

Marketing Campaign for a Restaurant Chain Using Exploratory Data Analysis

Presented By

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Agenda

Topics Covered

Introduction and Dataset Overview

Data Cleaning and Preparation

Distribution & Correlation

Competitive Analysis

Market Gap Analysis

Marketing Campaign

Objective

The objective is to leverage insights gained from comprehensive data analysis of Zomato data to craft a strategic marketing campaign for a restaurant chain. Through market analysis, gap identification, and competitive landscape assessment, the presentation aims to highlight opportunities for the restaurant chain to capitalize on underrepresented cuisines and price ranges. It will propose targeted strategies for different regions and customer segments, emphasizing differentiation from competitors through unique offerings and promotional tactics such as discounts, loyalty programs, and special events. The goal is to provide actionable recommendations that drive customer engagement, enhance brand visibility, and ultimately contribute to the restaurant chain's success in a competitive market.

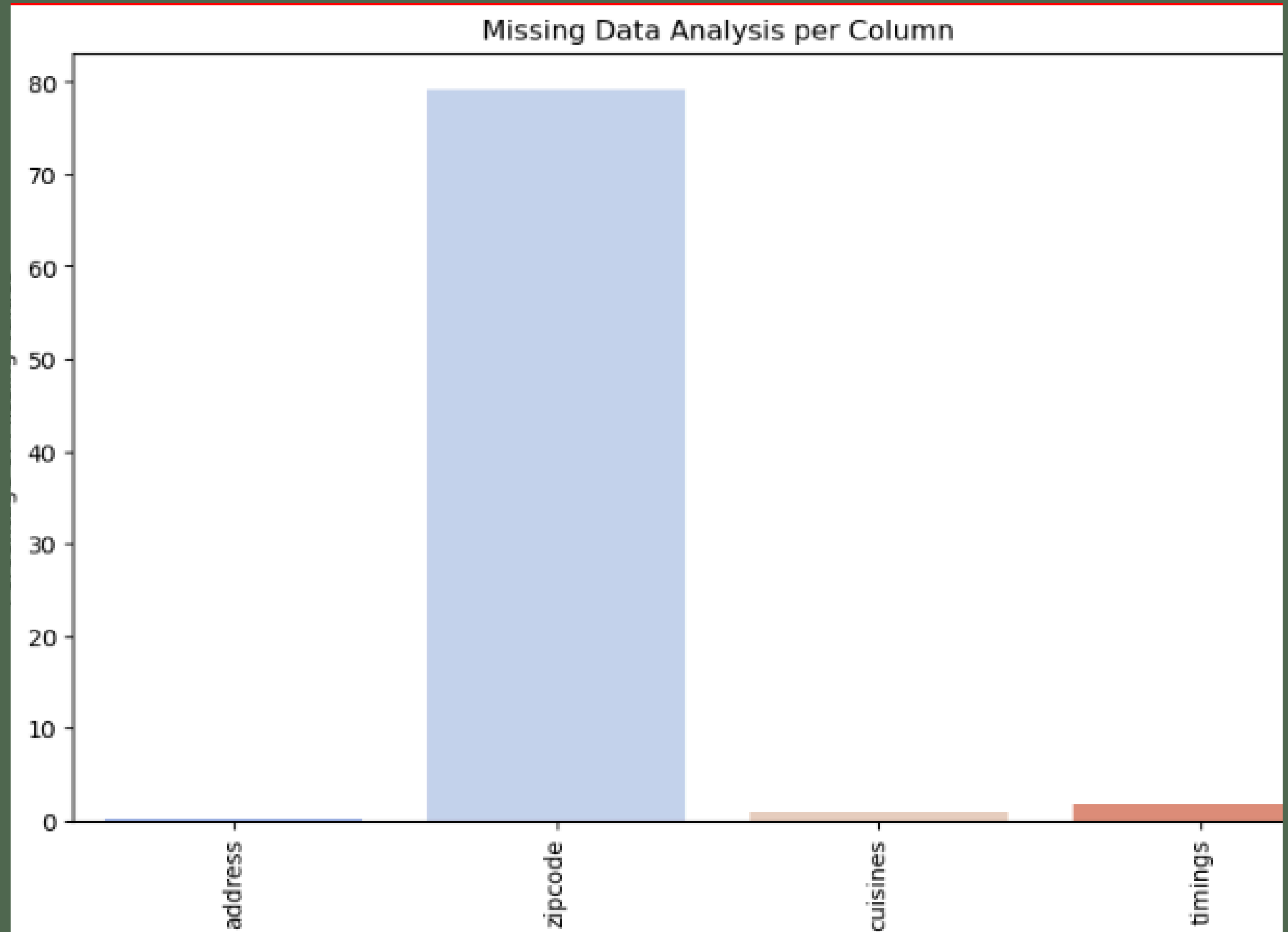


Dataset Overview

- 1.res_id: Unique identifier for each restaurant (integer).
- 2.name: Name of the restaurant (object).
- 3.Restaurant_Type: Type or category of the restaurant (object).
- 4.url: URL of the restaurant (object).
- 5.address: Address of the restaurant (object).
- 6.city: City where the restaurant is located (object).
- 7.city_id: Unique identifier for each city (integer).
- 8.locality: Locality or area within the city (object).
- 9.latitude: Latitude coordinate of the restaurant's location (float).
- 10.longitude: Longitude coordinate of the restaurant's location (float).
- 11.country_id: Unique identifier for the country (integer).
- 12.locality_verbose: Detailed description of the locality (object).
- 13.cuisines: Types of cuisines served at the restaurant (object).
- 14.timings: Opening and closing timings of the restaurant (object).
- 15.average_cost_for_two: Average cost for two people dining at the restaurant (integer).
- 16.price_range: Price range category (integer).
- 17.highlights: Not specified in detail (object).
- 18.aggregate_rating: Aggregate rating of the restaurant (float).
- 19.rating_text: Textual representation of the rating (object).
- 20.votes: Number of votes received by the restaurant (integer).
- 21.photo_count: Count of photos associated with the restaurant (integer).
- 22.rating_bin: Rating category (categorical).

