SWIGGY SALES ANALYSIS

Database

```
Use [Swiggy DB];
```

Data

```
select * from Swiggy_Data;
```

Data Validation And Cleaning

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;
```

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='' ;
```

Duplicate Detection

```
Select
State, City, Order_date, Restaurant_Name, Location, Category, Dish_Name,
Price_INR, Rating, Rating_count, Count(*)
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 CTC 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 CTC where rn >1;
```

Creating Scima

Dimention Table

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
	);

Select * from Dim_Date;
```

Location Table

```
create table Dim_Location(
	Location_Id int identity(1,1) primary key,
	State varchar(100),
	City varchar(100),
	Location varchar(200)
	);
```

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_Name varchar(200)
	);
```

Dish 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)
	);

select * from Fact_Swiggy_Orders;
```

Insert Data In Tables

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;

select * from Dim_Date;
```

Dim_Location

```
insert into Dim_Location(State, City, Location)
select distinct
	State,
	City,
	Location
from Swiggy_Data;

select * from Dim_Location;
```

Dim_Restaurant

```
insert into Dim_Restaurant(Restaurant_Name)
	select distinct
	Restaurant_Name
from Swiggy_Data;

select * from Dim_Restaurant;
```

Dim_Category

```
insert into Dim_Category(Category_Name)
	select distinct
	Category
from Swiggy_Data;

select * from Dim_Category;
```

Dim_Dish

```
insert into Dim_Dish(Dish_Name)
	select distinct
	Dish_Name
from Swiggy_Data;

select * from Dim_Dish;
```

Fact Table

```
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,

	dl.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 dl
	on dl.State = s.State
	and dl.City = s.City
	and dl.Location = s.Location

join Dim_Restaurant dr
	on dr.Restaurant_Name = s.Restaurant_Name

join Dim_Category dc
	on dc.Category_Name = s.Category

join Dim_dish dsh
	on dsh.Dish_Name = s.Dish_Name;


select * from Fact_Swiggy_Orders;


select * from Fact_Swiggy_Orders f
join Dim_Date d on f.Date_Id = d.Date_Id
join Dim_Location l on f.Location_Id = l.Location_Id
join Dim_Restaurant r on f.Restaurant_Id = r.Restaurant_Id
join Dim_Category c on f.Category_Id = c.Category_Id
join Dim_dish di on f.Dish_Id = di.Dish_Id;
```

KPI's

Total Orders

```
select count(*) as Total_Orders
from Fact_Swiggy_Orders;
```

Total_Orders
197401

Total Revenue (INR Million)

```
select
      Format(sum(convert(float,Price_INR))/1000000, 'N2') + 'INR_Million'
      as total_Revenue
from Fact_Swiggy_Orders;
```

total_Revenue
53.00INR_Million

Average Dish Price

```
select
      Format(avg(convert(float,Price_INR)),'N2') + 'INR'
      as Avg_Dish_Price
from Fact_Swiggy_Orders;
```

Avg_Dish_Price
268.50INR

Average Rating

```
select avg(rating) as Avg_Rating
from Fact_Swiggy_Orders;
```

Avg_Rating
4.341577

Deep Drive Business 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 count(*) 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

```
select
	d.Year,
	d.Month,
	d.Month_name,
Format(sum(convert(float,Price_INR))/1000000, 'N2') + 'INR_Million'
	as Total_Revenue
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 sum(Price_INR) desc;
```

	Year	Month	Month_name	Total_Revenue
1	2025	1	January	6.82INR_Million
2	2025	5	May	6.79INR_Million
3	2025	8	August	6.79INR_Million
4	2025	7	July	6.65INR_Million
5	2025	4	April	6.59INR_Million
6	2025	3	March	6.57INR_Million
7	2025	6	June	6.51INR_Million
8	2025	2	February	6.27INR_Million

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 count(*) desc;
```

	Year	Quarter	Total_Orders
1	2025	2	74154
2	2025	1	73084
3	2025	3	50163

Yearly Trend

```
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
order by count(*) desc;
```

	Year	Total_Orders
1	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) asc;
```

	Day_Name	Total_Orders
1	Sunday	28469
2	Monday	27568
3	Tuesday	27413
4	Wednesday	28284
5	Thursday	28450
6	Friday	28284
7	Saturday	28933

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 l.Location_Id = f.Location_Id
group by l.City
Order by Count(*) desc;
```

	City	Total_Orders
1	Bengaluru	20072
2	Mumbai	10507
3	Hyderabad	10308
4	Jaipur	10285
5	Lucknow	10192
6	New Delhi	10191
7	Ahmedabad	10175
8	Chandigarh	10060
9	Kolkata	10044
10	Chennai	10042

Top 10 Cities By Total Revenue

