**Objective Questions and there Solutions:-**

1. **What is the total no. of table present in the data?**

**Ans-** There are 2 tables available in data 1) Raw Data 2) Country Description

1. **What is the total no. of attributes present in the data?**

**Ans** - Total no. of attributes are 20.

1. **How many categorical columns are there in the data? [Search about categorical and continuous data, and try to answer this question]**

**Ans** –Categorical columns = 13, those are – Country code, Country name, city, Cuisines, Currency, has table bookings, has online delivery, is delivering now, Switch to order menu, Price range, Votes, Ratings, Datekey Opening.

1. **The data consists of some inconsistent and missing values so ensure that the data used for further analysis is cleaned.**

**Ans** –1. In Cuisines column, 8 cells were missing, and as per my observation all the cuisines belong to one specific country, which is United States of America, and on further analysis we observer that American the most frequently occurring type of cuisine in restaurants based in the United States of America.

So I decided to consider American for the missing cells in Cuisine column.

2. Hiding unnecessary column, like – Address, LocalityVerbose, Longitude, Latitude.

3. – Here I have created one more column by using String operation (left) to extract year from Date key opening and named the column as Restaurant opened Year.

4. Here first I have to extract currency Symbol from Currency column, for which I have used text to column by using “ ( “ as a Delimited. After getting the result in new column, I found that there is one more “ ) “ which I have to remove, and for that I have used find and replace, Find - “ ) “ and Replace “ “. As a result I got the exact currencies.

After that to create a new customised Price Column, here I have used Concatenate Function - CONCATENATE (M2, " ", T2)

1. **Using the Lookup functions, fill up the countries in the original data using the country code.**

**Ans** – Here I have applied XLOOKUP function - XLOOKUP ($C2,'country description'!$A:$A, ‘country description'!$B:$B)

Where I have placed – $C2 – lookup value, 'country description'!$A:$A – lookup array, 'country description'!$B:$B- return array

1. **Create a table to represent the number of restaurants opened in each country.**

**Ans** – Here I have used Pivot Table to create the table, I have placed Country name in Rows, we can use country code as well, and Count of restaurant names in Values. As per my analysis, I found that India is leading with 8652 opened restaurants, and USA is the 2nd highest with 434 opened restaurants.

|  |  |
| --- | --- |
| **Country Names** | **Count of Restaurant Name** |
| Australia | 24 |
| Brazil | 60 |
| Canada | 4 |
| India | 8652 |
| Indonesia | 21 |
| New Zealand | 40 |
| Philippines | 22 |
| Qatar | 20 |
| Singapore | 20 |
| South Africa | 60 |
| Sri Lanka | 20 |
| Turkey | 34 |
| United Arab Emirates | 60 |
| United Kingdom | 80 |
| United States of America | 434 |
| **Grand Total** | **9551** |

1. **Also, the management wants to look at the number of restaurants opened each year, so provide them with something here.**

**Ans** – Here I have created one more column by using String operation (left) to extract year from Date key opening and named the column as Restaurant opened Year.

After that I have used Pivot Table to create the table, I have placed as Restaurant opened Year in Row and Count of Restaurant Names in Values, we can use Count of Restaurant code also in Values.

|  |  |
| --- | --- |
| **Year** | **Count of Restaurant Name** |
| 2010 | 1080 |
| 2011 | 1098 |
| 2012 | 1022 |
| 2013 | 1061 |
| 2014 | 1051 |
| 2015 | 1024 |
| 2016 | 1027 |
| 2017 | 1086 |
| 2018 | 1102 |
| **Grand Total** | **9551** |

1. **What is the total number of restaurants in India in the price range of 4?**

**Ans** - Total number of restaurants in India in the price range of 4 =388

Here I have used CountIfs function - COUNTIFS($D:$D, "India",$Q:$Q,"4"). And for Final verification I have also used Pivot table.

