

1. Loaded All Datasets into PowerBI Desktop

2. Data Transformation Steps to Derive Visualization

a. City Name Corrections

Zomato_Africa

Zomato_Asia

Country_Master

Zomato_Europe

KPIs

Zomato_NAM

Zomato_Oceania

Zomato_SAM

Replace Values

Replace one value with another in the selected columns.

Value To Find:

Replace With:

Advanced options

OK Cancel

PREVIEW DOWNLOADED AT 5:43 PM

Zomato_Africa

Zomato_Asia

Country_Master

Zomato_Europe

KPIs

Zomato_NAM

Zomato_Oceania

Zomato_SAM

Replace Values

Replace one value with another in the selected columns.

Value To Find:

Replace With:

Advanced options

OK Cancel

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Zomato_Data_Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Queries [10]

123 Rest

Replace Values

Replace one value with another in the selected columns.

Value To Find: Cedar Rapids/Iowa City

Replace With: Cedar Rapids

OK Cancel

10 COLUMNS, 438 ROWS Column profiling based on top 1000 rows

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Zomato_Data_Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Queries [8]

123 Restaurant ID 123 Country Code A_c City A_c Restaurant Name,Address

Replace Values

Replace one value with another in the selected columns.

Value To Find: Bras_flia

Replace With: Brasilia

OK Cancel

10 COLUMNS, 438 ROWS Column profiling based on top 1000 rows

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Post city name correction

Zomato_Data_Analysis - Power BI Desktop

Table tools

Name: City | Data type: Text | Summarization: Don't summarize | Data category: Uncategorized | Sort by column | Data groups | Manage relationships | New column

Formatting

Properties

Data

Table: Zomato SAM (60 rows) Column: City (3 distinct values)

3. Removed unwanted columns
4. Split Restaurant Name and Restaurant Address into 2 separate columns and renamed the combined name from “Restaurant Name, Address” to Restaurant Name and Restaurant Address respectively

Zomato_Data_Analysis - Power Query Editor

File **Transform** **Add Column** **View** **Tools** **Help**

Queries [8]

Transform **Text Analytics** **Vision** **Azure Machine Learning** **AI Insights**

Properties

APC_City **APC_Restaurant Name,Address** **APC_Locality**

Split Column by Delimiter

Specify the delimiter used to split the text column.

Select or enter delimiter: Comma

Split at: Left-most delimiter

Advanced options

Quote Character: " Insert special character

Query Settings

PROPERTIES

Name: Zomato Africa
All Properties

APPLIED STEPS

Source, Navigation, Promoted Headers, **Changed Type**

PREVIEW DOWNLOADED AT 5:42 PM

9 COLUMNS, 60 ROWS Column profiling based on 1000 rows

Zomato_Data_Analysis - Power Query Editor

Queries [8]

- Zomato Africa
- Zomato Asia**
- Country Master
- Zomato Europe
- KPIs
- Zomato NAM
- Zomato Oceania
- Zomato SAM

Split Column by Delimiter

Specify the delimiter used to split the text column.

Select or enter delimiter: Comma

Split at:
 Left-most delimiter
 Right-most delimiter
 Each occurrence of the delimiter

Advanced options

Quote Character: "

Split using special characters

Insert special character

OK **Cancel**

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Zomato_Data_Analysis - Power Query Editor

Queries [8]

- Zomato Africa
- Zomato Asia
- Country Master
- Zomato Europe**
- KPIs
- Zomato NAM
- Zomato Oceania
- Zomato SAM

Split Column by Delimiter

Specify the delimiter used to split the text column.

Select or enter delimiter: Comma

Split at:
 Left-most delimiter
 Right-most delimiter
 Each occurrence of the delimiter

Advanced options

Quote Character: "

Split using special characters

Insert special character

OK **Cancel**

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Zomato_Data_Analysis - Power Query Editor

Queries [8]

- Zomato Africa
- Zomato Asia
- Country Master
- Zomato Europe
- KPIs
- Zomato NAM**
- Zomato Oceania
- Zomato SAM

Split Column by Delimiter

Specify the delimiter used to split the text column.

