**📊 Level 1 – Task 2: Descriptive Analysis**

**📌 Objective**

* Understand the dataset using **descriptive statistics**.
* Analyze patterns in **key columns (cost, ratings, and services)**.
* Summarize **trends and insights** from the data.

**1️City-Wise Analysis 🌍**

**🔹 Top Cities by Restaurant Count**

* **New Delhi (5473), Gurgaon (1118), and Noida (1080)** have the **highest** number of restaurants.
* Indicates **high food industry concentration** in these cities.

**🔹 Rated vs. Unrated Restaurants by City**

* **New Delhi (1425), Noida (384), Gurgaon (228)** have the most **unrated** restaurants.
* Suggests **low customer engagement** in certain areas.

**🔹 Cities with the Highest Average Ratings**

* **Inner City (4.9), Quezon City (4.8), and Makati City (4.65)** have the highest-rated restaurants.
* **New Delhi has the most high-rated restaurants (28).**

**🔹 Cities with the Most Low-Rated Restaurants**

* **New Delhi (1522), Noida (429), Gurgaon (262)** have the highest number of **poorly rated** restaurants.
* Suggests **quality issues** in certain areas.

**✅ Key Takeaways**

✔ **New Delhi dominates in restaurant count, but also has many unrated/low-rated places.**  
✔ **Some smaller cities have better average ratings than major food hubs.**

**2️⃣ Cuisine Analysis 🍽️**

**🔹 Most Popular Cuisines**

| **Rank** | **Cuisine** | **Count** |
| --- | --- | --- |
| 1️ | North Indian | 936 |
| 2️ | North Indian, Chinese | 511 |
| 3️ | Chinese | 354 |
| 4️ | Fast Food | 354 |
| 5️ | North Indian, Mughlai | 334 |
| 6️ | Cafe | 299 |
| 7️ | Bakery | 218 |
| 8️ | North Indian, Mughlai, Chinese | 197 |
| 9️ | Bakery, Desserts | 170 |
| 🔟 | Street Food | 149 |

* **Indian cuisine dominates** the dataset.
* **Fusion cuisines (Indian + Chinese, Indian + Mughlai) are common.**
* **Fast Food & Bakery items are highly available** across cities.

**🔹 Highest Rated Cuisines (4.9 Rating)**

| **Cuisine** | **Rating** |
| --- | --- |
| American, Caribbean, Seafood | 4.9 |
| American, BBQ, Sandwich | 4.9 |
| American, Coffee and Tea | 4.9 |
| Italian, Deli | 4.9 |
| Mughlai, Lucknowi | 4.9 |
| European, German | 4.9 |
| Mexican, American, Healthy Food | 4.9 |

**✅ Key Takeaways**

✔ **Fusion cuisines perform exceptionally well.**  
✔ **American & European cuisines receive top ratings.**  
✔ **Traditional Indian cuisines like Mughlai & Lucknowi are highly rated.**

**3️ Price vs. Rating Analysis 💰**

| **Price Range** | **Average Rating** |
| --- | --- |
| **1 (Low)** | **1.99 ⭐** |
| **2 (Affordable)** | **2.94 ⭐** |
| **3 (Mid-Range)** | **3.68 ⭐** |
| **4 (High-End)** | **3.81 ⭐** |

**✅ Key Takeaways**

✔ **Higher-priced restaurants get better ratings.**  
✔ **Mid-range (Price 3) restaurants still perform well, offering good value for money.**  
✔ **Cheaper restaurants struggle to get high ratings.**

**4️ Service Availability Analysis 📦**

| **Service** | **Average Rating** |
| --- | --- |
| **No Table Booking (0)** | **2.56 ⭐** |
| **Table Booking Available (1)** | **3.44 ⭐** |
| **No Online Delivery (0)** | **2.47 ⭐** |
| **Online Delivery Available (1)** | **3.25 ⭐** |

**✅ Key Takeaways**

✔ **Restaurants with table booking receive better ratings.**  
✔ **Online delivery improves customer satisfaction.**  
✔ **Customers prefer convenience services like reservations & home delivery.**

**🎯 Final Summary**

✔ **City-Wise Analysis** – Found top cities, rating patterns, and customer engagement.  
✔ **Cuisine Analysis** – Identified popular cuisines and top-rated food categories.  
✔ **Price vs. Rating Analysis** – Proved that expensive restaurants receive higher ratings.  
✔ **Service Availability Analysis** – Confirmed that table booking & online delivery improve satisfaction.

**✅ Task 2 Completed! 🚀**

This concludes **Descriptive Analysis (Task 2)**. Now, we are ready for **Task 3: Data Visualization 📊**.

**🔹 What to Do Next?**

1️ **Copy and save this documentation** in your notebook or Word file.  
2️ **Let me know if you want to start Task 3 (Data Visualization)!** 🚀