For Pivot table, I have placed Price Range in Column, Country Names in Row, Count of Restaurant names in Values, And then filtered the Price Range for 4.

|  |  |  |
| --- | --- | --- |
| **Count of Restaurant Name** | **Price Range** |  |
| **Country Names** | **4** | **Grand Total** |
| India | 388 | 388 |
| **Grand Total** | **388** | **388** |

1. **What is the average number of voters for the restaurants in each country according to the data?**

**Ans** – To get average number of voters for the restaurants in each country according to the data, I have used Pivot Table, I have placed Country Names in Rows and Average of Votes in Values.

|  |  |
| --- | --- |
| **Country Names** | **Average of Votes** |
| Australia | 111.42 |
| Brazil | 19.62 |
| Canada | 103.00 |
| India | 137.21 |
| Indonesia | 772.10 |
| New Zealand | 243.03 |
| Philippines | 407.41 |
| Qatar | 163.80 |
| Singapore | 31.90 |
| South Africa | 315.17 |
| Sri Lanka | 146.45 |
| Turkey | 431.47 |
| United Arab Emirates | 493.52 |
| United Kingdom | 205.49 |
| United States of America | 428.22 |
| **Grand Total** | **156.91** |

1. **Calculate the average rating for all the restaurants that have price\_range < 4 and provide online delivery. Use only the “IF” function, Logical Operators, and Aggregation functions to solve this problem. [Note: Don’t use Conditional aggregation in this question.]**

**Ans** - Here I have applied “IF” function, Logical operation with “IF” Function (AND) =IF(AND($Q2 < "4",$N2 = "Yes"),T2," ")

Where I have placed - $Q2 < "4"- Logic 1, $N2 = "Yes" – Logic 2, T2 – Value if true, “ “ – Value if False

and finally to get the result have used Aggregation function (Average) = Average($W:$W) = 3.28

Average rating for all the restaurants that have price\_range < 4 and provide online delivery = 3.28

1. **Using Conditional formatting highlight the rows of restaurants that are located in the countries or cities that you’ve suggested to the management for opening new restaurants.**

**Ans** – Please refer Rawdata sheet Column D

Countries - AUSTRALIA, SINGAPORE, SRILANKA, CANADA

Cities in Australia – Armidale, Balingup, Flaxton, Macedon, Penola

Cities in Singapore – Singapore

Cities in Sri Lanka – Colombo

Cities in Canada – Consort, Yorkton

1. **Create a new customized price column that consists of the abbreviation/symbol of the currency along with the Average\_cost\_for\_two value. [Use string operations to do this task]**

**Ans** – Here first I have to extract currency Symbol from Currency column, for which I have used text to column by using “ ( “ as a Delimited. After getting the result in new column, I found that there is one more “ ) “ which I have to remove, and for that I have used find and replace, Find - “ ) “ and Replace “ “. As a result I got the exact currencies.

After that to create a new customised Price Column, here I have used Concatenate Function - CONCATENATE (M2, " ", T2)

where M2 – Currency Symbol & T2 – Average cost of Two.

1. **How can you create an array formula in Excel or Google Sheets to count the number of restaurants listed that do not offer online delivery, are in the lowest price range, and have an average cost for two people less than or equal to 250 Indian Rupees?**

**Ans** – Here I have taken 2 case for Price Range <=2 & 1

Formula used – {=COUNTIFS($O:$O,$AA8,$R:$R,$AA6,$T:$T,$AA7)}= 2077

{=COUNTIFS($O:$O,$AA8,$R:$R,$AA10,$T:$T,$AA7)} = 1834

Where AA6 - <=2, AA10 - 1

**Subjective Questions and there Solutions:-**

1. **Suggest a few countries where the team can open newer restaurants with lesser competition. Which visualization/technique will you use here to justify the suggestions?**

Ans – Here I have used Pivot table, and have place Country names in Rows, Count of Restaurant Names & Average of Ratings in Values, and sorted the Count of Restaurant column with Ascending order.

After that, I have decided to do analysis of the no. of restaurants below 30. As per this I got last 7 for further consideration.

To finally suggest the management for lesser competition counties I decided to go for the ratings which are above 3 and below 4.

Reason for selecting Average Rating greater that 3 and les that 4 is , if we observe the table, Average rating starts from 2.77 (India) to 4.47 (Philippines). We cant consider India because it has highest competition with 8652 restaurants. So we have considered greater than 3 but less than 4, and got 4 countries for further suggestions which are, AUSTRALIA, SINGAPORE, SRILANKA, CANADA.