Select or enter delimiter: Comma

Split at:

- Left-most delimiter
- Right-most delimiter
- Each occurrence of the delimiter

Advanced options

Quote Character: "

Split using special characters

Insert special character

OK **Cancel**

PREVIEW DOWNLOADED AT 5:45 PM

Zomato_Data_Analysis - Power Query Editor

Queries [8]

- Zomato Africa
- Zomato Asia
- Country Master
- Zomato Europe
- KPIs
- Zomato NAM
- Zomato Oceania**
- Zomato SAM

Split Column by Delimiter

Specify the delimiter used to split the text column.

Select or enter delimiter: Comma

Split at:

- Left-most delimiter
- Right-most delimiter
- Each occurrence of the delimiter

Advanced options

Quote Character: "

Split using special characters

Insert special character

OK **Cancel**

PREVIEW DOWNLOADED AT 5:45 PM

Zomato_Data_Analysis - Power Query Editor

Queries [8]

- Zomato Africa
- Zomato Asia
- Country Master
- Zomato Europe
- KPIs
- Zomato NAM
- Zomato Oceania
- Zomato SAM**

Split Column by Delimiter

Specify the delimiter used to split the text column.

Select or enter delimiter: Comma

Split at: Left-most delimiter Right-most delimiter Each occurrence of the delimiter

Advanced options

Quote Character: " Split using special characters: Insert special character:

Query Settings

PROPERTIES

Name: Zomato SAM
All Properties

APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Changed Type
- Replaced Value
- Replaced Value1**

OK **Cancel**

9 COLUMNS, 60 ROWS Column profiling based on top 1000 rows PREVIEW DOWNLOADED AT 5:46 PM

5. Created Separate Table by Append Query Option – Append Query as New, then removed unwanted columns except Cuisines

Zomato_Data_Analysis - Power Query Editor

Queries [8]

- Zomato Africa
- Zomato Asia
- Country Master
- Zomato Europe
- KPIs
- Zomato NAM
- Zomato Oceania
- Zomato SAM**

Append

Concatenate rows from three or more tables into a single table.

Two tables Three or more tables

Available tables

- Zomato Africa (Current)
- Zomato Asia
- Country Master
- Zomato Europe
- KPIs
- Zomato NAM
- Zomato Oceania
- Zomato SAM**

Tables to append

- Zomato Africa (Current)
- Zomato Asia
- Zomato Europe
- Zomato NAM
- Zomato Oceania
- Zomato SAM

Query Settings

PROPERTIES

Name: Zomato Africa
All Properties

APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Changed Type
- Split Column by Delimiter
- Changed Type1
- Renamed Columns**

OK **Cancel**

Zomato_Data_Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Queries [9]

Apc_Cuisines

1	Pizza, Grill
2	Cafe, Patisserie
3	Spanish, Tapas
4	Cafe, Bakery
5	Cafe
6	Japanese, Sushi, Asian
7	Cafe, Bakery, Tea, Vegetarian
8	Mediterranean
9	Burger, American
10	Sushi
11	Seafood, Asian, Grill, Sushi
12	Burger, Fast Food, Grill
13	Desserts, Ice Cream
14	Japanese, Asian, Seafood, Sushi
15	Cafe, Burger
16	Cafe, Patisserie, Bakery, Desserts
17	Seafood, African, Sushi
18	Cafe, Mediterranean
19	Burger, American, Grill
20	Seafood, Japanese, Sushi
21	European, Contemporary
22	Tapas
23	Asian, Sushi, Tapas

1 COLUMN, 999+ ROWS Column profiling based on top 1000 rows

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Query Settings

PROPERTIES
Name: Cuisines Menu
All Properties

APPLIED STEPS
Source
Removed Columns
X Removed Duplicates

6. Make Country-Code table with unique values – Go to each table

Zomato_Data_Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Queries [9]

