**CAPSTONE PROJECT**

**FARMERS CHOICE 2016**

For this project, I used **FUNCTIONS, CONDITIONAL FORMATING and CHARTS**. To begin with:

Functions are formulas that perform calculations by using specific values (arguments) in a particular order or structure. There are various types of functions but for this project I used just a few of them as needed.

1.To find the total products in the data set I used the UNIQUE function, which listed out the products.

2.To find the number of vegetables and fruits (Category), carrot, cabbage, banana, beans, orange apple mango (Products), I used the COUNTIF function. This function counted the number of each specified variable.

3. To find the total number of sales, I used the SUM function. This accumulated the Amount range of the data set.

4.I also used the MIN and MAX functions to find the Minimum and maximum sales (Amount) in the data set.

5.To find the total number of order ID I used the COUNT function giving me a total of 213 order ID.

6.I also found the most middle sales (Amount) and order ID using the MEDIAN function, giving me $4781 and 212 respectively.

7.For most occurring product in the data set, I used the MODE function.

8.To find the category “APPLE” belongs I used VLOOKUP function.

9.For each number of sales of every country (F2:F214) I used the COUNTIF function.

10.I also used the UPPER and LOWER function to look up for “CABBAGE” and “FRANCE” respectively.

**CONDITIONAL CONFORMATING**

This is an excel tool used to visualize data to read trends and patterns.

**ELABORATION**

1.To identify sales (D2:D214) that were above average ($4832) in the data set I highlighted these cells in light pink color.

2. To identify sales (D2:D214) that were below average ($4832) in the data set I highlighted these cells in light cream color.

3.To identify which product belong to the fruit Category (C2:C217), I used conditional formatting to highlight all cells containing the word “Fruit” in light blue color.

4. To identify which product belong to the vegetables Category (C2:C217), I used conditional formatting to highlight all cells containing the word “Vegetables” in green color.

5.I applied conditional formatting to the country column (F2:F214), I highlighted cells containing France, United States and Germany in Blue, Curry and Red colors respectively.

**PIVOT TABLE**

Pivot table is a tool used to calculate, summarize and analyze data that allows you compare patterns and trends in your data set. We have (One dimensional pivot tables and two-dimensional pivot tables).

**One Dimensional Pivot Tables**

This type of pivot table organizes data based on a single criterion or field showing data in rows and columns and summarizing information for just one selected variable. Used to analyze data based on one aspect. For the data set of “**FARMERS CHOICE 2016**”, I had quite a number of one-dimensional pivot tables: Sum of sales by Category, Total sales by products, Total sales by country, Sum of products by countries, Total sales by products and months and the Total sales (amount) by product and category.

|  |  |
| --- | --- |
| Total products by countries | |
| Country | Count of Product |
| Australia | 27 |
| Canada | 20 |
| France | 28 |
| Germany | 33 |
| New Zealand | 14 |
| United Kingdom | 34 |
| United States | 57 |
| **Grand Total** | **213** |

**Two-Dimensional Pivot Table**

This type of pivot table organizes data based on two or more criterion or field showing data in rows and columns and summarizing information for just the selected variables at an interception.

For the data set of “**FARMERS CHOICE 2016**”, I had arguments such as Total sales(amount) by country and category, Total sales (amount) by product and category and sales by product and months.

|  |  |  |  |
| --- | --- | --- | --- |
| Total amount by product and category | | |  |
| **Sum of Amount** | **Category** |  |  |
| **Country** | **Fruit** | **Vegetables** | **Grand Total** |
| Australia | 91221 | 40492 | 131713 |
| Canada | 82338 | 12407 | 94745 |
| France | 125931 | 15125 | 141056 |
| Germany | 66430 | 88738 | 155168 |
| New Zealand | 62392 | 4390 | 66782 |
| United Kingdom | 87786 | 85351 | 173137 |
| United States | 176971 | 90162 | 267133 |
| **Grand Total** | **693069** | **336665** | **1029734** |