**Restaurant Analysis of Swiggy**

**Task 1: Top 10 Areas with Most Restaurants**

The area with the most restaurants is Rohini, with 257 restaurants, followed by Chembur (208) and Kothrud (149). This indicates high restaurant density in specific urban areas, likely due to high demand or strategic business placement.

**Task 2: Most Popular Food Types Served by Swiggy Restaurants in Each City**

Chinese cuisine appears as the most popular food type across several cities like Kolkata, Mumbai, Pune, Chennai, and Hyderabad. This trend reflects a significant preference for Chinese cuisine among urban customers, followed closely by Indian and North Indian dishes.

**Task 3: Top Rated Swiggy Restaurants (In Percentage)**

Approximately 3.73% of Swiggy restaurants are top-rated (above 4.5). Out of 8,680 total restaurants, 324 have achieved this high rating, indicating a relatively small proportion of restaurants consistently meeting top-tier customer expectations.

**Task 4: Correlation of Factors Affecting Average Rating**

An analysis of the factors shows:

- Delivery time and average rating: A positive correlation, where higher delivery times are associated with higher ratings, possibly due to a bias toward rating higher in slower-paced areas.

- Total ratings and average rating: A slight negative correlation, suggesting that as total reviews increase, the average rating tends to decline, potentially due to growing visibility attracting mixed reviews.

**Task 5: Correlation Between Restaurant Price and Average Rating**

A positive correlation is observed between restaurant prices and average ratings, indicating that higher-priced restaurants generally receive higher ratings. This could reflect a perception of higher quality at higher prices.

**Task 6: City-wise Restaurant Count**

Kolkata leads with 1,346 restaurants, followed by Mumbai (1,277) and Chennai (1,106). This distribution likely corresponds to each city’s population density and urban demand for varied cuisines.

**Task 7: Price Analysis**

Most restaurants fall within the medium price range, followed by low and high ranges. The distribution suggests a focus on affordable to moderately-priced dining options to cater to a broader customer base.

**Task 8: Delivery Time Analysis**

Kolkata and Chennai experience the highest aggregate delivery times, while smaller cities like Surat have the lowest. Optimizing delivery in high-demand cities could improve customer satisfaction.

**Task 9: Cuisine Analysis**

Indian and Chinese cuisines are the top choices, followed by North Indian and Fast Food. This indicates strong demand for local flavors with a growing inclination toward Chinese-inspired dishes.

**Task 10: Area-wise Restaurant Analysis**

Areas like Rohini, Chembur, and Andheri East dominate in restaurant count, suggesting business strategies that focus on dense, high-traffic zones.

**Task 11: Correlation Analysis**

Correlation analysis between rating factors, price, and delivery shows various relationships:

- Price and rating: Positive, suggesting that higher prices may correlate with perceived quality.

- Delivery time and rating: Positive, although optimization could improve the customer experience.

**Task 12: Customer Feedback Analysis**

Feedback data shows Subway, Behrouz Biryani, and Lunchbox as brands with notable customer engagement, which could guide targeted marketing strategies.

**Task 13: Geographical Mapping**

Maps of restaurant locations provide insights into high-density areas and can inform strategies for geographic expansion, efficient routing, and targeted promotions.

**Task 14: Business Recommendations**

Key recommendations include:

- Promote high-rated cuisines and restaurants to maintain and grow customer loyalty.

- Optimize delivery times in slower areas, enhancing customer satisfaction in those zones.

- Expand popular cuisines in demand-heavy regions to increase local market share.

- Offer discounts on higher-priced restaurants to attract price-sensitive customers.

- Market top-rated regions in marketing efforts to build brand trust.

- Gather actionable feedback regularly to help improve restaurant offerings.