**MINI PROJECT- Python**

**TOPIC– Indian food delivery restaurant aggregator**

**PROBLEM STATEMENT:**

Restaurants from all over the world can be found here in Bengaluru. From the United States to Japan, Russia to Antarctica, you get all types of cuisines here. Delivery, Dine-out, Pubs, Bars, Drinks, Buffet, Desserts you name it and Bengaluru has it. Bengaluru is the best place for foodies. The number of restaurants is increasing day by day. Currently, it stands at approximately 12,000 restaurants. With such a high number of restaurants. This industry hasn't been saturated yet. And new restaurants are opening every day. However, it has become difficult for them to compete with already established restaurants. The key issues that continue to pose a challenge to them include high real estate costs, rising food costs, shortage of quality manpower, fragmented supply chain, and over-licensing. This Zomato data aims at analyzing the demography of the location. Most importantly it will help new restaurants in deciding their theme, menus, cuisine, cost, etc for a particular location. It also aims at finding similarities between neighborhoods of Bengaluru on the basis of food. The dataset also contains reviews for each of the restaurants which will help in finding the overall rating for the place.

**Aim:**

The basic idea of analyzing the Zomato dataset is to get a fair idea about the factors affecting the establishment of different types of restaurants at different places in Bengaluru, the aggregate rating of each restaurant, Bengaluru being one such city has more than 12,000 restaurants with restaurants serving dishes from all over the world. With each day new restaurants open the industry hasn't been saturated yet and the demand is increasing day by day. In spite of increasing demand, it however has become difficult for new restaurants to compete with established restaurants. Most of them serve the same food. Bengaluru is the IT capital of India. Most of the people here are dependent mainly on the restaurant food as they don’t have time to cook for themselves.

**DATASET DESCRIPTION:**

Zomato is an Indian multinational restaurant aggregator and food delivery company founded by Deepinder Goyal and Pankaj Chaddah in 2008. Zomato provides information, menus, and user reviews of restaurants as well as food delivery options from partner restaurants in select cities.

**DATA DICTIONARY:**

• **Restaurant Id**: Unique id of every restaurant across various cities of the world

• **Restaurant Name**: Name of the restaurant

• Country Code: Country in which restaurant is located

• City: City in which the restaurant is located

• **Address**: Address of the restaurant

• **Locality**: Location in the city

• **Locality Verbose:** Detailed description of the locality

• Longitude: Longitude coordinate of the restaurant's location

• Latitude: Latitude coordinate of the restaurant's location

• **Cuisines**: Cuisines offered by the restaurant

• **Average Cost for two**: Cost for two people in different currencies

• Currency: Currency of the country

• **Has Table booking**: yes/no

• **Has Online delivery**: yes/ no

• Is delivering: yes/ no

• Switch to order menu: yes/no

• Price range: range of price of food

• **Aggregate Rating**: Average rating out of 5

• Rating color: depending upon the average rating color

• Rating text: text on the basis of rating of rating

• **Votes**: Number of ratings cast by people

**QUESTIONS TO SOLVE:**

1. **Import libraries that you required and Load the data set.**
2. **Which are the top restaurant chains based on the distribution(frequency) in Bangaluru?**
3. **How many restaurants do not accept online orders?**
4. **What is the ratio b/w restaurants that provide and do not provide table booking?**
5. **Use a boxplot on the rating column. Use User Defined Function or Lambda function or Apply function to extract the data that comes before /. Kindly exclude /.**
6. **Online and Offline orders restaurants percentage.**
7. **Plot the scatter plot using the Cost vs rating variable with respect to online order. Use apply the function Or other function to remove the “,”.**
8. Find the distribution of the votes and Approx\_cost using a user-defined function and for a loop.
9. **Which are the most common restaurant type in Banglore?**
10. **Is there any difference b/w the votes of restaurants accepting and not accepting online orders?**
11. **Which are the most common restaurant type in Banglore?**
12. **Find the Best budget Restaurants in any location.**
13. **Top quick bites restaurant chains in Banglore.**
14. **Which are the most popular casual dining restaurant chains, Make use of any plot related to this question?**
15. **Which are the most popular cuisines of Bangalore using a related plot?**