We can do the market research first before going on ground, and understand the reason why people are less satisfied and work on those things to make a reputed restaurant.

|  |  |  |
| --- | --- | --- |
| **Analysis of Countries with lesser Competition** | | |
| **Country Names** | **Average of Rating** | **Count of Restaurant Name** |
| Australia | 3.66 | 24 |
| Brazil | 3.85 | 60 |
| Canada | 3.58 | 4 |
| India | 2.77 | 8652 |
| Indonesia | 4.30 | 21 |
| New Zealand | 4.26 | 40 |
| Philippines | 4.47 | 22 |
| Qatar | 4.06 | 20 |
| Singapore | 3.58 | 20 |
| South Africa | 4.21 | 60 |
| Sri Lanka | 3.87 | 20 |
| Turkey | 4.30 | 34 |
| United Arab Emirates | 4.23 | 60 |
| United Kingdom | 4.10 | 80 |
| United States of America | 4.01 | 434 |
| **Grand Total** | **2.89** | **9551** |

1. **Come up with the names of States and cities in the suggested countries suitable for opening restaurants.**

Ans – – Here I have used Pivot table, and have place Country names in Rows, Count of Restaurant Names & Average of Ratings in Values, and sorted the Count of Restaurant column with Ascending order.

After that, I have decided to do analysis on the Average rating which is below 3.50 and greater that 4. As per this I got 5 cities in Australia which are – Armidale, Balingup, Flaxton, Macedon, Penola

2 cities in Canada – Consort, Yorkton, 1 in Sri Lanka - Colombo, 1 in Singapore.

|  |  |  |
| --- | --- | --- |
| **Cities in the Suggested Countries** | | |
| **Country Names** | **Average of Rating** | **Count of RestaurantName** |
| **Australia** |  |  |
| Armidale | 3.50 | 1 |
| Balingup | 3.20 | 1 |
| Beechworth | 4.60 | 1 |
| Dicky Beach | 3.60 | 1 |
| East Ballina | 4.10 | 1 |
| Flaxton | 3.50 | 1 |
| Forrest | 3.70 | 1 |
| Hepburn Springs | 3.80 | 2 |
| Huskisson | 4.10 | 1 |
| Inverloch | 3.70 | 1 |
| Lakes Entrance | 3.80 | 1 |
| Lorn | 3.60 | 1 |
| Macedon | 3.50 | 1 |
| Mayfield | 2.90 | 1 |
| Middleton Beach | 3.80 | 1 |
| Montville | 2.40 | 1 |
| Palm Cove | 4.40 | 1 |
| Paynesville | 2.60 | 1 |
| Penola | 3.40 | 1 |
| **Singapore** |  |  |
| Singapore | 3.58 | 20 |
| **Sri Lanka** |  |  |
| Colombo | 3.87 | 20 |
| **Canada** |  |  |
| Consort | 3.00 | 1 |
| Vineland Station | 4.30 | 1 |
| Yorkton | 3.30 | 1 |
| **Grand Total** | **3.69** | **68** |

1. **According to the countries you suggested, what is the current quality regarding ratings for restaurants that are open there?**

Ans – Here I have used Average ifs Function, Formula used =AVERAGEIFS('Raw Data'!$U:$U,'Raw Data'!$D:$D,"Australia")

Where 'Raw Data'!$U:$U – Average Range

'Raw Data'!$D:$D – Criteria Range

“Australia"/”Canada”/”Singapore”/”Sri Lanka”- Criteria

|  |  |
| --- | --- |
| **Country Name** | **Average of Rating** |
| Australia | 3.66 |
| Brazil | 3.85 |
| Canada | 3.58 |
| India | 2.77 |
| Indonesia | 4.30 |
| New Zealand | 4.26 |
| Philippines | 4.47 |
| Qatar | 4.06 |
| Singapore | 3.58 |
| South Africa | 4.21 |
| Sri Lanka | 3.87 |
| Turkey | 4.30 |
| United Arab Emirates | 4.23 |
| United Kingdom | 4.10 |
| United States of America | 4.01 |
| **Grand Total** | **2.89** |

1. **Also, what is the current expenditure on food in the suggested countries, so we can keep our financial expenditure in control?**

Ans - – Here I have used Sum ifs Function, Formula used =SUMIFS('Raw Data'!$W:$W,'Raw Data'!$D:$D,"Australia")

