

**LOVELY PROFESSIONAL UNIVERSITY**  
**ACADEMIC TASK NO. 1**

**Mittal School of Business (MSOB)**  
**Faculty of Marketing**

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Name of the faculty member: Dr. MOHD FARHAN

Course Code: MGN909

**Course Title: DATA ANALYSIS USING SPSS Max.**

Marks: 30 Marks

Date of Allotment: **19.08.2020**

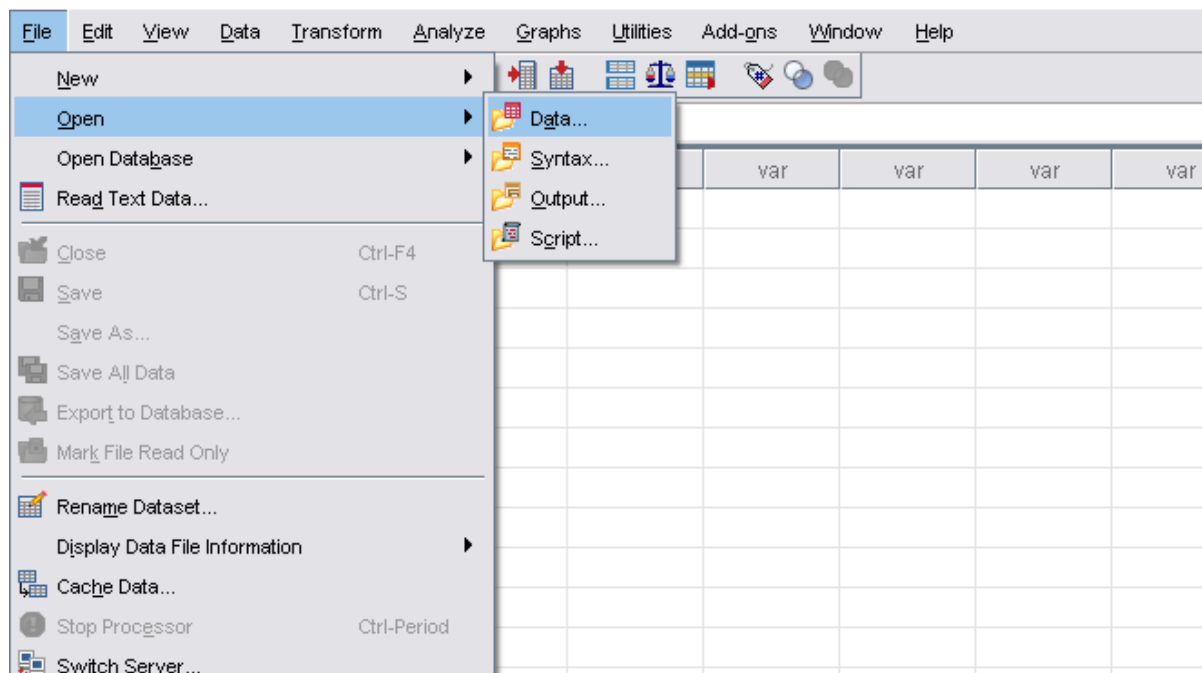
Date of Submission: **29.08.2020**

**ASSIGNMENT 1**

1. First we need to import data into SPSS to perform our desired Analysis.

To import data into our SPSS we follow these commands:

**File Tab>>Open option>>Data Option>>Select the data file from Download directory.**



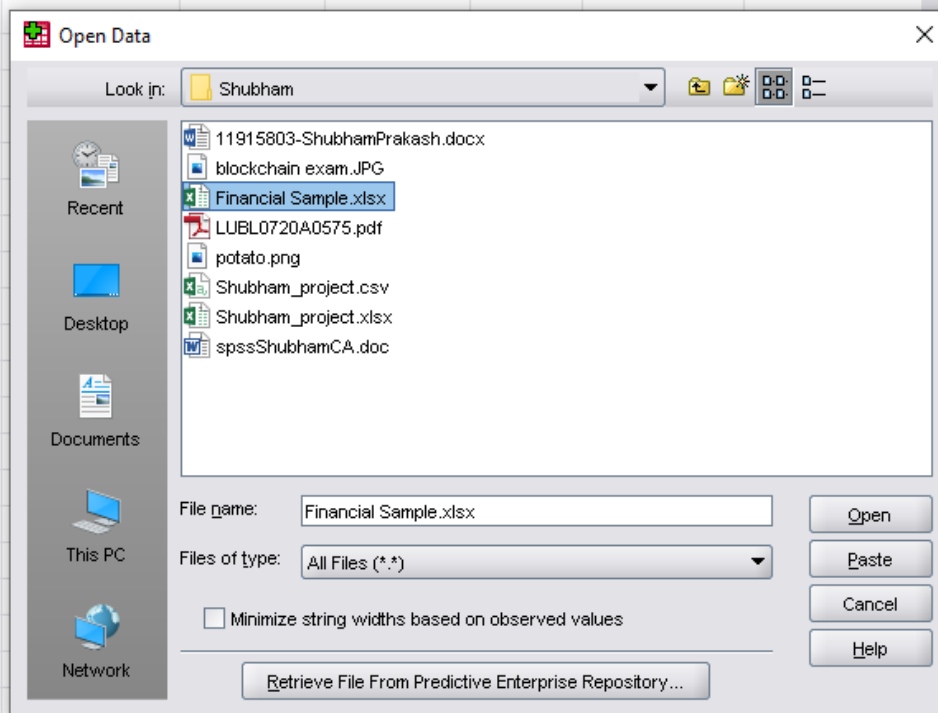
Step 1: Download the file from Sample Excel Spreadsheet – Microsoft [go.microsoft.com](https://go.microsoft.com/fwlink/) › fwlink

Step 2: Open SPSS and click to **File tab** on top left side.