123 Country Code Apc_Country

1	94	Indonesia
2	94	Indonesia
3	null	
4	191	Sri Lanka
5	214	UAE
6	94	Indonesia
7	1	India
8	30	Brazil
9	null	
10	14	Australia
11	208	Turkey
12	189	South Africa
13	1	India
14	216	United States
15	null	
16	215	United Kingdom
17	94	Indonesia
18	214	UAE
19	162	Phillippines
20	215	United Kingdom
21	215	United Kingdom
22	166	Qatar
23	215	United Kingdom

2 COLUMNS, 209 ROWS Column profiling based on top 1000 rows

PREVIEW DOWNLOADED ON WEDNESDAY

Query Settings

PROPERTIES
Name: Country Master
All Properties

APPLIED STEPS
Source
Navigation
Promoted Headers
X Changed Type

DAX:

- 1) Added a **Rating color** column in an appropriate table with the data rows in the format given below

- 2) Created the following measures in the appropriate tables

a. Restaurant count

The screenshot shows the Power BI Desktop interface with the title bar "Zomato_Data_Analysis - Power BI Desktop". The ribbon menu is visible with tabs like File, Home, Insert, Modeling, View, Optimize, Help, Format, Data / Drill, Table tools, and Measure tools. The "Measure tools" tab is selected. In the center workspace, a measure named "Restaurant Count" is being defined with the formula: $\text{COUNT}(\text{All_Restaurant}[\text{Restaurant Name}])$. The "Formatting" pane shows the format as "Whole number". The "Properties" pane shows the data category as "Uncategorized". The "Calculations" pane has options for "New measure" and "Quick measure". On the right side, the "Visualizations" pane shows various chart types, and the "Data" pane lists data sources including "All Cuisines", "All Dax", "All Restaurant", "Country Master", "KPIs", "Zomato Africa", "Zomato Asia", "Zomato Europe", "Zomato NAM", "Zomato Oceania", and "Zomato SAM". A weather widget indicates 30°C and a system status bar shows the date and time as 6/17/2023 6:11 PM.

b. Average cost

This screenshot shows the continuation of measure creation in Power BI Desktop. A new measure named "Avg Cost" is being defined with the formula: $\text{AVERAGE}(\text{KPIs}[\text{Average cost for two}])$. The "Formatting" pane shows the format as "General". The "Properties" pane shows the data category as "Uncategorized". The "Calculations" pane has options for "New measure" and "Quick measure". The "Visualizations" pane and "Data" pane are visible on the right, along with the weather widget and system status bar.

c. Average rating

Average Rating = AVERAGE(KPIs[Aggregate rating])

Visualizations pane:

- Filters on this visual: Average Rating is (All)
- Filters on this page: Add data fields here
- Filters on all pages: Add data fields here

Data pane:

- All Cuisines
- All Dax
 - Average Rating
 - Avg Cost
 - Σ Column
 - Restaurant Count
- All_Restaurant
- Country Master
- KPIs
- Zomato Africa
- Zomato Asia
- Zomato Europe
- Zomato NAM
- Zomato Oceania
- Zomato SAM

d. Cuisine count

Cuisine Count = COUNT('All_Restaurant'[Cuisines])

Visualizations pane:

- Filters on this visual: Cuisine Count is (All)
- Filters on this page: Add data fields here
- Filters on all pages: Add data fields here

Data pane:

- All Cuisines
- All Dax
 - Cuisine Count
 - Average Cost
 - Average Rating
 - Σ Column
 - Most Cuisine Ser...
 - Restaurant Count
- All_Restaurant
- Country Master
- KPIs
- Zomato Africa
- Zomato Asia
- Zomato Europe
- Zomato NAM
- Zomato Oceania
- Zomato SAM