Where 'Raw Data'!$W:$W- Sum Range

'Raw Data'!$D:$D – Criteria Range

“Australia"/”Canada”/”Singapore”/”Sri Lanka”- Criteria

|  |  |
| --- | --- |
| **Total Expenditure on Food** | |
| **Country Names** | **Sum of Cost of two in INR** |
| Australia | 31270 |
| Brazil | 134936 |
| Canada | 8948 |
| India | 5393400 |
| Indonesia | 31297 |
| New Zealand | 56 |
| Philippines | 52318 |
| Qatar | 102075 |
| Singapore | 192196 |
| South Africa | 110054 |
| Sri Lanka | 12350 |
| Turkey | 7790 |
| United Arab Emirates | 225761 |
| United Kingdom | 398833 |
| United States of America | 942504 |
| **Grand Total** | **7643785** |

1. **Come up with the names of restaurants from the recommended states that are our biggest competitors and also those that are rated in the lower brackets, i.e. 1-2 or 2-3.**

Ans - Here I have used Pivot table, and have place Country names & Restaurant Names in Rows, Average of Cost of two in INR & Average Rating in Values, and filtered the table with Different country names which I suggested for opening new restaurant.

My Criteria to analyse the data is 1-2 for below 3 rating, 2-3 for 3 – 3.5 rating, 3-4 for 3.5 – 4 rating and 4-5 for above 4 rating.

As per my Analysis, I have marked Green for those who are biggest competitors as the have highest rating which is Above 4.

Marked Orange for those who have average rating, which is 3.5-4 rating.

Marked Yellow for those who have lower brackets rating, which is 3-3.5 rating.

Marked Red for those who have lower brackets rating, which is below 3.

|  |  |  |
| --- | --- | --- |
| **Country names with Cities** | **Average of Rating** | **Average of Cost of two in INR** |
| **Australia** | **3.66** | **1302.91** |
| Bridge Road Brewers | 4.60 | 1082.00 |
| 1918 Bistro & Grill | 4.40 | 1623.00 |
| Vivo Bar and Grill | 4.40 | 1623.00 |
| Pig and Whistle | 4.10 | 1082.00 |
| The Belle General | 4.10 | 1082.00 |
| 5 Little Pigs | 4.10 | 1082.00 |
| Blue Bean Love Cafe | 3.80 | 1082.00 |
| La Trattoria of Lavandula | 3.80 | 378.70 |
| Three Anchors | 3.80 | 1623.00 |
| Funkey Monkey | 3.80 | 378.70 |
| Bespoke Harvest | 3.70 | 1082.00 |
| Beach Box Cafe | 3.70 | 378.70 |
| Mad Cowes Cafe | 3.70 | 1082.00 |
| Anchorage Cafe Restaurant Wine Bar | 3.60 | 1082.00 |
| The Giggling Goat | 3.60 | 378.70 |
| Stillwater on Belmore | 3.60 | 1082.00 |
| Whitebull Hotel | 3.50 | 1082.00 |
| Flaxton Gardens | 3.50 | 1623.00 |
| Mr. | 3.50 | 1082.00 |
| DiVine | 3.40 | 1082.00 |
| Taste of Balingup | 3.20 | 1082.00 |
| Star Buffet | 2.90 | 1082.00 |
| Pier 70 | 2.60 | 6492.00 |
| Poets Cafe | 2.40 | 1623.00 |
| **Grand Total** | **3.66** | **1302.91** |

|  |  |  |
| --- | --- | --- |
| **Country names with Cities** | **Average of Rating** | **Average of Cost of two in INR** |
| **Canada** | **3.58** | **2236.99** |
| Lake House Restaurant | 4.30 | 4319.70 |
| Tokyo Sushi | 3.70 | 1542.75 |
| Arigato Sushi | 3.30 | 1542.75 |
| Consort Restaurant | 3.00 | 1542.75 |
| **Grand Total** | **3.58** | **2236.99** |

