Zomato Data Analysis: Exploring Restaurants and Cuisines using SQL

Dataset: Zomato Dataset

Project Description:

In this project, I analyzed the Zomato dataset using SQL to gain insights into various aspects of restaurants and cuisines. I utilized SQL queries to extract valuable information and draw meaningful conclusions from the dataset.

Methods Used:

- SQL Queries
- Data Analysis
- Data Manipulation
- Aggregation Functions
- Joins

Results/Findings:

- 1. Top 10 Cuisines by Count:
 - The query identified the top 10 cuisines with the highest occurrence in the dataset.
 - Cuisine X had the highest count, indicating its popularity among restaurants.
 - The findings can help understand the preferred cuisines in the dataset.
- 2. Average Rating of Restaurants:
 - The query calculated the average rating of restaurants by considering non-null ratings.
- The average rating was determined to be Y, indicating the overall satisfaction level of customers.
 - The findings provide insights into the general rating trend of restaurants in the dataset.
- 3. Average Price Range by City:
 - The guery computed the average price range of restaurants in each city.
- City Z had the highest average price range, suggesting it may have more upscale or expensive dining options.
 - The results offer an understanding of the cost range across different cities.
- 4. Count of Cuisines by City:
 - The query determined the count of cuisines offered by restaurants in each city.
 - City A had the highest count of cuisines, indicating a diverse culinary landscape.
 - The findings provide an overview of the variety of cuisines available in different cities.
- 5. Total Count of Restaurants by Price Range:
 - The guery aggregated the count of restaurants based on their price range.
- Price range B had the highest count, suggesting it is the most common price range among restaurants.

- The results offer insights into the distribution of restaurants based on their affordability.

6. Percentage of Restaurants Offering Delivery:

- The query calculated the percentage of restaurants that offer delivery services in each city.
- City C had the highest percentage, indicating a strong presence of delivery-oriented restaurants.
 - The findings highlight the importance of delivery services in the restaurant industry.

7. Top 5 Cities with High Average Rating:

- The query identified the top 5 cities with the highest number of restaurants having a high average rating.
 - City D ranked first, indicating a concentration of well-rated restaurants in that location.
 - The results help identify cities with a strong reputation for high-quality dining experiences.

8. Top 5 Cuisines by City with Highest Count:

- The query determined the top 5 cuisines offered by restaurants in each city based on their count.
 - City E had Cuisine F as the most common cuisine, indicating its popularity in that city.
 - The findings provide insights into the culinary preferences and diversity in different cities.

9. Percentage of Vegetarian Restaurants by City:

- The query calculated the percentage of vegetarian restaurants in each city.
- City G had the highest percentage, suggesting a strong presence of vegetarian-friendly dining options.
 - The results offer insights into the vegetarian dining scene across different cities.

10. Average Rating by Price Range:

- The query calculated the average rating for restaurants in each price range.
- Price range H had the highest average rating, indicating a correlation between higher prices and better ratings.
- The findings provide an understanding of the relationship between price and customer satisfaction.

11. Count of Restaurants Offering Online Ordering:

- The query determined the count of restaurants that offer online ordering services in each city.
- City I had the highest count, indicating a strong adoption of online ordering platforms by restaurants.
 - The results highlight the importance of online ordering in the modern restaurant landscape.

12. Top 5 Cities with Most Expensive Restaurants:

- The query identified the top 5 cities with the highest average price range for restaurants.
- City J ranked first, suggesting a higher concentration of upscale or fine dining establishments.

- The findings offer insights into cities where dining out may be relatively more expensive.

13. Average Rating by Cuisine:

- The query calculated the average rating for each cuisine.
- Cuisine K had the highest average rating, indicating a favorable reception among customers.
 - The results help identify cuisines that are generally well-received by diners.

14. Percentage of Restaurants with Outdoor Seating:

- The guery calculated the percentage of restaurants that offer outdoor seating in each city.
- City L had the highest percentage, suggesting a higher prevalence of outdoor dining options.
 - The findings highlight the availability and popularity of outdoor seating in different cities.

15. Average Cost by Cuisine:

- The query calculated the average cost for each cuisine.
- Cuisine M had the highest average cost, indicating it is generally associated with higher-priced restaurants.
 - The results provide insights into the cost range of different cuisines.

Technical Skills Utilized:

- SQL (MS SQL SERVER)
- Data Analysis
- Database Management
- Data Manipulation

By successfully completing this project, I demonstrated my proficiency in SQL, data analysis, and extracting insights from complex datasets. I applied various SQL techniques and methodologies to derive meaningful information about restaurants and cuisines from the Zomato dataset.