3) Create a new column in the **Country Code** table and name it "**Continent**" and create the values using the below-mentioned convention

<https://byjus.com/social-science/7-continents-and-their-countries-and-capitals/>

Zomato_Data_Analysis - Power BI Desktop

Column tools

Name	Continent	Format	Summarization	Data category	Sort by column	Data groups	Manage relationships	New column
1 Data type	Text	\$ %	Don't summarize	Uncategorized	Sort	Groups	Relationships	Calculations
Structure	Continent	Formatting	Properties					
<pre> 1 Continent = 2 IF('Country Master'[Country]="Indonesia","Southeast Asia", 3 IF('Country Master'[Country]="Sri Lanka","South Asian", 4 IF('Country Master'[Country)="UAE","West Asian", 5 IF('Country Master'[Country)="India","South Asian", 6 IF('Country Master'[Country)="Brazil","South America", 7 IF('Country Master'[Country)="Australia","Australia", 8 IF('Country Master'[Country)="Turkey","West European", 9 IF('Country Master'[Country)="South Africa","Southern Africa", 10 IF('Country Master'[Country)="United States","North America", 11 IF('Country Master'[Country)="United Kingdom","West European", 12 IF('Country Master'[Country)="Philippines","Southeast Asian", 13 IF('Country Master'[Country)="Qatar","West Asian", 14 IF('Country Master'[Country)="Canada","North America", 15 IF('Country Master'[Country)="New Zealand","Oceania continent", 16 IF('Country Master'[Country)="Singapore","Southeast Asian",")))))))))))))))</pre>								

Data

- All Cuisines
- All Dax
- All Restaurant
- Country Master
 - Continent
 - Country
 - Country Code
- KPIs
- Zomato Africa
- Zomato Asia
- Zomato Europe
- Zomato NAM
- Zomato Oceania
- Zomato SAM

29°C
6:49 PM
6/17/2023
20

Table: Country Master (15 rows) Column: Continent (10 distinct values)

Consolidated and interactive Power BI report:

- Derive Data on the total number of restaurants worldwide, including continents, countries, and cities
- View data on a global scale with the capacity to drill down to a granular level