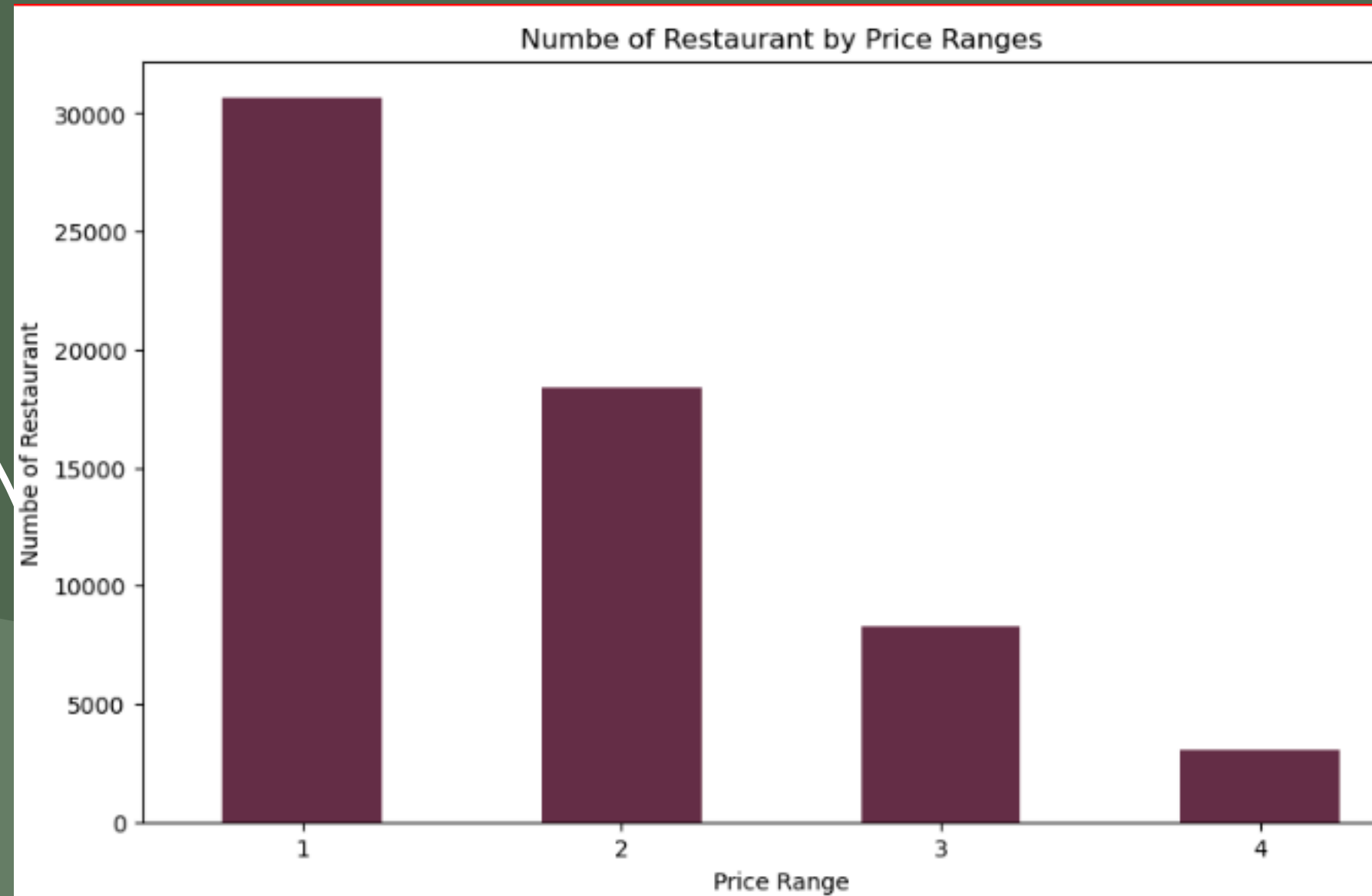
Missing Data Handling

Given that the 'zipcode' column has 79.3% missing data and attempting to impute these values would compromise the dataset's integrity, it's advisable to drop the 'zipcode' column.



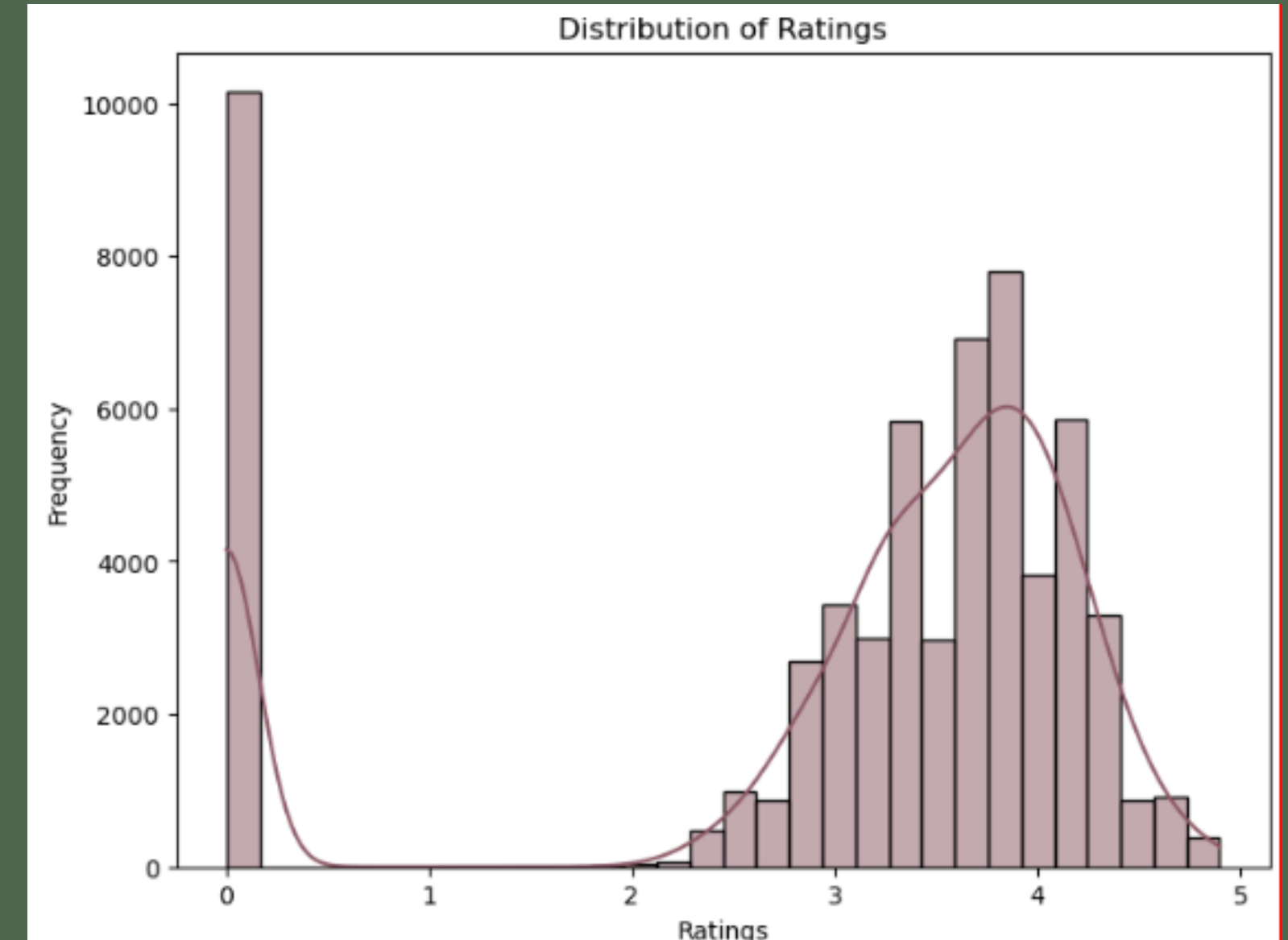
Distribution Analysis

Distribution Analysis of Price Range



It indicates that price range 1 has the highest number of restaurants, followed by price range 2, then price range 3, and finally price range 4 with the fewest number of restaurants.