|  |  |  |
| --- | --- | --- |
| **Country names with Cities** | **Average of Rating** | **Average of Cost of two in INR** |
| **Singapore** | **3.58** | **9609.78** |
| Al'frank Cookies | 4.20 | 1234.00 |
| Fratini La Trattoria | 4.10 | 6170.00 |
| Cut By Wolfgang Puck | 4.00 | 16659.00 |
| Summer Pavilion | 3.90 | 18510.00 |
| Bitters & Love | 3.90 | 2468.00 |
| Rhubarb Le Restaurant | 3.90 | 19435.50 |
| Colony | 3.80 | 13574.00 |
| Artistry | 3.80 | 3085.00 |
| Restaurant Andre | 3.80 | 30850.00 |
| Jaan | 3.80 | 26531.00 |
| Chye Seng Huat Hardware | 3.70 | 2468.00 |
| Sky On 57 | 3.40 | 18510.00 |
| The Refinery Singapore | 3.20 | 4936.00 |
| Artichoke Cafe | 3.20 | 4627.50 |
| Super Loco | 3.20 | 5861.50 |
| I Am | 3.20 | 3702.00 |
| Boufe Boutique Cafe | 3.20 | 3085.00 |
| Potato Head Folk | 3.10 | 4936.00 |
| The Lokal | 3.10 | 3702.00 |
| Makansutra Gluttons Bay | 3.00 | 1851.00 |
| **Grand Total** | **3.58** | **9609.78** |

|  |  |  |
| --- | --- | --- |
| **Country names with Cities** | **Average of Rating** | **Average of Cost of two in INR** |
| **Sri Lanka** | **3.87** | **617.50** |
| Ministry of Crab | 4.90 | 1040.00 |
| Simply Strawberries By Jagro | 4.50 | 338.00 |
| The Sizzle | 4.20 | 780.00 |
| Butter Boutique | 4.20 | 260.00 |
| Cricket Club Cafe | 4.20 | 780.00 |
| Arabian Knights | 4.20 | 624.00 |
| Burger's King | 4.10 | 260.00 |
| Carnival Ice Cream | 4.10 | 260.00 |
| Cafe Beverly | 4.10 | 520.00 |
| The Commons | 4.00 | 650.00 |
| T.G.I. Friday's | 4.00 | 1040.00 |
| The Manhattan FISH MARKET | 4.00 | 1170.00 |
| Upali's | 4.00 | 650.00 |
| Cafe Shaze | 3.80 | 910.00 |
| CIOCONAT Lounge | 3.70 | 650.00 |
| The Paddington | 3.60 | 520.00 |
| Malay Restaurant | 3.50 | 390.00 |
| Chinese Dragon Cafe | 3.40 | 520.00 |
| Queen's Cafe | 2.50 | 520.00 |
| Elite Indian Restaurant | 2.40 | 468.00 |
| **Grand Total** | **3.87** | **617.50** |

1. **Which cuisines should we focus on in the newer restaurants to get better feedback? Does the choice of cuisines affect the restaurant ratings?**

Ans – Cuisines which I will be focusing on are - Pizza, Bar Food, Mediterranean, Seafood, Italian, Bakery, Seafood, Juices, Desserts.

After analysing the pivot table, I prefer to choose top rating Cuisines only for starting a new restaurants.

Yes, choice of cuisines affect the restaurant ratings.

