**Project Title**: ***Analysis of Zomato Restaurant Dataset***  
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**Tool Used**: Microsoft Excel

**1. Introduction**

In the digital age, data drives decisions, especially in industries like food and hospitality. This project explores restaurant data from Zomato to uncover key insights related to customer preferences, city-wise performance, food pricing, and rating trends.

The data, sourced from Kaggle, contains detailed records on restaurants, their locations, cuisine types, menu items, votes, and ratings. The objective was to clean and analyze this data and present findings through an interactive Excel dashboard.

**2. Data Cleaning Process**

The raw dataset (in the "ROW DATA" sheet) presented several challenges that needed to be addressed before analysis. Cleaning this data was essential to ensure accurate reporting.

**Identified Issues:**

* **Missing values**: Fields such as ratings and best-seller flags contained "NONE" or were blank.
* **Inconsistent text**: Variations in city and place names due to extra spaces or typos.
* **Mixed data types**: Prices or ratings stored as text instead of numeric.

**Steps Taken:**

1. **Trimmed Text Fields**: Cleaned up columns like City, Cuisine, Place\_Name.
2. **Data Type Correction**: Converted ratings, price columns, and vote counts to numeric types.
3. **Created New Columns**:
   * Avg\_Rating\_Restaurant: Combined average of dining and delivery ratings.
   * Is\_Highly\_Rated: Marked restaurants with ratings ≥ 4.0.
   * Is\_Expensive: Flagged based on price compared to city average.

Cleaned data was saved in the "CLEANED DATA" sheet.

**3. Questions & Pivot Table Analysis**

In the "Q&Ptables" sheet, I created pivot tables to answer key business and consumer-related questions.

**Q1: Which cities have the most restaurants?**

* **Fields used**: City, Restaurant\_Name
* **Analysis**: Counted unique restaurants per city.
* **Insight**: Metro cities like Bangalore and Delhi top the list in restaurant count.
* **Chart Type**: Bar Chart

**Q2: Which restaurants are highly rated (≥ 4.5)?**

* **Fields used**: Restaurant\_Name, Avg\_Rating\_Restaurant
* **Filter**: Is\_Highly\_Rated = TRUE
* **Insight**: These restaurants are potential benchmarks in food quality and service.
* **Chart Type**: List or Table

**Q3: What cuisines are the most popular?**

* **Fields used**: Cuisine, Restaurant\_Popularity
* **Calculation**: Total popularity score per cuisine
* **Insight**: Indian, Fast Food, and Chinese are the most preferred types.
* **Chart Type**: Pie Chart or Column Chart

**Q4: How do food prices vary by city?**

* **Fields used**: City, Avg\_Price\_City
* **Insight**: Certain cities show higher average food prices, indicating local economic differences.
* **Chart Type**: Line Chart or Bar Chart

**Q5: How do delivery and dining ratings compare across cities?**

* **Fields used**: City, Delivery\_Rating, Dining\_Rating
* **Insight**: Some cities rate better on delivery than dine-in, and vice versa.
* **Chart Type**: Line Chart

**4. Dashboard Overview**

The "Dashboard" sheet was designed for interactivity and ease of exploration. It includes:

**Interactive Elements:**

* **Slicers** to filter the entire dashboard by City, Cuisine, and Rating Category.
* **Charts** that auto-update based on slicer selections.

**Visual Components:**

* **Column Chart**: Average food prices across cities.
* **Pie Chart**: Cuisine-wise distribution.
* **Bar Chart**: Restaurant ratings.
* **KPI Boxes**:
  + Total Restaurants
  + Average City Rating
  + Average Price

This layout allows users to explore patterns without needing technical skills.

**5. Conclusion**

This project successfully transformed raw restaurant data into valuable insights using Excel's data analysis tools. Through careful cleaning, structured pivot analysis, and a user-friendly dashboard, we gained clarity on:

* Where restaurants thrive the most
* What customers prefer in terms of cuisine and service
* How pricing and quality vary across Indian cities

The dashboard is dynamic and scalable, providing a solid foundation for business planning, food delivery strategies, or restaurant benchmarking. Future improvements may include map integration, sentiment analysis using customer reviews, or time-based performance trends.