Zomato_Data_Analysis - Power BI Desktop

Home

Data

Visualizations

Filters

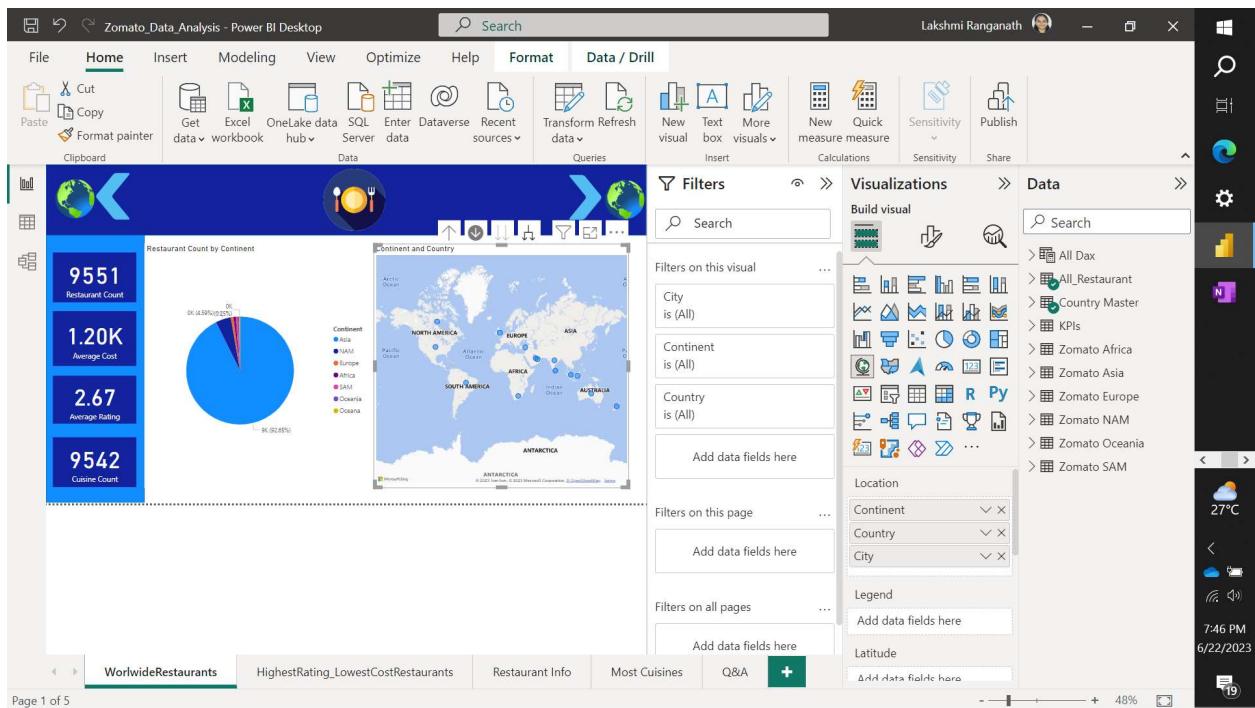
Visualizations

Data

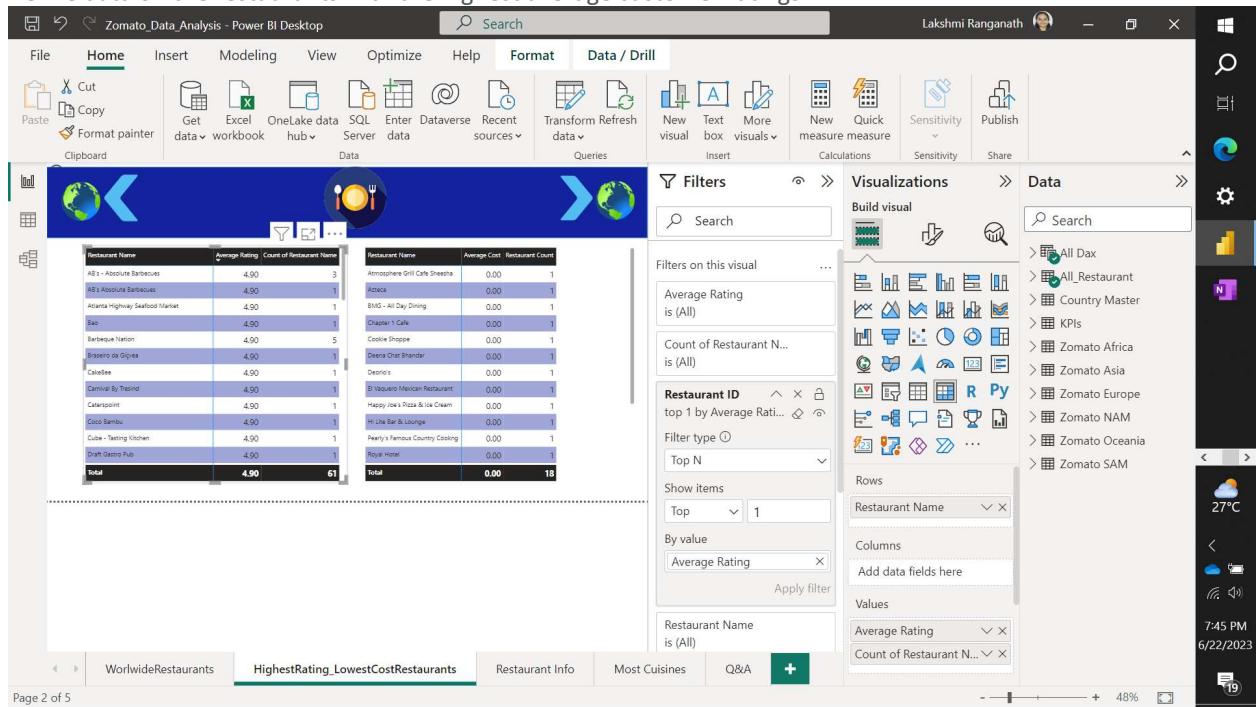
29°C
7:00 PM
6/17/2023
20

WorldwideRestaurants x HighestRating Measures +

Page 1 of 3



3. Derive data on the restaurants with the highest average customer ratings



4. Discover the restaurants with the lowest average costs

Table 1: Restaurant Name, Average Rating, Count of Restaurant Name

Restaurant Name	Average Rating	Count of Restaurant Name
AB's Absolute Barbecues	4.90	3
AB's Absolute Barbecues	4.90	1
Atlanta Highway Seafood Market	4.90	1
Bao	4.90	1
Barbeque Nation	4.90	5
Brasierio da Goyva	4.90	1
Caldeee	4.90	1
Carnive by Trend	4.90	1
Caterpoint	4.90	1
Coso Bambu	4.90	1
Cuba - Tasting Kitchen	4.90	1
Draft Gastro Pub	4.90	1
Total	4.90	61

Table 2: Restaurant Name, Average Cost, Restaurant Count

Restaurant Name	Average Cost	Restaurant Count
Atmosphere Grill Cafe Sheeha	0.00	1
Atmica	0.00	1
BMS - All Day Dining	0.00	1
Chapter 1 Cafe	0.00	1
Cookie Shoppe	0.00	1
Deevo Chat Shendar	0.00	1
Devon's	0.00	1
El Vagabundo Mexican Restaurant	0.00	1