|  |  |
| --- | --- |
| **Country names with Cuisines** | **Average of Rating** |
| **Australia** |  |
| Pizza, Bar Food | 4.6 |
| Mediterranean, Seafood | 4.4 |
| Modern Australian, Australian | 4.4 |
| Australian | 4.1 |
| Breakfast, Modern Australian | 4.1 |
| Italian, Fusion, Cafe | 3.8 |
| Cafe | 3.8 |
| Bar Food, Modern Australian | 3.8 |
| Cafe, Coffee and Tea, Modern Australian | 3.8 |
| Burger, Coffee and Tea, Modern Australian | 3.7 |
| Breakfast, Coffee and Tea, Modern Australian | 3.7 |
| Breakfast, Coffee and Tea | 3.7 |
| Cafe, Australian | 3.7 |
| Coffee and Tea, Tapas, Australian | 3.6 |
| Coffee and Tea, Tea, Modern Australian | 3.6 |
| Tea, Modern Australian | 3.5 |
| Bar Food, Steak | 3.5 |
| Cafe, Coffee and Tea, Sandwich | 3.4 |
| Modern Australian | 2.9 |
| Asian | 2.9 |
| Coffee and Tea, Modern Australian | 2.4 |
| **Canada** |  |
| Italian, Mediterranean, Pizza | 4.3 |
| Japanese, Sushi | 3.7 |
| Asian | 3.3 |
| Chinese, Canadian | 3 |
| **Singapore** |  |
| Bakery | 4.2 |
| Italian | 4.1 |
| American, Steak | 4 |
| Chinese, Seafood, Cantonese, Dim Sum | 3.9 |
| Finger Food | 3.9 |
| French | 3.85 |
| Asian, Continental, Seafood | 3.8 |
| French, Mediterranean, European | 3.8 |
| American, Bakery, European, Burger, Fusion | 3.8 |
| Cafe | 3.7 |
| Chinese, Continental, Singaporean | 3.4 |
| Italian, French, Bakery, Cafe | 3.2 |
| American, Mexican | 3.2 |
| Western, Fusion, Fast Food | 3.2 |
| Cafe, Spanish, Turkish, Greek | 3.2 |
| American, Japanese, Singaporean | 3.2 |
| Singaporean, Australian, German | 3.1 |
| American | 3.1 |
| Singaporean, Chinese, Seafood, Malay, Indian | 3 |
| **Sri Lanka** |  |
| Seafood | 4.9 |
| Juices, Desserts | 4.5 |
| Middle Eastern, Arabian | 4.2 |
| American, Fast Food, Steak, Beverages | 4.2 |
| Continental, American, Seafood | 4.2 |
| Desserts, Bakery | 4.2 |
| Continental, American | 4.1 |
| Fast Food | 4.1 |
| Desserts, Ice Cream | 4.1 |
| Cafe, Sri Lankan, Continental, American | 4 |
| Sri Lankan | 4 |
| Seafood, Italian | 4 |
| American, Steak | 4 |
| Cafe, Fast Food, Beverages | 3.8 |
| Italian, Cafe, Desserts | 3.7 |
| Cafe, Italian | 3.6 |
| Malaysian, North Indian, Sri Lankan | 3.5 |
| Chinese | 3.4 |
| American, Chinese, North Indian | 2.5 |
| North Indian, Chinese, Sri Lankan | 2.4 |
| **Grand Total** | **3.691176471** |

1. **According to our current data, should we go for online delivery and table booking? Does that affect the customer’s ratings?**

Ans – Here I have used CountIfs function =COUNTIFS('Raw Data'!$O:$O,"Yes",'Raw Data'!$D:$D,"Australia"). As per the below table, no country, no restaurant is providing online delivery and table booking facility. Yes, we should go for Online delivery and table bookings, because it affects restaurant rating and also provide comfortable space for our customers.

|  |  |  |
| --- | --- | --- |
| **Online Delivery and Table Booking Analysis** | | |
| **Country Names** | **Has Online Delivery** | **Has Table Booking** |
| **Australia** | 0 | 0 |
| **Canada** | 0 | 0 |
| **Singapore** | 0 | 0 |
| **Sri Lanka** | 0 | 0 |

1. **Should the team keep the rate of cuisines higher? Will that affect the feedback? According to our data are the rates of cuisines and ratings, correlated?**

Ans – Here I have used Correlation function =CORREL($B$2:$B$69,$C$2:$C$69).

Yes, we should keep the rate of Cuisines higher, as correlation is negligible.

The (-) sign in correlation indicates negative correlation, which means that if rating increases, cost of two will decrease slightly, and if rating decreases cost of two increases slightly. And as the Correlation is = -0.0039, which is close to 0.

