Documentation of Data Sources and Transformations

1. **Data Source (Zomato Data for Different Continents):**
    - Added a new column: **Continent**.
    - Combined all data into a single table (**Restaurant Details**).
    - Split the **Name.Address** column into two separate columns: **Restaurant Name** and **Address**.
    - Moved the **Cuisines** column to generate a new table.
    - Cleaned the **City** column due to formatting issues in entries such as **Istanbul, Brasilia, São Paulo, Chatham_Kent, Cedar Rapids**. (correct values)
    - Checked for duplicates—none were found.
    - Removed null values from the **City** column.
      (All transformations were performed using Power Query.

2. **Cuisines Table:**
    - **Columns:** Restaurant ID, Cuisine.
    - Used **Power Query** to split the **Cuisines** column (since each row contained multiple values) and unpivoted the data so that each row has a single cuisine value. This ensured **(Restaurant ID, Cuisine)** pairs were unique.
    - Created a new column (**Number of Cuisines**) using a **DAX formula** (using table view) to count the number of cuisines per restaurant. This helps in identifying restaurant diversity.
    - Checked for duplicates—none were found.
    - Null values were removed.

3. **Country Code Table:**
    - **Columns:** Country Code, Country, Continent.
    - Created a new column (**Continent**) using **Dax formula** (using table view) to identify the continent for each country.
    - Removed duplicates and null values using **Power Query**.

4. **KPIs (Fact Table):**
    - Checked for duplicates—none were found.
    - Removed null values from the **City** column.
    - Extracted the **Has Table Booking** and **Has Online Delivery** columns(removed) to create a separate **Service** table using **Power Query.**

5. **Service Table:**
    - **Columns:** Restaurant ID, Has Table Booking, Has Online Delivery.
    - Checked for duplicates—none were found.
    - In the **Table View**, hid the original columns (**Has Table Booking, Has Online Delivery**) from the report view.
    - Created a new column **Services Types** (Online Booking, Table Booking, Both, or Neither) to categorize restaurants based on their service offerings. This helps identify restaurants providing more services, benefiting customers.

6. **Measures:**
    - **Today's date:** Generates the current access date.
    - **Least number of cuisines:** To identify the greatest number of cuisines a restaurant provides.
    - **Most number of cuisines:** To identify the least number of cuisines a restaurant provides.
    - **Average rating:** Computes the overall average rating.
    - **Average Cost:** Average of the average cost of two.
    - **Average Cost non-zero**: Average of the average cost of two for not-zero values.
    - **Lowest rated restaurant**: Identify the lowest rate given to a restaurant.
    - **Top rated restaurant:** Identify the highest rate given to a restaurant.
    - **Maximum number of votes**: Identify the maximum number of votes given to a restaurant.
    - **Minimum number of votes:** Identify the minimum number of votes given to a restaurant.
    - **Most affordable avg cost of two**: Find the least avg cost (most affordable) restaurants – without considering zero values.
    - **Most expensive avg cost of two**: Find the highest avg cost (most expensive) restaurants.

- **Total Restaurants:** Calculates the total number of restaurants.
- **Total Cuisines:** Calculates the total number of cuisines.