**Zomato Order & Restaurant Analysis Using Power BI**

**Perform Simple Data Transformations Using SQL**

CREATE TABLE restaurants (

restaurant\_id VARCHAR(15) PRIMARY KEY,

restaurant\_name VARCHAR(15),

city VARCHAR(15),

area VARCHAR(15),

cuisine VARCHAR(15),

avg\_rating DECIMAL(2,1),

total\_ratings INT,

price\_range VARCHAR(10),

delivery\_available VARCHAR(5)

);

CREATE TABLE Orders (

order\_id VARCHAR(20) PRIMARY KEY,

restaurant\_id VARCHAR(20),

customer\_id VARCHAR(20),

order\_date DATE,

order\_time TIME,

delivery\_time\_mins INT,

total\_cost DECIMAL(10,2),

item\_count INT,

payment\_method VARCHAR(15),

customer\_rating DECIMAL(2,1),

FOREIGN KEY (restaurant\_id) REFERENCES Restaurants(restaurant\_id)

);

**1. Basic Data Cleaning**

1. **Remove duplicate records.**
2. **Handle NULL values (if any) by replacing them with appropriate values.**

**2. Data Exploration Queries**

1. **Count the number of restaurants in each city.**

SELECT city,

COUNT(\*) AS restaurant\_count

FROM Restaurants

GROUP BY city;

1. **Find the top 5 cities with the highest number of orders.**

SELECT r.city,

COUNT(\*) AS order\_count

FROM Orders o

JOIN Restaurants r ON o.restaurant\_id = r.restaurant\_id

GROUP BY r.city

ORDER BY order\_count DESC

LIMIT 5;

1. **Calculate the total revenue generated by each restaurant.**

SELECT restaurant\_id,

SUM (total\_cost) AS total\_revenue

FROM Orders

GROUP BY restaurant\_id;

**3. Data Aggregation**

1. **Find the average order amount for each city.**

SELECT r.city, AVG(o.total\_cost) AS average\_order\_amount

FROM Orders o

JOIN Restaurants r ON o.restaurant\_id = r.restaurant\_id

GROUP BY r.city

ORDER BY average\_order\_amount DESC;

SELECT r.city, ROUND(AVG(o.total\_cost), 2) AS average\_order\_amount

FROM Orders o

JOIN Restaurants r ON o.restaurant\_id = r.restaurant\_id

GROUP BY r.city

ORDER BY average\_order\_amount DESC;

1. **Identify the top 5 restaurants with the highest total sales.**

SELECT r.restaurant\_id, r.restaurant\_name, SUM(o.total\_cost) AS total\_sales

FROM Orders o

JOIN Restaurants r ON o.restaurant\_id = r.restaurant\_id

GROUP BY r.restaurant\_id, r.restaurant\_name

ORDER BY total\_sales DESC

LIMIT 5;

1. **Data Joins**
2. **Join the Zomato\_Orders and Zomato\_Restaurants tables to get restaurant names along with order details.**

SELECT

o.order\_id,

r.restaurant\_name,

r.city,

o.customer\_id,

o.order\_date,

o.order\_time,

o.delivery\_time\_mins,

o.total\_cost,

o.item\_count,

o.payment\_method,

o.customer\_rating

FROM Orders o

JOIN Restaurants r ON o.restaurant\_id = r.restaurant\_id;