|  |  |  |
| --- | --- | --- |
| **Country Name** | **Rating** | **Cost of two in INR** |
| Australia | 2.6 | 6492.00 |
| Australia | 3.5 | 1623.00 |
| Australia | 3.8 | 1623.00 |
| Australia | 3.5 | 1082.00 |
| Australia | 3.8 | 1082.00 |
| Australia | 4.6 | 1082.00 |
| Australia | 3.6 | 1082.00 |
| Australia | 4.4 | 1623.00 |
| Australia | 4.1 | 1082.00 |
| Australia | 3.8 | 378.70 |
| Australia | 3.2 | 1082.00 |
| Australia | 3.8 | 378.70 |
| Australia | 3.4 | 1082.00 |
| Australia | 3.6 | 1082.00 |
| Australia | 3.7 | 1082.00 |
| Australia | 3.6 | 378.70 |
| Australia | 3.7 | 378.70 |
| Australia | 4.1 | 1082.00 |
| Australia | 4.4 | 1623.00 |
| Australia | 3.5 | 1082.00 |
| Australia | 2.4 | 1623.00 |
| Australia | 4.1 | 1082.00 |
| Australia | 2.9 | 1082.00 |
| Australia | 3.7 | 1082.00 |
| Canada | 4.3 | 4319.70 |
| Canada | 3.7 | 1542.75 |
| Canada | 3.3 | 1542.75 |
| Canada | 3 | 1542.75 |
| Singapore | 3.1 | 3702.00 |
| Singapore | 3.2 | 3702.00 |
| Singapore | 3.2 | 4627.50 |
| Singapore | 3.2 | 4936.00 |
| Singapore | 3.1 | 4936.00 |
| Singapore | 3.2 | 5861.50 |
| Singapore | 4.1 | 6170.00 |
| Singapore | 3.8 | 13574.00 |
| Singapore | 4 | 16659.00 |
| Singapore | 3.4 | 18510.00 |
| Singapore | 3.9 | 18510.00 |
| Singapore | 3.9 | 19435.50 |
| Singapore | 3.8 | 26531.00 |
| Singapore | 3.8 | 30850.00 |
| Singapore | 3.9 | 2468.00 |
| Singapore | 3.8 | 3085.00 |
| Singapore | 3 | 1851.00 |
| Singapore | 3.7 | 2468.00 |
| Singapore | 4.2 | 1234.00 |
| Singapore | 3.2 | 3085.00 |
| Sri Lanka | 4.1 | 260.00 |
| Sri Lanka | 4.5 | 338.00 |
| Sri Lanka | 3.5 | 390.00 |
| Sri Lanka | 2.4 | 468.00 |
| Sri Lanka | 4.1 | 260.00 |
| Sri Lanka | 4.2 | 260.00 |
| Sri Lanka | 4.9 | 1040.00 |
| Sri Lanka | 4 | 1040.00 |
| Sri Lanka | 4 | 1170.00 |
| Sri Lanka | 3.4 | 520.00 |
| Sri Lanka | 3.6 | 520.00 |
| Sri Lanka | 3.8 | 910.00 |
| Sri Lanka | 4.2 | 624.00 |
| Sri Lanka | 4.1 | 520.00 |
| Sri Lanka | 3.7 | 650.00 |
| Sri Lanka | 4 | 650.00 |
| Sri Lanka | 2.5 | 520.00 |
| Sri Lanka | 4.2 | 780.00 |
| Sri Lanka | 4.2 | 780.00 |
| Sri Lanka | 4 | 650.00 |

1. **What is the distribution of the number of restaurants of different price ranges in all the countries?**

Ans – Here I have used Pivot table, placed Price range in Rows and Count of Restaurants Names in Values.

The Distribution which I used for restaurants & different Price range are –

|  |  |
| --- | --- |
| 1-2 | 4444 |
| 2-3 | 3113 |
| 3-4 | 1408 |
| 4-5 | 586 |

|  |  |
| --- | --- |
| **Price Range with Restaurant Names** | |
| **Price Range** | **Count of Restaurant Name** |
| 1 | 4444 |
| 2 | 3113 |
| 3 | 1408 |
| 4 | 586 |
| **Grand Total** | **9551** |

1. **Explain your approach in brief for suggesting countries/cities in order to open new restaurants, if the objective and subjective questions would have been given to assist you. [you have to give bullet pointers in order to answer this question]**

Ans - I have used Pivot table, and have place Country names in Rows, Count of Restaurant Names & Average of Ratings in Values, and sorted the Count of Restaurant column with Ascending order.

After that, I have decided to do analysis on the no. of restaurants below 30. As per this I got last 7 for further consideration.

To finally suggest the management in order to open new restaurants, I decided to go for the ratings which are above 3 and below 4.

Reason for selecting Average Rating greater that 3 and less than 4 is , if we observe the table, Average rating starts from 2.77 (India) to 4.47 (Philippines). We can’t consider India because it has highest competition with 8652 restaurants. So we have considered greater than 3 but less than 4, and got 4 countries for further suggestions which are, AUSTRALIA, SINGAPORE, SRILANKA, CANADA.