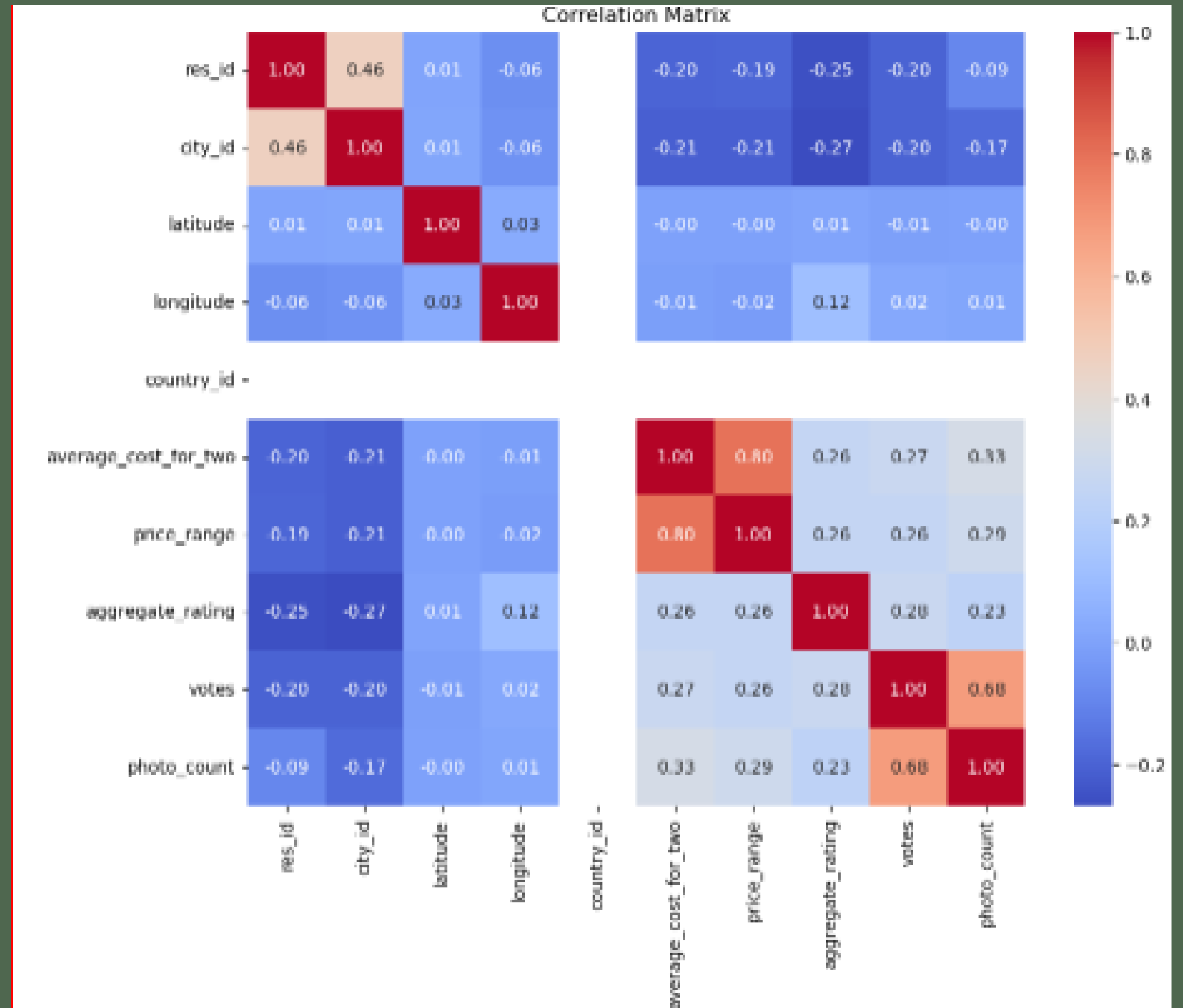
Distribution Analysis of Rating



10,000 restaurants have an aggregate rating of 0.0.0 rating could indicate several possible reasons
No Reviews or Ratings, Negative Reviews, data entry errors, need further investigation to know the reason of 0 rating

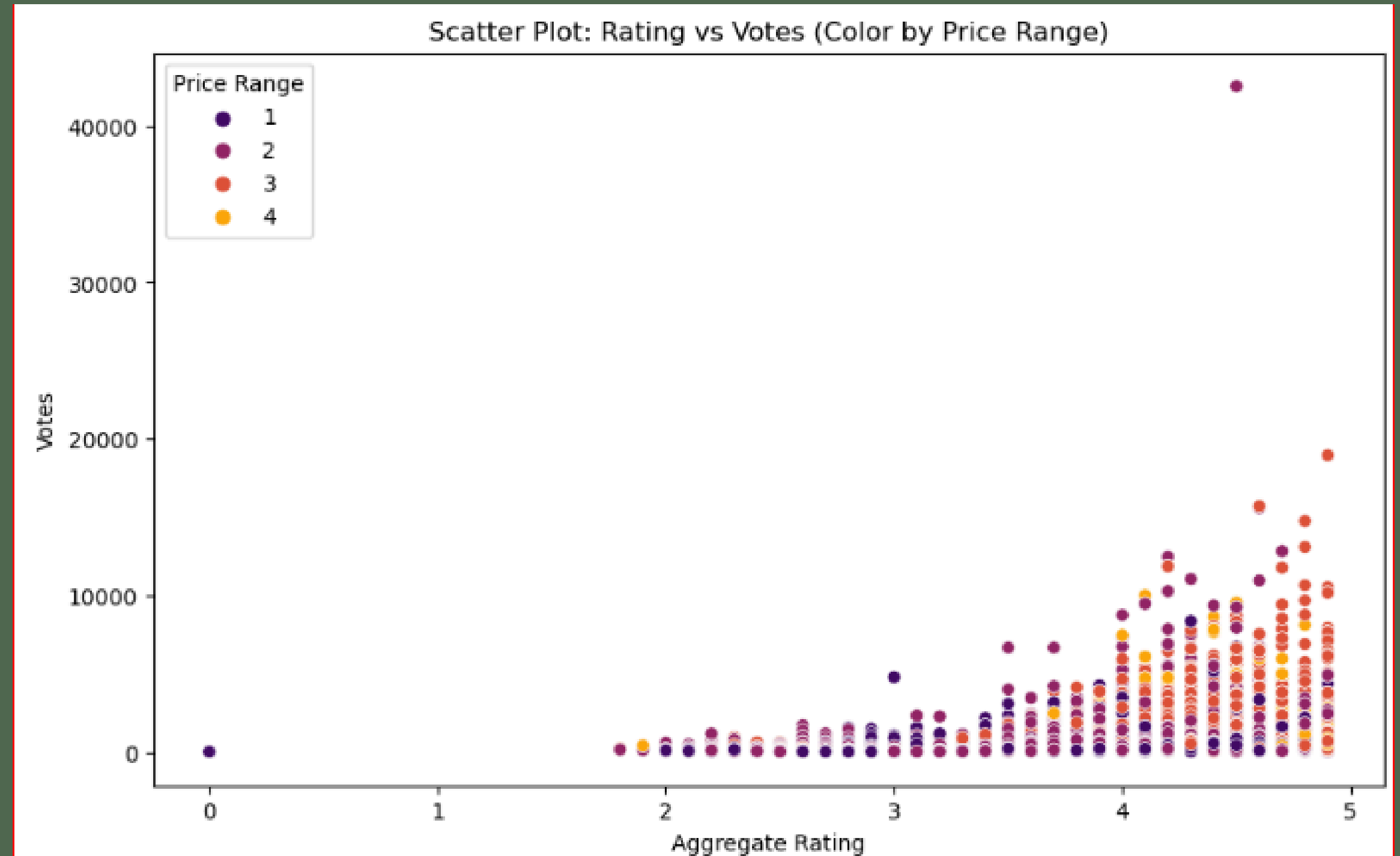
Correlation Analysis

'Res_id' and 'city_id' are strongly positively correlated at about 0.464, indicating a link between restaurants and their locations. Meanwhile, 'price_range' and 'average_cost_for_two' show a robust positive correlation around 0.797, meaning higher-priced restaurants tend to charge more on average for meals.

