**📊 15 Statistical Q&A with Explanations**

**1. Distribution of Restaurant Prices**

**Q:** *What is the price distribution of restaurants?*

**A:** A histogram shows how prices are spread — whether most restaurants are budget-friendly or expensive. A right-skewed distribution means many low-cost places and few costly ones.

**2. Distribution of Average Ratings**

**Q:** *How are average ratings distributed?*

**A:** Most ratings typically cluster around 3.5–4.5. A histogram helps identify whether ratings are inflated (very high) or realistic (normal spread).

**3. Distribution of Delivery Times**

**Q:** *How long do deliveries take across restaurants?*

**A:** This helps evaluate customer wait times. A bell-shaped curve shows consistency; long tails suggest outliers (very slow delivery).

**4. Number of Restaurants per City**

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

**A:** A bar plot answers this, highlighting city-wise competition and availability. It may show metro areas like Bangalore or Delhi dominate.

**5. Distribution of Total Ratings**

**Q:** *How many people rate each restaurant?*

**A:** Some have 10,000+ ratings; others may have just a few. This shows trustworthiness — more ratings usually mean more reliable averages.

**6. Top 10 Most Common Food Types**

**Q:** *Which food categories are most commonly offered?*

**A:** After multi-label encoding, summing each binary food type column gives total mentions. Popular types like *North Indian*, *Chinese*, or *Biryani* likely top the list.

**7. Price by City**

**Q:** *How do restaurant prices vary across cities?*

**A:** Box plots help compare price ranges. Some cities may have higher median prices due to cost of living or premium dining culture.

**8. Average Ratings by City**

**Q:** *Do customers in some cities give higher ratings?*

**A:** Comparing rating distributions city-wise reveals regional satisfaction trends. It also shows where food quality or service is appreciated more.

**9. Price vs. Average Rating**

**Q:** *Do expensive restaurants have higher ratings?*

**A:** A scatter plot shows if a trend exists — higher price = better rating — or if it's unrelated. This tests value-for-money perceptions.

**10. Delivery Time vs. Total Ratings**

**Q:** *Do longer delivery times affect customer engagement (ratings count)?*

**A:** This helps explore if slow delivery deters customers from rating, or from ordering again. No clear trend may mean delivery doesn’t impact review behavior directly.

**11. Average Ratings in Top 5 Areas**

**Q:** *Which areas have the best-rated restaurants?*

**A:** Local area-wise boxplots show regional quality trends. Some neighborhoods may be known for good food and better service.

**12. Do Expensive Restaurants Get Better Ratings?**

**Q:** *Is there a correlation between cost and customer satisfaction?*

**A:** Grouping prices into quartiles (cheap to premium) and plotting their average ratings tests if higher price yields better experience.

**13. Areas with Longest Average Delivery Times**

**Q:** *Which areas consistently suffer long deliveries?*

**A:** A bar chart highlights logistical inefficiencies or high-traffic areas. Useful for Swiggy's ops team or customer expectation management.

**14. Food Types with Highest Average Ratings**

**Q:** *Which food types do people love most?*

**A:** By averaging ratings across all restaurants that offer each food, we identify food styles people rate highly — e.g., *Mughlai* might beat *Fast Food*.

**15. Correlation Between Delivery Time and Price**

**Q:** *Are expensive meals slower to deliver?*

**A:** A scatter plot shows whether higher-priced meals (e.g., fine dining) tend to have longer delivery times due to prep time or packaging.