Decomposition
Restaurant Analysis

Data Preparation:

- ***Tool: Google Sheets***
  - ***RESTAURANT TABLE***
    - Open the raw data for Restaurants on Sheets, create a copy and look over the data.
    - Deleted all duplicated information with the "remove duplicate" feature
    - Filtered the data by ratings with 0, deleted that data and was left with all the restaurants with ratings.
    - I cleaned the City column by trimming unnecessary characters at the end of some of the cities and created a new column with the correct cities.
    - Formatted the columns to make the data more legible and hid any columns I will not be using
  - ***ORDERS TABLE***
    - Open the raw data for orders on Sheets, create a copy and look over the data.
    - Deleted all duplicates and blank rows
    - Deleted all the sales that equaled to 0 and -1 using a filter
    - Deleted all the currency that was not in INR
    - Formatted the columns to make the data more legible and hid any columns I will not be using

- ○ *USERS TABLE*
  - ■ Open the raw data for orders on Sheets, create a copy and look over the data.
  - ■ Deleted all duplicates and blank rows
  - ■ Formatted the columns to make the data more legible and hid any columns I will not be using
- ○ *MENU TABLE*
  - ■ Open the raw data for orders on Sheets, create a copy and look over the data.
  - ■ Deleted all duplicates and blank rows
  - ■ Formatted the columns to make the data more legible and hid any columns I will not be using
- ● *Tool:Tableau*
  - ○ Upload the data to Tableau to create the tables /dashboard and story.
  - ○ Join the tables as needed

Research Questions

1. What are the 10 most popular cuisine types?
2. What restaurants have the most locations ?
3. What cities have the highest average rating of restaurants?
4. What restaurants have the highest SUM of prices for their food?
5. What cities have the most restaurants?
6. What restaurants have the most orders?
7. Top 10 restaurants that made the most in Sales Amount
8. Who orders more, females or males?

Metrics Defined

- The data analysis is based on restaurants that have ratings
- Top 10 Cuisine would be the 10 cuisines with the most restaurants
- For cities with the highest rating average, we would take all the rating in each city and get the average of them, and show the top 5-10 cities
- For cities with the most restaurants I would like to show the 15 cities with the highest number of restaurants and add a filter to allow for deeper exploration of the data.
- For restaurant orders I'd like to display the 20 restaurants with the highest order and add a filter that allows the user to narrow down the data if needed
- Sales amount - I would show the top 10 restaurants that have made the most in sales amounts

Visualizations:

1. Top 10 Cuisine Types:***Highlights Table***
2. Restaurants with the most locations: ***Bar Chart***
3. Cities with the highest Average Ratings: ***Highlight Table***
4. *Sum of Prices: **Bar Chart***
5. Cities with the most restaurants: ***Treemap***
6. Restaurants with the most orders ***Horizontal Bars***
7. Top 10 Sales : ***Bar Chart***
8. Who Orders more: ***Pie Chart***

Hypotheses:

1. Popular Cuisine Types: Specific cities favor certain types of cuisine
2. Restaurants with higher average customer ratings tend to have a greater number of locations
3. Larger cities (by population) have a higher average restaurant rating compared to smaller cities due to being more popular options in these cites
4. Cities with larger populations and greater cultural diversity have a higher number of restaurants.
5. Restaurants with higher customer ratings receive more orders on average.
6. Larger cities (by population) have a higher overall number of restaurant orders
7. Cuisines that are more popular within a city receive a higher volume of orders.

Goal for my Analysis:

The goal of my business analysis is to gain a comprehensive understanding of the restaurant's performances.

Findings:

- This data highlights a significant preference for Indian and Chinese cuisines, either individually or in combination, and suggests that desserts, particularly Indian desserts, are also quite popular.
- Fast food chains, especially those that offer pizza and fried chicken, are everywhere. There's also a noticeable number of dessert-focused spots, showing that quick-service meals and sweet treats are very popular.
- Chopal and Kunta are standout locations in terms of customer satisfaction with restaurant offerings.
- Indian Cakes & Nuts and Wok On Fire - Indo Chinese - Pan Asian are leading the way in revenue. Their impressive earnings indicate that these restaurants are quite popular
- Bangalore is a major hotspot for dining, with various parts of the city boasting a strong restaurant presence.
- New Hyderabad Biryani Zone and Nandhana Restaurant are the top-performing restaurants in terms of order volume, significantly outpacing other establishments.
- Fast food and café chains dominate the high sales rankings, indicating their popularity.
- Males order more from restaurants than females

Suggestions:

1. Concentrate on marketing to male customers, who make up the majority of the current customer base, while also creating targeted campaigns to attract more female customers and achieve a better sales balance.
2. Consider opening new restaurant locations in Bangalore, especially in areas like Indiranagar and Koramangala, where there is already a high concentration of successful restaurants.
3. Given the popularity of Indian and Chinese cuisines, think about adding more fusion dishes to attract more customers.
4. Study successful chains like Domino's Pizza and Happy Brew Cafe to understand their effective strategies in pricing, promotions, and customer service, and apply similar tactics to your business.