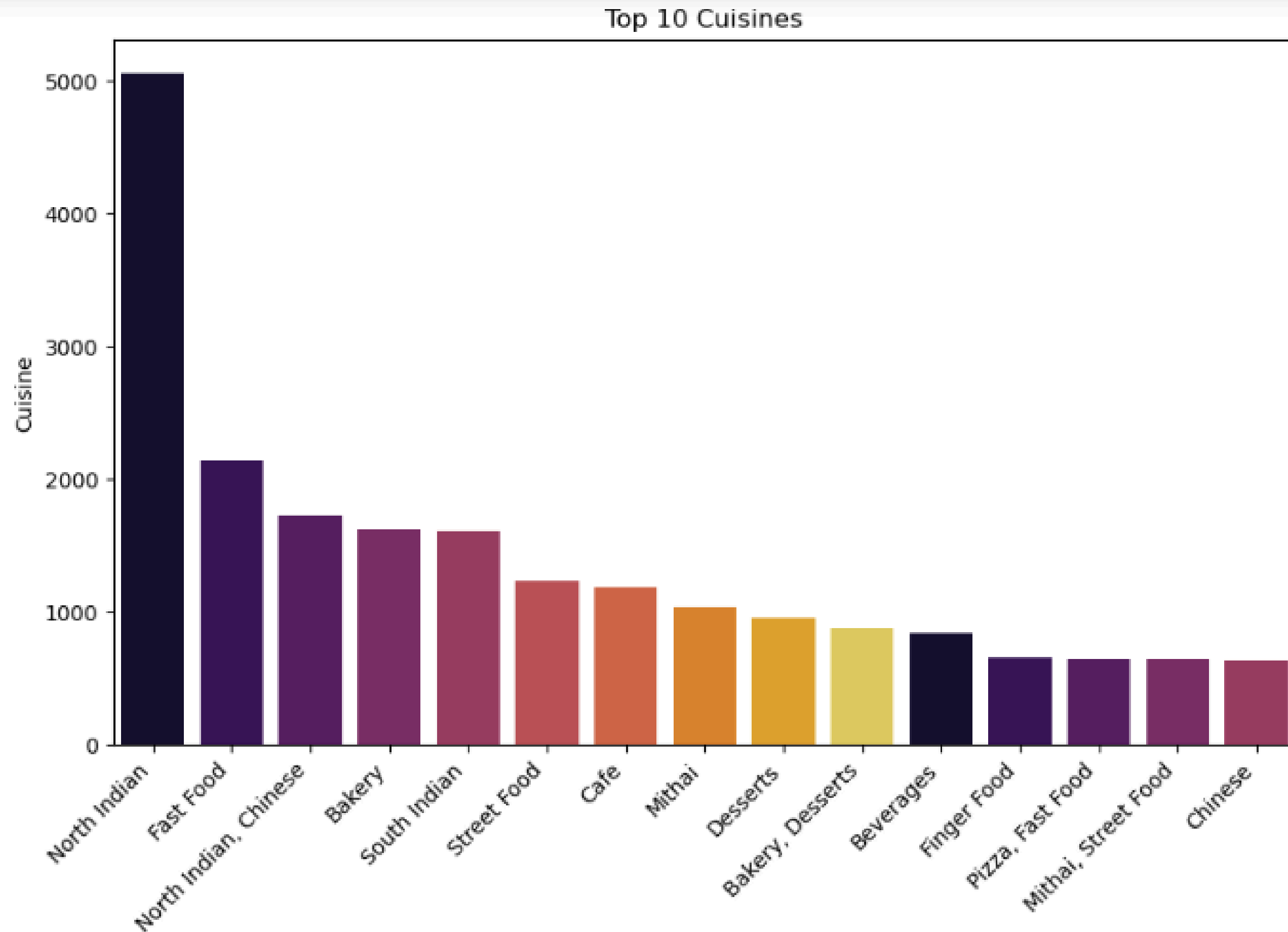


Correlation Analysis

Overall, the correlation indicates that there are some positive associations between Aggregate rating and price range, but the correlations are not extremely strong, implying that they are not strongly dependent on each other.



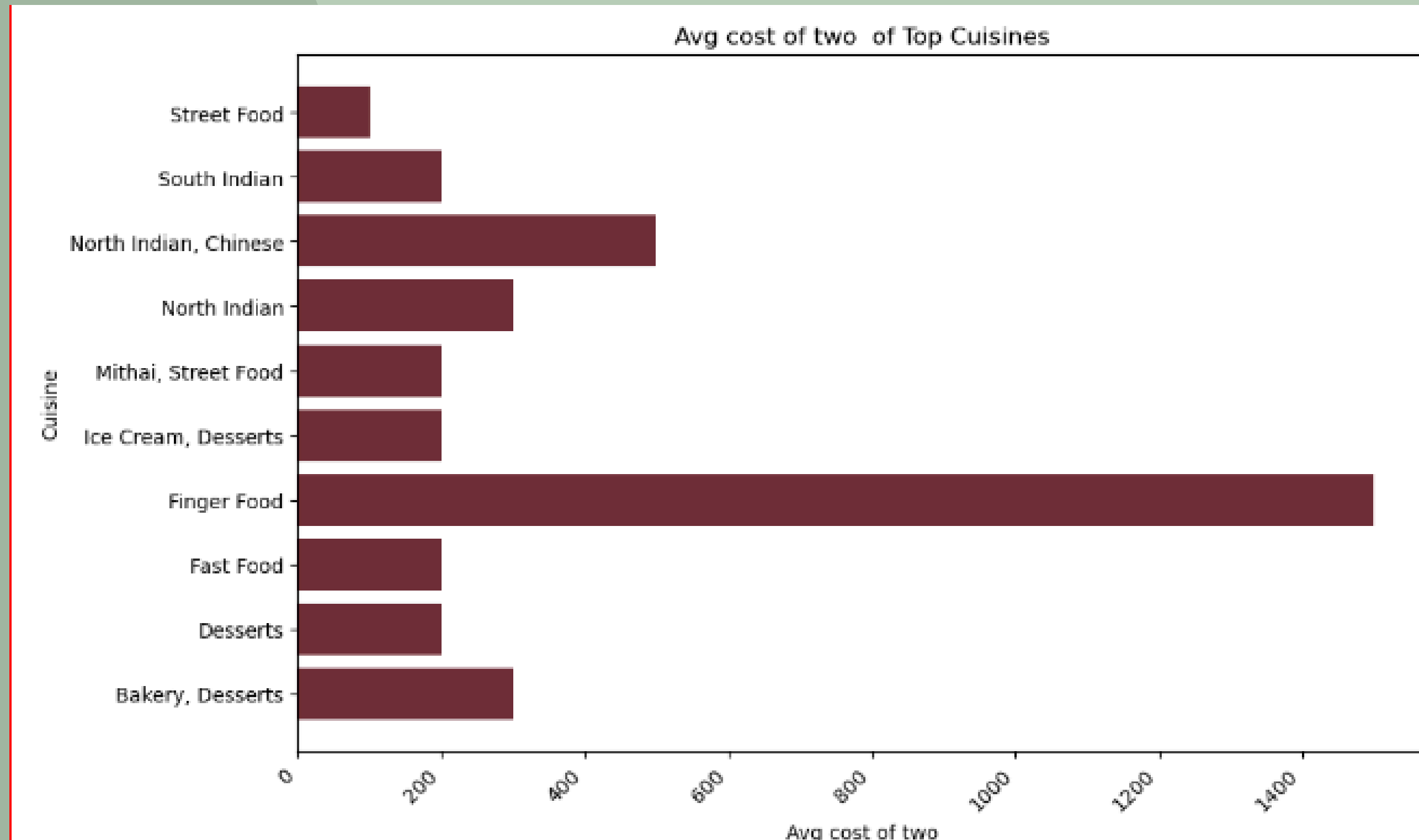
Top 10 Popular Cuisines



the 15 most favorite cuisines:

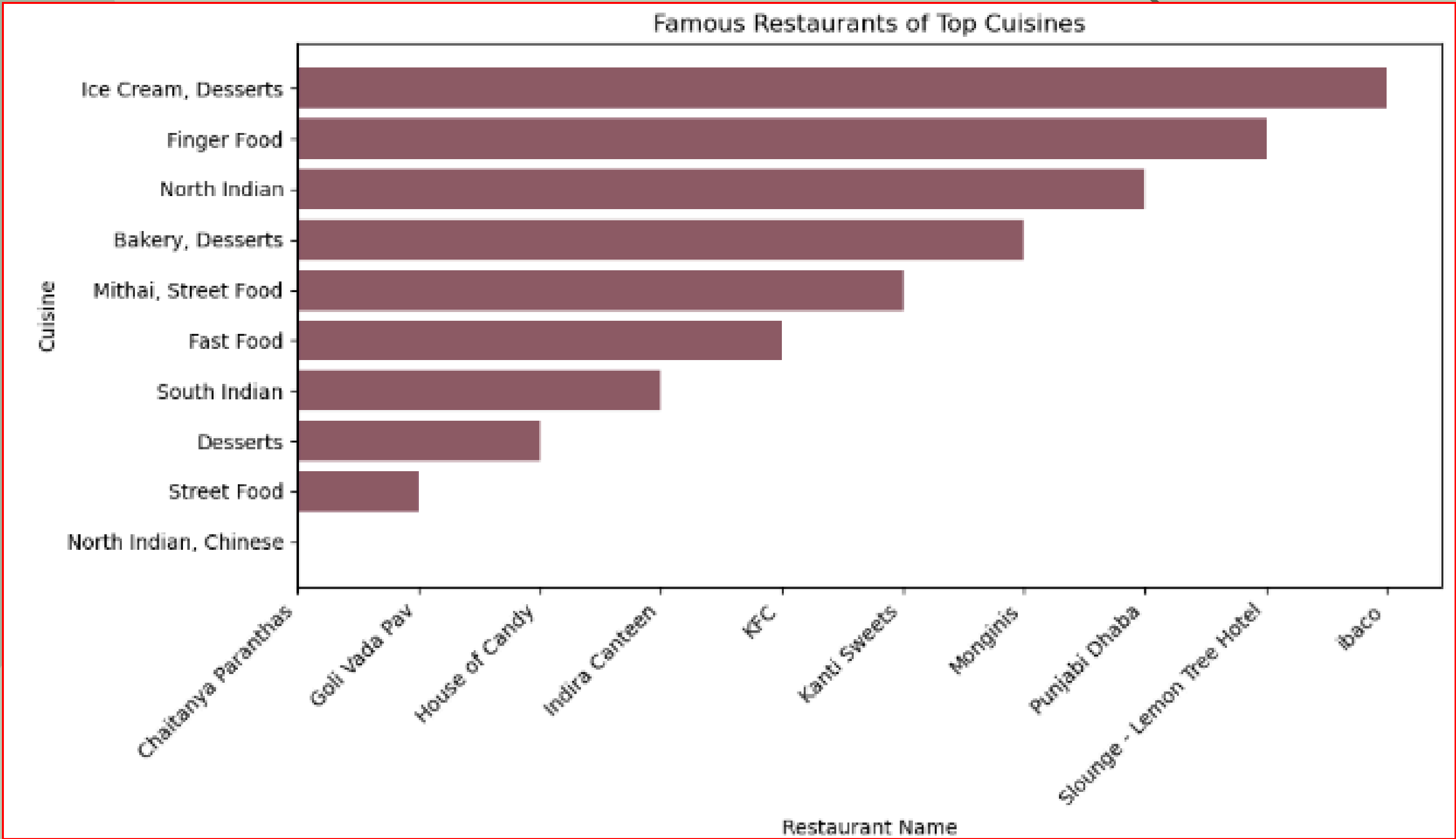
North Indian Bakery,
Desserts Fast Food South
Indian Street Food North
Indian, Chinese Mithai,
Street Food Ice Cream,
Desserts Finger Food
Desserts North Indian
cuisine is the most favorite
cuisine

Avg cost of two of Top Cuisines



Finger food venues top the list with an average cost of 1500, followed by North Indian-Chinese fusion restaurants at 500, North Indian cuisine and bakery/dessert-focused establishments at 300, and finally, others offer the most budget-friendly option.

Famous Restaurants of Top Cuisines

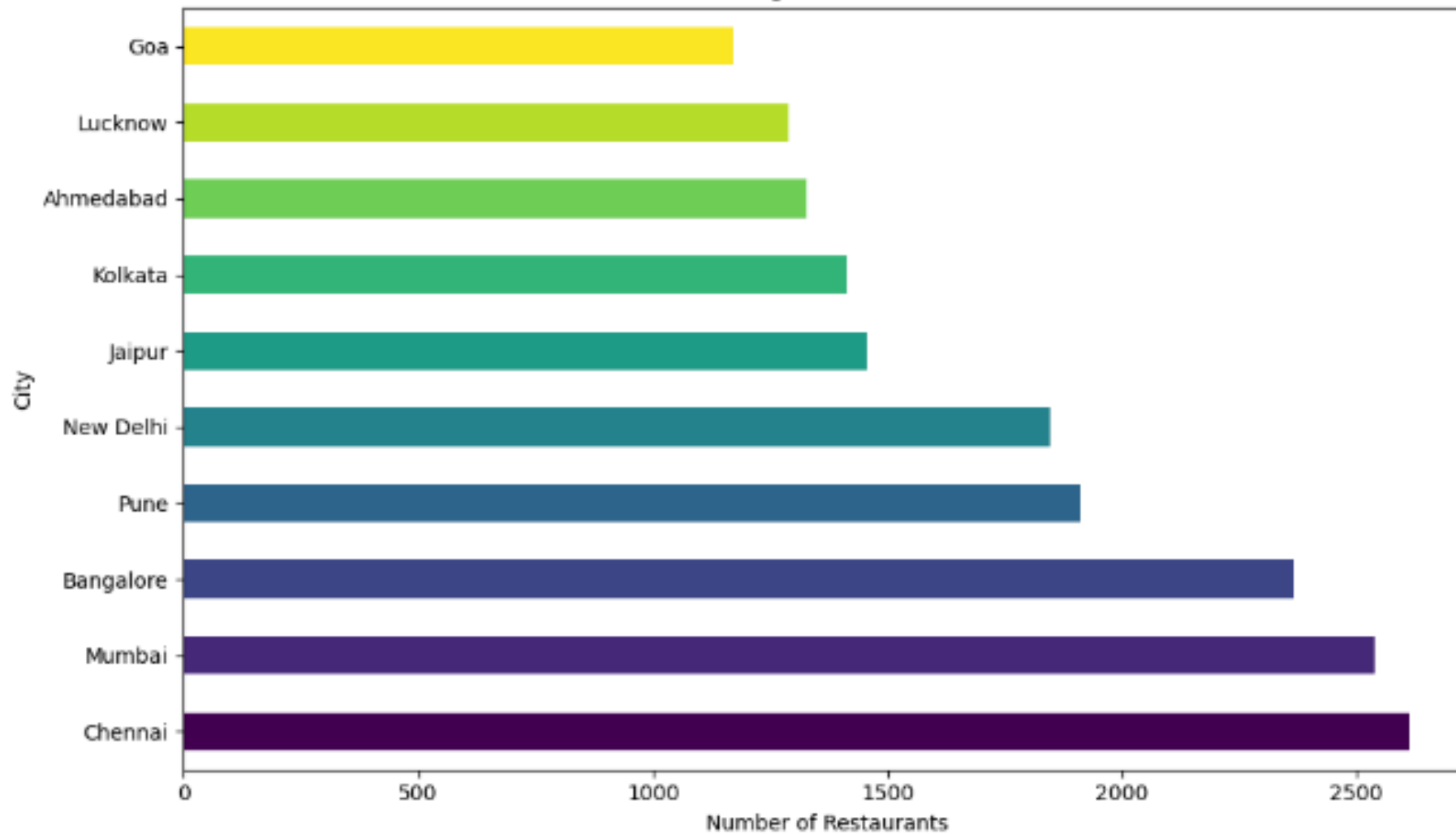


Competitive Analysis:

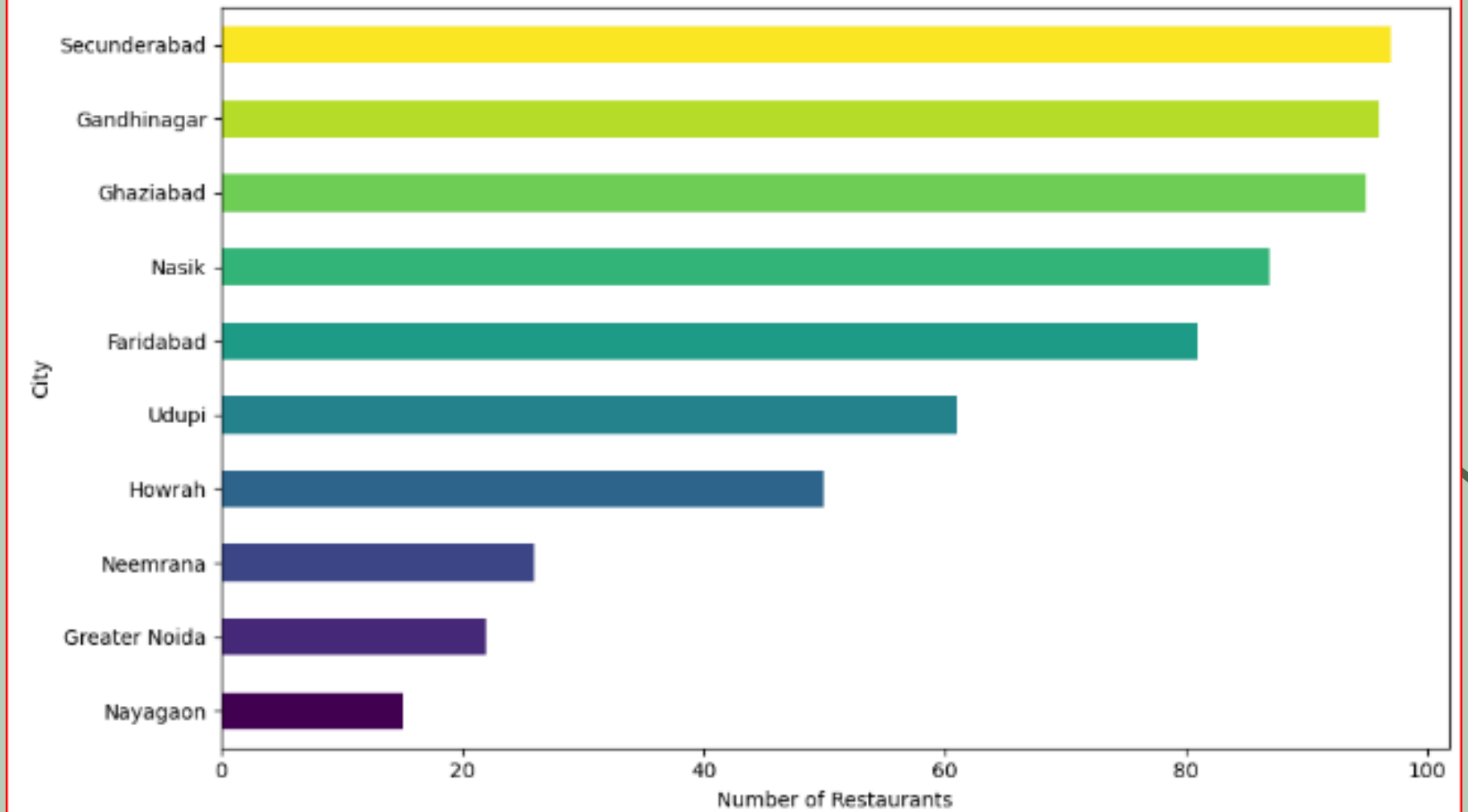
Cities with the highest number of restaurants

Cities with the Lowest number of restaurants

10 Cities with the Highest Number of Restaurants



10 Cities with the Lowest Number of Restaurants



Competitive Analysis

Price Range Distribution of Cities with most restaurants



Price Range Distribution of Cities with most restaurants

Chennai has the highest number of restaurants in Price Range 1, indicating a significant presence of budget-friendly dining options. However, the count decreases as we move to higher price ranges.

Mumbai shows a balanced distribution across price ranges, with a notable number of restaurants in Price Range 3, suggesting a diverse dining scene with options across different price points.

Bangalore also demonstrates a diverse range of dining options but with a higher concentration in Price Range 1 and Price Range 2, indicating a mix of budget-friendly and mid-range establishments.

Pune follows a similar pattern to Bangalore but with a slightly higher count in Price Range 1.

New Delhi showcases a higher count in Price Range 1 and Price Range 2, aligning with its reputation for a variety of dining experiences across different price levels.

Jaipur, Kolkata, Ahmedabad, and Lucknow show a preference for budget-friendly options, with higher counts in Price Range 1 and Price Range 2 compared to higher price ranges.

Goa stands out with a significant number of restaurants in Price Range 3 and Price Range 4, indicating a presence of higher-priced dining options, possibly due to its tourism-centric nature.

Competitive Analysis

Rating Distribution of Cities with most restaurants

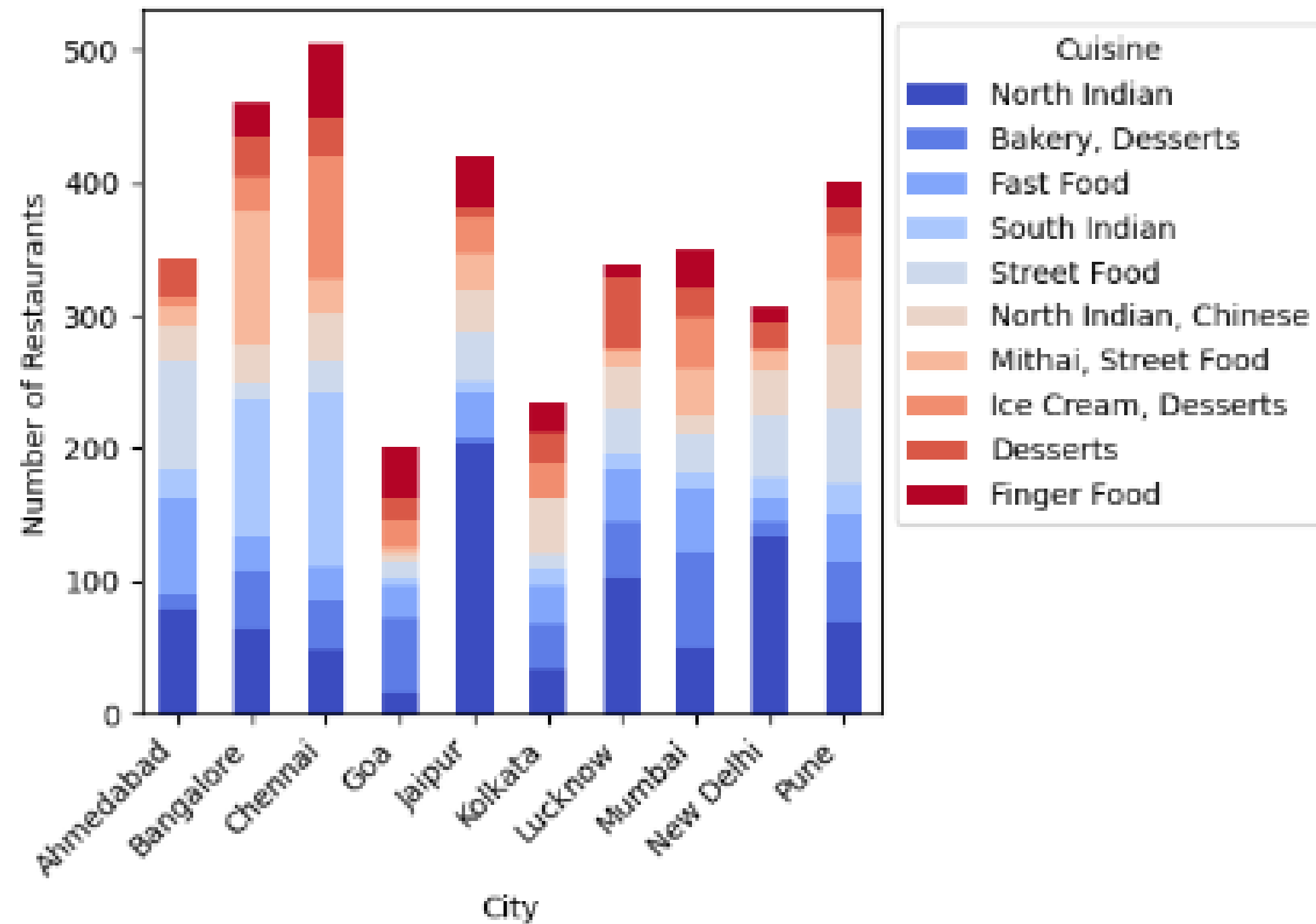


Mumbai leads with 1136 restaurants in the highest rating bin, showcasing its strong presence among top-rated establishments, followed closely by Bangalore (1154) and Chennai (811). This position indicates a higher concentration of lower-rated establishments

