
select DATENAME(WEEKDAY, d.full_date) as day_name, COUNT(*) as total_orders
from fact_swiggy_orders f
join dim_date d on f.date_id = d.date_id
group by DATENAME(WEEKDAY, d.full_date), DATEPART(WEEKDAY, d.full_date)
order by DATEPART(WEEKDAY, d.full_date);
```

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

Location Based Analysis:

Top 10 cities by order volume

```
select top 10 l.city, count(*) as total_orders
from fact_swiggy_orders f
join dim_location l on f.location_id = l.location_id
group by l.city
order by total_orders desc;
```

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

Revenue Contribution by States

```
select l.state, format(SUM(convert(float, f.price_inr)), 'N2') + ' INR' as total_revenue
from fact_swiggy_orders f
join dim_location l on f.location_id = l.location_id
group by l.state
order by SUM(convert(float, f.price_inr)) desc;
```

state	total_revenue
Karnataka	5,455,887.73 INR
Uttar Pradesh	3,117,359.65 INR
Telangana	3,021,656.62 INR
Maharashtra	3,015,573.35 INR
Delhi	2,829,180.60 INR
Gujarat	2,815,536.27 INR
Punjab	2,804,991.82 INR
West Bengal	2,662,213.76 INR
Tamil Nadu	2,642,594.63 INR
Rajasthan	2,502,833.61 INR
Madhya Pradesh	1,969,962.77 INR
Goa	1,539,479.41 INR
Haryana	1,438,455.54 INR
Meghalaya	1,427,851.75 INR
Himachal Pradesh	1,382,500.18 INR

Total Order Contribution by States

```
select l.state, COUNT(*) as total_orders
from fact_swiggy_orders f
join dim_location l on f.location_id = l.location_id
group by l.state
order by total_orders desc;
```

state	total_orders
Karnataka	20072
Maharashtra	10507
Telangana	10308
Rajasthan	10285
Uttar Pradesh	10192
Delhi	10191
Gujarat	10175
Punjab	10060
West Bengal	10044
Tamil Nadu	10042
Madhya Pradesh	7475
Meghalaya	5183
Jharkhand	5101
Uttarakhand	5084
Himachal Pradesh	5053

Food Performance:

Top 10 Restaurants by Orders

```
select top 10 r.restaurant_name, COUNT(*) as total_orders
from fact_swiggy_orders f
join dim_restaurant r on f.restaurant_id = r.restaurant_id
group by r.restaurant_name
order by total_orders desc;
```

restaurant_name	total_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

Top Categories by Order Volume

```
select c.category, COUNT(*) as total_orders
from fact_swiggy_orders f
```

```
join dim_category c on f.category_id = c.category_id
group by c.category
order by total_orders desc;
```

category	total_orders
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
Snacks	1438
Breads	1422
DESSERTS & BEVERAGES	1333
Burger Combos (3 Pc Meals)	1331
DOTD	1307

Top 10 Ordered Dishes

```
select top 10 d.dish_name, COUNT(*) as total_orders
from fact_swiggy_orders f
join dim_dish d on f.dish_id = d.dish_id
group by d.dish_name
order by total_orders desc;
```

dish_name	total_orders
Veg Fried Rice	321
Choco Lava Cake	303
Jeera Rice	265
Paneer Butter Masala	262
French Fries	248
Chicken Sausage	230
Chicken Fried Rice	228
Butter Naan	218
Margherita Pizza	203
Green Salad	197

Cuisine Performance

```
select c.category, COUNT(*) as total_orders, format(AVG(convert(float, f.rating)), 'N2') as
avg_rating
from fact_swiggy_orders f
join dim_category c on f.category_id = c.category_id
group by c.category
order by total_orders desc;
```

category	total_orders	avg_rating
Recommended	24097	4.32
Desserts	3582	4.37
Main Course	2983	4.31
Beverages	2682	4.37
BURGERS	2538	4.32
Sweets	1954	4.46
McSaver Combos (2 Pc Meals)	1884	4.41
Exclusive Deals (Save upto 40%)	1717	4.35
Starters	1692	4.30
ROLLS	1652	4.25
Snacks	1438	4.31
Breads	1422	4.35
DESSERTS & BEVERAGES	1333	4.34
Burger Combos (3 Pc Meals)	1331	4.38
DOTD	1307	4.31

Customer Spending Insights:

Total Orders by Price Range

```
select
case
when price_inr < 100 then 'under_100'
when price_inr between 100 and 199 then '100-199'
when price_inr between 200 and 299 then '200-299'
when price_inr between 300 and 499 then '300-499'
else
'500+'
end as price_range,
COUNT(*) as total_orders
from fact_swiggy_orders
group by
case
when price_inr < 100 then 'under_100'
when price_inr between 100 and 199 then '100-199'
when price_inr between 200 and 299 then '200-299'
when price_inr between 300 and 499 then '300-499'
else
'500+'
end
order by total_orders desc;
```

price_range	total_orders
100-199	56189
200-299	54567
300-499	43758
under_100	26795
500+	16092

Ratings Analysis:

Rating Count Distribution (1 – 5)

```
select rating, COUNT(*) as rating_count
from fact_swiggy_orders
group by rating
order by rating_count desc
```

rating	rating_count
4.40	85642
4.30	13698
4.60	10840
4.50	9946
5.00	9401
4.70	9089
4.80	8809
4.20	8214
4.10	7619
4.90	5713
4.00	5346
3.90	4021
3.80	3966
3.70	2711
3.60	2010