```
Select top 10
       l.City,
       Sum(f.Price_INR) as Total_Revenue
from Fact_Swiggy_Orders f join Dim_Location l
       on l.Location_Id = f.Location_Id
group by l.City
Order by Sum(f.Price_INR) desc;
```

	City	Total_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

Revenue Contribution By States

```
Select
       l.State,
       Sum(f.Price_INR) as Total_Revenue
from Fact_Swiggy_Orders f join Dim_Location l
       on l.Location_Id = f.Location_Id
group by l.State
Order by Sum(f.Price_INR) desc;
```

	State	Total_Revenue
1	Karnataka	5455887.73
2	Uttar Pradesh	3117359.65
3	Telangana	3021656.62
4	Maharashtra	3015573.35
5	Delhi	2829180.60
6	Gujarat	2815536.27
7	Punjab	2804991.82
8	West Bengal	2662213.76
9	Tamil Nadu	2642594.63
10	Rajasthan	2502833.61

Top 10 Restaurant By Orders

```
Select top 10
       r.restaurant_name,
       count(*) as Total_Orders
from Fact_Swiggy_Orders f join Dim_Restaurant r
       on r.Restaurant_Id = f.Restaurant_Id
group by r.Restaurant_Name
Order by Count(*) desc;
```

	restaurant_name	Total_Orders
1	McDonald's	13528
2	KFC	12957
3	Burger King	7115
4	Pizza Hut	6529
5	Domino's Pizza	5489
6	LunchBox - Meals and Thalis	4700
7	Baskin Robbins - Ice Cream Desserts	4197
8	Faasos - Wraps, Rolls & Shawarma	3256
9	Olio - The Wood Fired Pizzeria	3239
10	The Good Bowl	2665

Top Categories By Order Volume

```
Select
       c.Category_Name,
       count(*) as Total_Orders
from Fact_Swiggy_Orders f join Dim_Category c
       on c.Category_Id = f.Category_Id
group by c.Category_Name
Order by Count(*) desc;
```

	Category_Name	Total_Orders
1	Recommended	24097
2	Desserts	3582
3	MAIN COURSE	2983
4	Beverages	2682
5	Burgers	2538
6	Sweets	1954
7	McSaver Combos (2 Pc Meals)	1884
8	Exclusive Deals (Save upto 40%)	1717
9	STARTERS	1692
10	ROLLS	1652

Most Ordered Dishes

```
Select Top 10
       d.Dish_Name,
       count(*) as Total_Orders
from Fact_Swiggy_Orders f join Dim_dish d
       on d.Dish_Id= f.Dish_Id
group by d.Dish_Name
Order by Count(*) desc;
```

	Dish_Name	Total_Orders
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

Cuisine Performance (Orders + Avg_Rating)

```
Select
       c.Category_Name,
       count(*) as Total_Orders,
       Avg(f.rating) as Avg_Rating
from Fact_Swiggy_Orders f join Dim_Category c
       on c.Category_Id = f.Category_Id
group by c.Category_Name
Order by Total_Orders desc;
```

	Category_Name	Total_Orders	Avg_Rating
1	Recommended	24097	4.321782
2	Desserts	3582	4.371635
3	MAIN COURSE	2983	4.310191
4	Beverages	2682	4.368717
5	Burgers	2538	4.324940
6	Sweets	1954	4.455527
7	McSaver Combos (2 Pc Meals)	1884	4.413800
8	Exclusive Deals (Save upto 40%)	1717	4.348806
9	STARTERS	1692	4.304846
10	ROLLS	1652	4.246368
11	Snacks	1438	4.312447
12	Breads	1422	4.347819
13	DESSERTS & BEVERAGES	1333	4.337809
14	Burger Combos (3 Pc Meals)	1331	4.378211
15	DOTD	1307	4.314307

Total Orders By Price Range

```sql
select
	case
		when convert(float, Price_INR) < 100 then 'Under 100'
		when convert(float, Price_INR) between 100 and 199 then '100 - 199'
		when convert(float, Price_INR) between 200 and 299 then '200 - 299'
		when convert(float, 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 convert(float, Price_INR) < 100 then 'Under 100'
		when convert(float, Price_INR) between 100 and 199 then '100 - 199'
		when convert(float, Price_INR) between 200 and 299 then '200 - 299'
		when convert(float, Price_INR) between 300 and 499 then '300 - 499'
		else '500+'
	end
order by Total_Orders desc;
```

	Price_Range	Total_Orders
1	100 - 199	56189
2	200 - 299	54567
3	300 - 499	43758
4	Under 100	26795
5	500+	16092

Rating Count Distribution (1-5)

```
select
	rating,
	count(*) as Rating_Count
from Fact_Swiggy_Orders
group by rating
order by rating desc;
```

	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
7	4.40	85642
8	4.30	13698
9	4.20	8214
10	4.10	7619
11	4.00	5346
12	3.90	4021
13	3.80	3966
14	3.70	2711
15	3.60	2010
16	3.50	1883
17	3.40	1340