Competitive Analysis

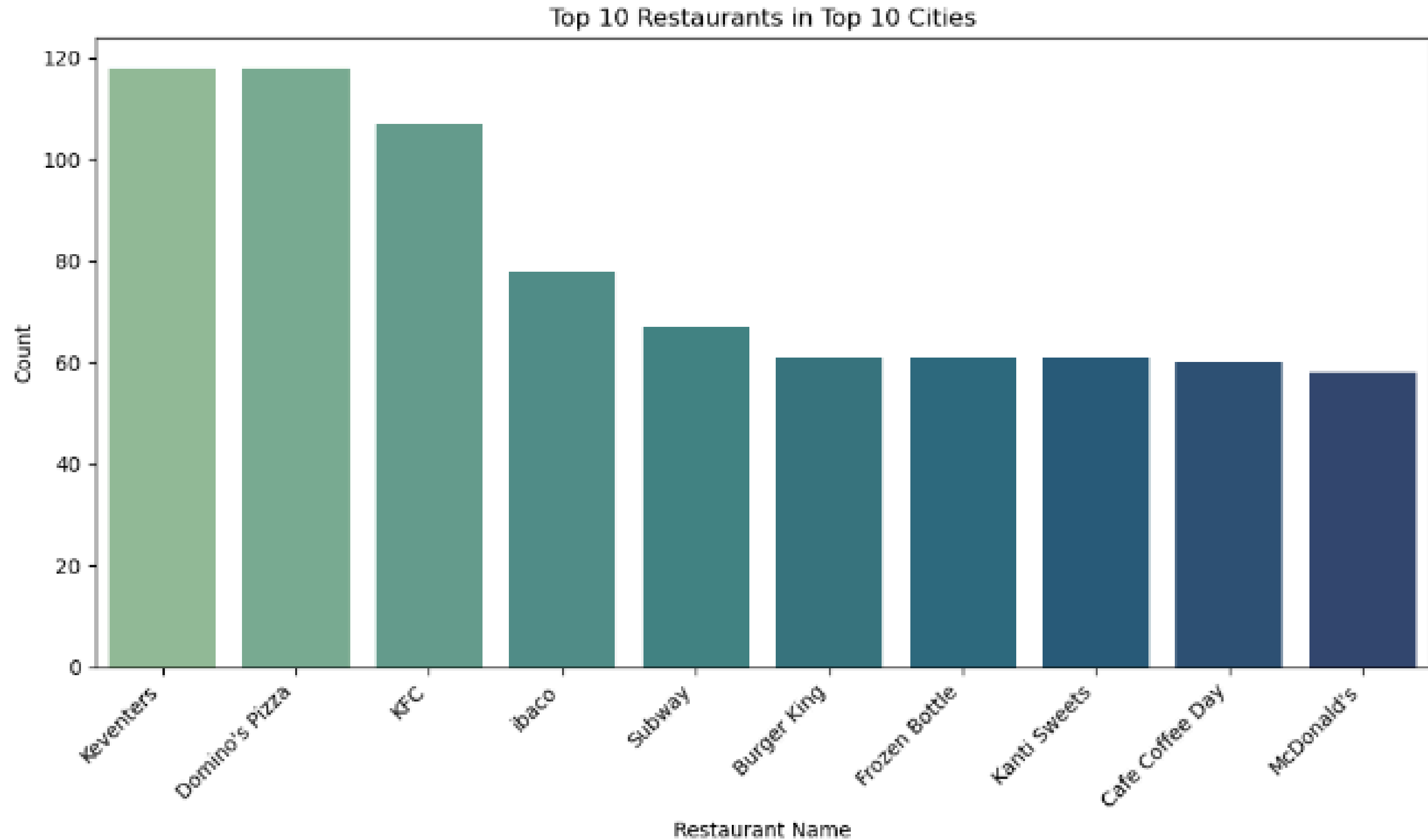
Top 10 Cuisines Among Top Cities with Highest Number of Restaurants

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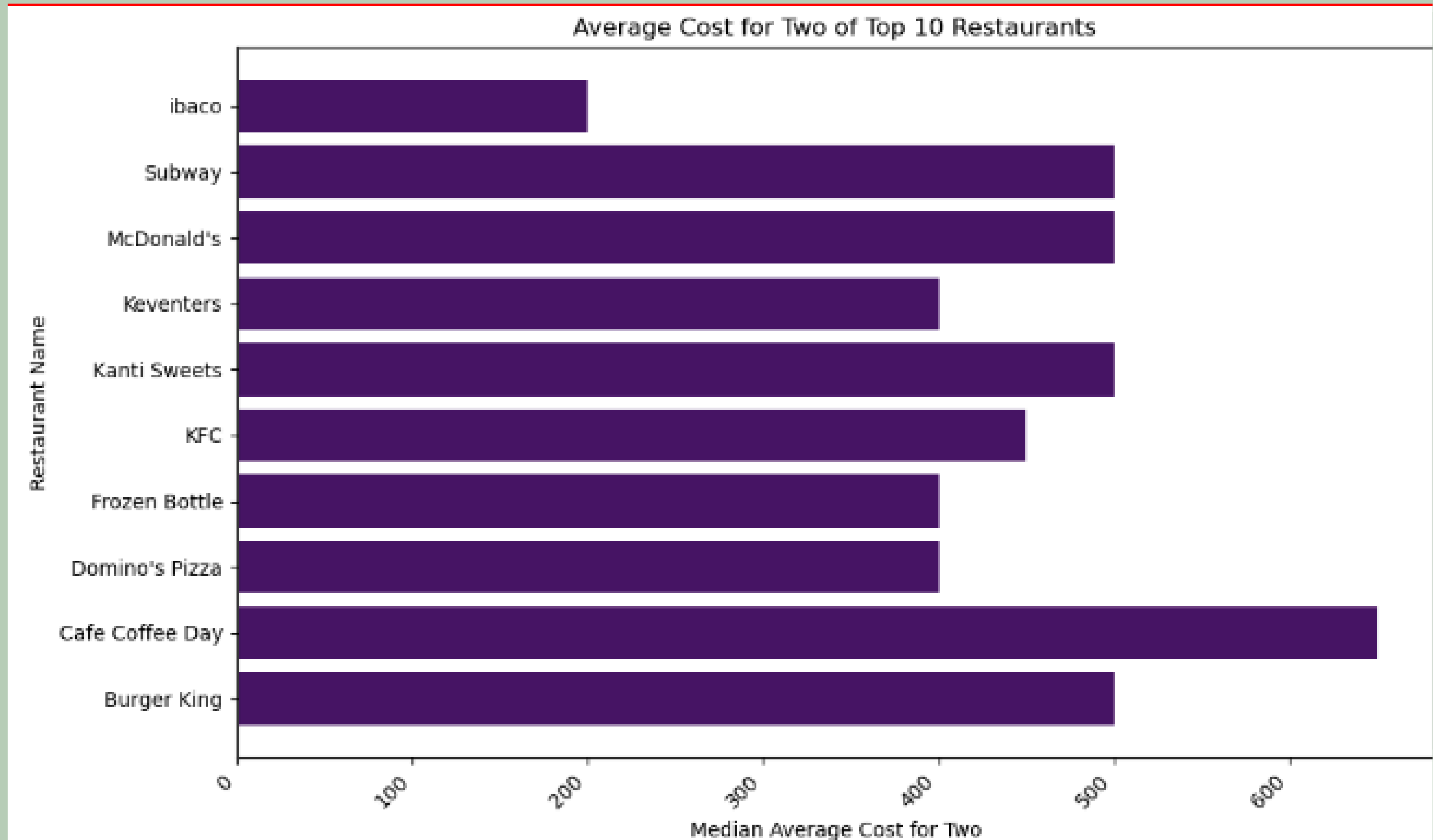


The analysis highlights the diversity of cuisines available across these cities, with North Indian cuisine is on the top,It is most prominent in Jaipur, Lucknow, and New Delhi, indicating that these cities have the highest counts of restaurants serving North Indian cuisine