Hadly Joe's Pizza & Ice Cream	0.00	1
Hi Lite Bar & Lounge	0.00	1
Hairy Jo's Famous Country Cooking	0.00	1
Royal Hotel	0.00	1
Total	0.00	18

Filters pane on the right shows:

- Average Cost is (All)
- Restaurant Count is (All)
- Restaurant Name (Top N) - Filter type: Top N, Show items: Bottom 1 by Average ...
- By value: Average Cost
- Rows: Restaurant Name
- Columns: Add data fields here
- Values: Average Cost, Restaurant Count

5. Filter and view information on the restaurants based on:

- Their geographical dimensions such as continent, country, and city.
- The service they provide, such as online ordering or reservation services
- The average rating slab by the color.

Filter Panel (Left):

- Continent: Europe
- Has Online delivery: All
- Country: United Kingdom
- City: London

Rating Color Panel (Center):

- Dark Green
- Green

Table (Right):

Restaurant Name	Restaurant Count
Dishoom	2
Bao	1
Bocca Di Lupo	1
Bone Daddies	1
Duck & Waffle	1
Flat Iron	1
Total	15

Visualizations pane on the right shows:

- All Dax
- All_Restaurant
- Country Master
- KPIs
- Zomato Africa
- Zomato Asia
- Zomato Europe
- Zomato NAM
- Zomato Oceania
- Zomato SAM

