

Zomato Data Exploration & Analysis

Using SQL

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PROJECT OVERVIEW

This project focuses on exploring and analyzing the Zomato dataset using SQL. The dataset contains over 9000 rows with various restaurant-related information such as Restaurant ID, Name, City, Location, Cuisines, Rating, Votes, Price range, and more. The goal is to use SQL for cleaning, merging tables, and applying window functions to derive insights on restaurant trends, customer preferences, customer ratings, popular cuisines, areas with most listed of restaurants, and service availability across countries, with a focus on Indian restaurants.

TOOLS & SKILLS USED

- MySQL for scripts and queries
- SQL Window Functions
- Joins & CTEs
- Views & Aggregations

DATA EXPLORATION STEPS

- Inspected table schema and metadata
- Checked and removed duplicates based on RestaurantID
- Removed unnecessary columns
- Merged country data using Country Code
- Corrected misspelled city names
- Used window functions to compute rolling counts
- Explored min, max, and average values of votes, rating, and price columns
- Created rating categories

KEY INSIGHTS

- According to this Zomato Dataset, **90.59%** of data is related to restaurants listed in **India** followed by **USA (4.54%)**.
- Out of 15 Countries only 2 countries provide **Online delivery** options to their customers, to be precise only **28.01%** of restaurants in India and **46.67%** of restaurants in UAE provides online delivery options.
- As this dataset contains data most related to India, so I worked on gaining insights on **Indian Restaurants**.
- **Connaught Place** in New Delhi has the **most listed restaurants** (122) followed by Rajouri Garden (99) and Shahdara (87)
- Most popular cuisine in Connaught Place is **North Indian Food**.
- Out of **122 restaurants** in Connaught Place only 54 restaurants provide **table booking** facility to their customers.
- **Average Ratings** for restaurants with table booking facility is approx. **3.8/5** compared to restaurants without table booking facility is **3.6/5** in Connaught Place, New Delhi.
- **Best moderately priced restaurant** with average cost for two less than 1000, rating more than 4, votes more than 1000 and provides both table booking and online delivery options to their customer with Indian cuisines is located in Kolkata, India named as '**India Restaurant**' (Restaurant ID - 20747).

SNAPSHOTS OF RESULTS

- Total Number of Restaurants in different countries along with their Percentage, according to the dataset.

COUNTRY_NAME	REST_COUNT	PERCENTAGE_SHARE
India	8652	90.59
United States	434	4.54
United Kingdom	80	0.84
Brazil	60	0.63
UAE	60	0.63
South Africa	60	0.63
New Zealand	40	0.42
Turkey	34	0.36
Australia	24	0.25
Phillipines	22	0.23
Indonesia	21	0.22
Singapore	20	0.21
Qatar	20	0.21
Sri Lanka	20	0.21
Canada	4	0.04

- Restaurants that provide online deliveries along with their Percentage.

COUNTRY_NAME	TOTAL_REST	ONLINE_DELIVERY_PERCENT
India	2423	28.01
UAE	28	46.67

- Localities with the most listed restaurants with their Average ratings.

COUNTRY_NAME	Locality	TOTAL_REST	AVG_RATING
India	Connaught Place	122	3.84
India	Rajouri Garden	99	3.66
India	Shahdara	87	1.95
India	Defence Colony	86	3.33
India	Malviya Nagar	85	3.47
India	Pitampura	85	3.00
India	Mayur Vihar Phase 1	84	2.39
India	Rajinder Nagar	81	3.09
India	Safdarjung	80	2.96
India	Satyaniketan	79	3.56
India	Krishna Nagar	77	2.26
India	Karol Bagh	76	3.21
India	Sector 62	76	2.32
India	Sector 18	75	3.51
India	Hauz Khas	74	2.77
India	Kalkaji	73	3.08
India	Sector 15	71	2.92

- List of most popular cuisines in Connaught Place, New Delhi.

Cuisines	CUISINE_COUNT
North Indian Mughlai	7
Cafe	6
North Indian	6
North Indian Chinese Italian Continental	4
Fast Food Burger	3
North Indian Chinese Mughlai	2
North Indian Continental Italian	2
North Indian Chinese	2
Chinese	2
Fast Food	2
North Indian European	2
Pizza Fast Food	2
Burger Desserts Fast Food	2
Chinese Thai	2
North Indian Continental	2
South Indian	2
Chinese North Indian Mughlai Continental	1

- Total number of restaurants in Connaught Place, New Delhi having Table Booking option with average rating.

TABLE_BOOKING_OPT	TOTAL_REST	AVG_RATING
WITH_TABLE	54	3.84
WITHOUT_TABLE	68	3.61

- Best moderately priced restaurant with average cost for two less than 1000, rating more than 4, votes more than 4 and provides both table booking and online delivery options

RestaurantID	RestaurantName	CountryCode	COUNTRY_NAME	Address	Locality	LocalityVerbose	Cuisines	Currency
20747	India Restaurant	1	India	Ground Floor 1st Floor 2nd Floor 34 Karl Marx Sarani Kidderpore Kolkata	Kidderpore	Kidderpore Kolkata	Biryani North Indian Chinese Mughlai	Indian Rupees(Rs.)
Has_Table_booking	Has_Online_delivery	Is_delivering_now	Switch_to_order_menu	Price_range	Votes	Average_Cost_for_two	Rating	
Yes	Yes	No	No	2	1219	800	4.6	

- List of different cuisines available in Connaught Place, New Delhi.

Locality	Cuisines
Connaught Place	North Indian Chinese Mughlai
Connaught Place	North Indian Continental Italian
Connaught Place	Cafe
Connaught Place	Finger Food Continental North Indian Chinese
Connaught Place	Cafe
Connaught Place	North Indian Chinese
Connaught Place	North Indian
Connaught Place	Chinese North Indian Mughlai Continental
Connaught Place	Fast Food
Connaught Place	North Indian Chinese Italian Continental
Connaught Place	North Indian Chinese Italian Continental
Connaught Place	South Indian North Indian Chinese
Connaught Place	North Indian Italian Continental
Connaught Place	Continental Italian Asian Indian
Connaught Place	Ice Cream