'Top restaurants in top 10 cities



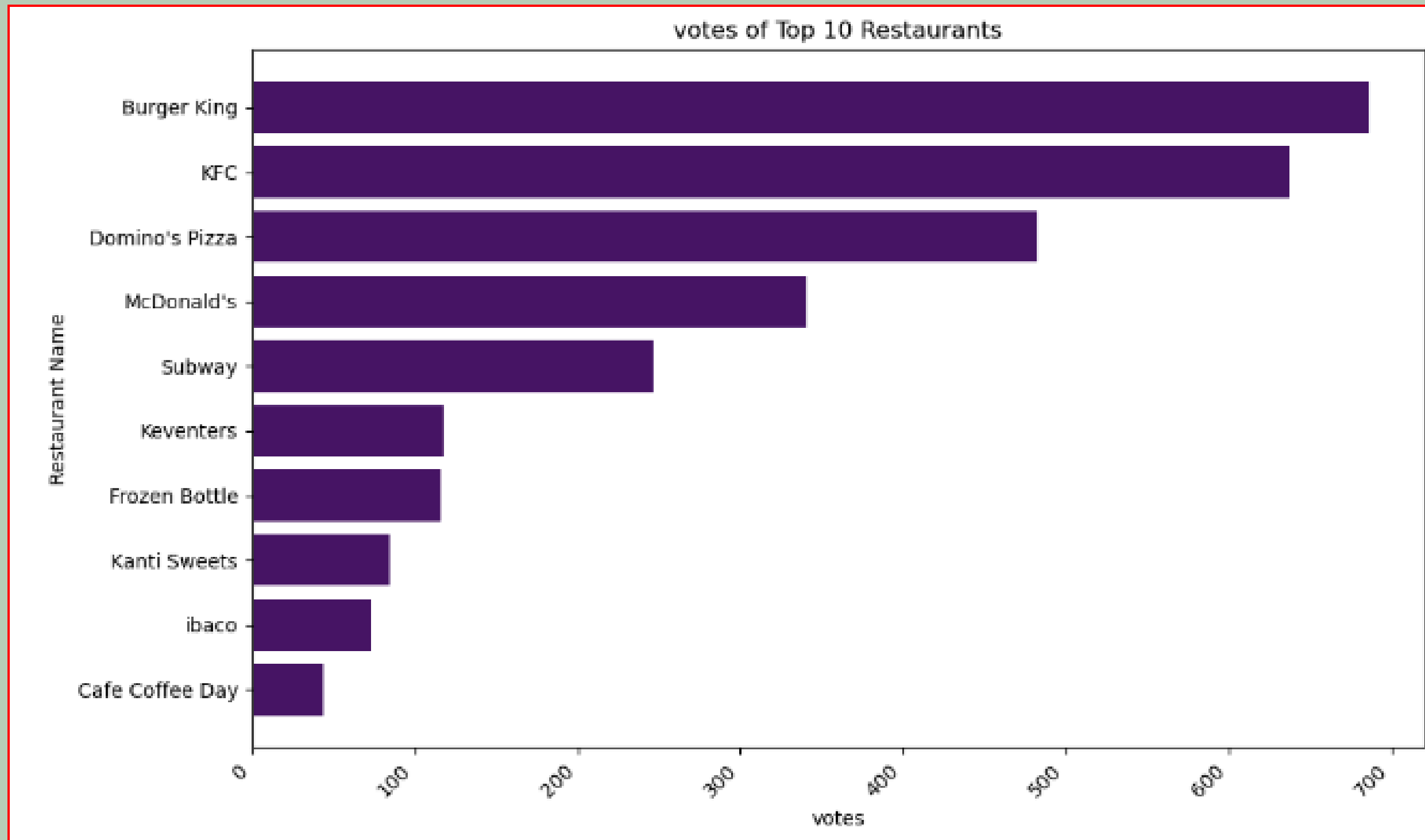
Average Cost for Two of Top 10 Restaurants



Average Cost for Two of Top 10 Restaurants

1. Burger King, Kanti Sweets, McDonald's, and Subway have an average cost around 500, indicating moderately priced dining experiences.
2. Cafe Coffee Day stands out with a higher average cost of 650, suggesting a slightly more upscale or premium pricing compared to others.
3. Domino's Pizza, Frozen Bottle, and Keventers offer more budget-friendly options with an average cost around 400.
4. KFC falls in between with an average cost of 450, positioning it as a mid-range dining option.
5. ibaco stands out as the most budget-friendly option among the top 10 restaurants, with an average cost of 200.

Avg votes of Top 10 Restaurants



Among the listed restaurants, Burger King leads with the highest average vote count of 685.83, followed closely by KFC with 637.70 votes. Domino's Pizza ranks third with 482.29 votes, while McDonald's and Subway follow with 340.67 and 246.53 votes, respectively. Keventers and Frozen Bottle have comparable vote counts around 117, indicating strong customer engagement. Kanti Sweets, ibaco, and Cafe Coffee Day have lower average vote counts, but they still reflect varying levels of customer interaction and satisfaction. Overall, Burger King and KFC stand out as the most popular and highly rated restaurants among the listed ones.

Market Gap Analysis

- 1.Chennai: Capitalize on offering diverse cuisines in Price Range 1, focusing on budget-friendly dining options to cater to a wide audience.
- 2.Mumbai: Continue to maintain a balanced distribution across price ranges, emphasizing the diversity of dining experiences with a notable presence in Price Range 3.
- 3.Bangalore and Pune: These cities can capitalize on providing a mix of budget-friendly options in Price Range 1 and mid-range establishments in Price Range 2 to appeal to various customer segments.
- 4.New Delhi: Focus on offering a variety of dining experiences across different price levels, with an emphasis on Price Range 1 and Price Range 2 where there is higher demand.
- 5.Jaipur, Kolkata, Ahmedabad, and Lucknow: These cities should continue to prioritize budget-friendly options in lower price ranges, aligning with the preferences of the local market.
- 6.Goa: Leverage its tourism-centric nature by showcasing a significant presence of higher-priced dining options in Price Range 3 and Price Range 4, targeting tourists and visitors seeking upscale dining experiences.

In terms of cuisines, considering the popularity of North Indian cuisine across various cities, the restaurant chain could also explore introducing or highlighting regional Indian cuisines that may be underrepresented, such as North-Eastern, Rajasthani, or Kashmiri cuisine. Additionally, offering international cuisines that are not widely available in the local market, healthy and specialty diets catering to specific dietary needs, fusion and experimental cuisines, and traditional home-cooked meals can further differentiate the restaurant chain and attract a diverse customer base.

Marketing campaign based on the insights from the analysis

Target Regions and Customer Segments:

- **North India:** Focus on North Indian cuisine and its variations (e.g., North Indian-Chinese fusion) in cities like Delhi, Jaipur, and Lucknow, targeting families, food enthusiasts, and tourists.
- **South India:** Highlight South Indian cuisine in Chennai, Bangalore, and Hyderabad, catering to local residents, students, and health-conscious diners.
- **Metro Cities:** Target Mumbai, Delhi, Bangalore, and Chennai with a range of cuisines and price points to attract diverse customer segments, including professionals, families, and millennials.
- **Tourist Destinations:** Promote special events, themed menus, and discounts in tourist hotspots like Goa, targeting vacationers, international tourists, and adventure seekers.

Differentiation from Competitors:

- **Quality Focus:** Emphasize high-quality ingredients, authentic recipes, and chef-inspired creations to differentiate from fast-food chains and emphasize culinary excellence.
- **Unique Offerings:** Highlight signature dishes, regional specialties, and exclusive menu items to create a unique selling proposition and stand out in a crowded market.
- **Customer Experience:** Prioritize exceptional service, personalized dining experiences, and customer feedback initiatives to build trust, loyalty, and positive word-of-mouth.

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Marketing campaign based on the insights from the analysis

Promotional Tactics:

- **Discounts and Offers:** Launch limited-time promotions, combo deals, and happy hour discounts to attract price-sensitive customers and drive foot traffic during off-peak hours.
- **Loyalty Programs:** Introduce loyalty cards, reward points, and exclusive benefits for repeat customers to incentivize repeat visits, increase customer retention, and foster brand loyalty.
- **Special Events:** Organize food festivals, live music nights, and themed events to create buzz, attract a wider audience, and enhance the overall dining experience.

Omnichannel Marketing Approach:

- **Digital Marketing:** Utilize social media platforms, email campaigns, and online advertising to reach a broader audience, engage with customers, and promote special offers and events.
- **Offline Marketing:** Leverage local partnerships, community events, and traditional advertising channels like print media and radio to target specific geographic areas and demographics.



Thank you!