6. Identify the restaurants with the most cuisines served
Calculated Count of Cuisines served as per below

Power BI Desktop - Zomato_Data_Analysis

Column tools

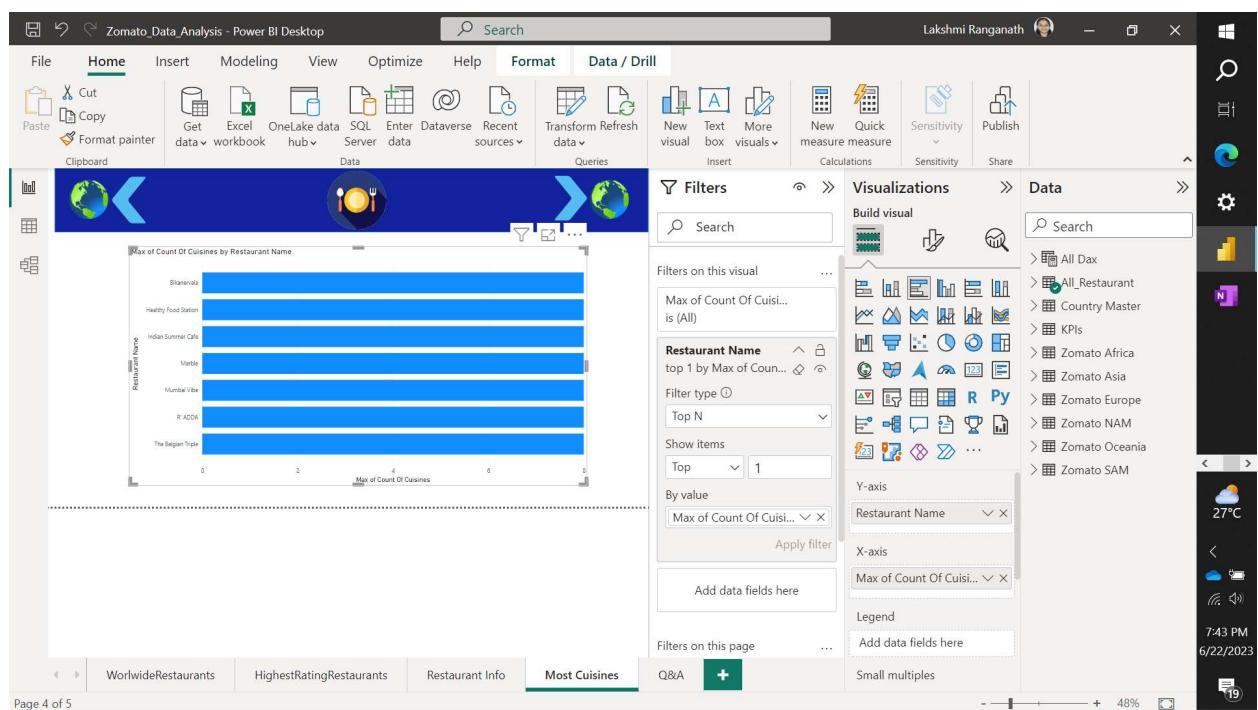
Structure

Name	Count Of Cuisines	Data type	Whole number	Format	Whole number	Summarization	Sum	Data category	Uncategorized	Sort by column	Groups	Relationships	New column	Calculations
Count Of Cuisines	1	Count Of Cuisines	Whole number	\$ %	0	Sum		Uncategorized		Sort by column	Groups	Relationships	New column	Count Of Cuisines = LEN(TRIM('All_Restaurant'[Cuisines]))-LEN(SUBSTITUTE('All_Restaurant'[cuisines],",",""))+1

Data

Search: Count Of Cuisines

Table: All_Restaurant (5551 rows) Column: Count Of Cuisines (8 distinct values)



7. Design a multi-page report that suits Zomato's theme with easy navigation across sections.

8. Allow Zomato users to be able to access this information from both a web browser and a mobile device.

By sharing the link, through below steps, all Zomato users can able to access Dashboard information.

Zomato Data Analysis

Pages

WorldwideRestaurants

HighestRating_LowestC...

Restaurant Info

Most Cuisines

Q&A

File Export Share Chat in Teams Get insights Edit ...

PPU Trial: 20 days left

Filters

Search

Link copied

<https://app.powerbi.com/link>

Copy

People in your organization with the link can view and share

Max of Count Of Cuisines by Restaurant Name

Restaurant Name	Max of Count Of Cuisines
Bikannivala	8
Healthy Food Station	8
Indian Summer Cafe	8
Marble	8
Mumbai Vibe	8
R ADDA	8
The Belgian Trip	8

There aren't any filters to display.