Step 3: Select the **Open** option from the drop down menu.

Step 4: Select **Data** option and Directory selection pop-up window will open.

Step 5: Select Data file from **Download directory** or where the data file is present and remember to change the filetype to All files. And click Open.



Here, we can see that the desired data has been imported into the SPSS.

	Segment	Country	Product	Discount Band	Units Sold	Manufacturing Price	Sale Price	Gross Sales	Discounts	Sales
1	Government	Canada	Carretera	None	1618.5	3.0	20.0	32370.0	0.0	32370.0
2	Government	Germany	Carretera	None	1321.0	3.0	20.0	26420.0	0.0	26420.0
3	Midmarket	France	Carretera	None	2178.0	3.0	15.0	32670.0	0.0	32670.0
4	Midmarket	Germany	Carretera	None	888.0	3.0	15.0	13320.0	0.0	13320.0
5	Midmarket	Mexico	Carretera	None	2470.0	3.0	15.0	37050.0	0.0	37050.0
6	Government	Germany	Carretera	None	1513.0	3.0	350.0	529550.0	0.0	529550.0
7	Midmarket	Germany	Montana	None	921.0	5.0	15.0	13815.0	0.0	13815.0
8	Channel Partners	Canada	Montana	None	2518.0	5.0	12.0	30216.0	0.0	30216.0
9	Government	France	Montana	None	1899.0	5.0	20.0	37980.0	0.0	37980.0
10	Channel Partners	Germany	Montana	None	1545.0	5.0	12.0	18540.0	0.0	18540.0
11	Midmarket	Mexico	Montana	None	2470.0	5.0	15.0	37050.0	0.0	37050.0
12	Enterprise	Canada	Montana	None	2665.5	5.0	125.0	333187.5	0.0	333187.5
13	Small Business	Mexico	Montana	None	950.0	5.0	300.0	287400.0	0.0	287400.0
14	Government	Germany	Montana	None	2146.0	5.0	7.0	15022.0	0.0	15022.0
15	Enterprise	Canada	Montana	None	345.0	5.0	125.0	43125.0	0.0	43125.0
16	Midmarket	United States of America	Montana	None	615.0	5.0	15.0	9225.0	0.0	9225.0
17	Government	Canada	Paseo	None	292.0	10.0	20.0	5840.0	0.0	5840.0
18	Midmarket	Mexico	Paseo	None	974.0	10.0	15.0	14610.0	0.0	14610.0
19	Channel Partners	Canada	Paseo	None	2518.0	10.0	12.0	30216.0	0.0	30216.0
20	Government	Germany	Paseo	None	1006.0	10.0	350.0	352100.0	0.0	352100.0
21	Channel Partners	Germany	Paseo	None	367.0	10.0	12.0	4404.0	0.0	4404.0
22	Government	Mexico	Paseo	None	883.0	10.0	7.0	6181.0	0.0	6181.0
23	Midmarket	France	Paseo	None	549.0	10.0	15.0	8235.0	0.0	8235.0
24	Small Business	Mexico	Paseo	None	788.0	10.0	300.0	236400.0	0.0	236400.0
25	Midmarket	Mexico	Paseo	None	2472.0	10.0	15.0	37080.0	0.0	37080.0
26	Government	United States of America	Paseo	None	1143.0	10.0	7.0	8001.0	0.0	8001.0
27	Government	Canada	Paseo	None	1725.0	10.0	350.0	603750.0	0.0	603750.0
28	Channel Partners	United States of America	Paseo	None	912.0	10.0	12.0	10944.0	0.0	10944.0
29	Midmarket	Canada	Paseo	None	2152.0	10.0	15.0	32280.0	0.0	32280.0
30	Government	Canada	Paseo	None	1817.0	10.0	20.0	36340.0	0.0	36340.0
31	Government	Germany	Paseo	None	1513.0	10.0	350.0	529550.0	0.0	529550.0
32	Government	Mexico	Velo	None	1493.0	120.0	7.0	10451.0	0.0	10451.0
33	Enterprise	France	Velo	None	1804.0	120.0	125.0	22500.0	0.0	22500.0
34	Channel Partners	Germany	Velo	None	2161.0	120.0	12.0	25932.0	0.0	25932.0
35	Government	Germany	Velo	None	1006.0	120.0	350.0	352100.0	0.0	352100.0

## 2. Generating frequency tables of Segments.

- For generating the Frequency tables we need to Select the **Analyze** tab, and then select **Descriptive Stats**. then select **Frequencies** option from the drop down menu.
- Analyze tab**>> **Descriptive Stats** >> **Frequencies**>> **Select Variable** >> **Check Display Table**>> **OK**

### Frequencies

[DataSet1]

#### Statistics

Segment

N	Valid	700
	Missing	0

#### Segment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Channel Partners	100	14.3	14.3	14.3
	Enterprise	100	14.3	14.3	28.6
	Government	300	42.9	42.9	71.4
	Midmarket	100	14.3	14.3	85.7
	Small Business	100	14.3	14.3	100.0
	Total	700	100.0	100.0	

Here, we can see that Govt. has th highest Frequency, Percent & Valid Percent.  
And Total Frequency is 700.

## ❖ Generating frequency tables of products.

### ➔ Frequencies

[DataSet1]

#### Statistics

Product

N	Valid	700
	Missing	0

#### Product

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Amarilla	94	13.4	13.4	13.4
	Carretera	93	13.3	13.3	26.7
	Montana	93	13.3	13.3	40.0
	Paseo	202	28.9	28.9	68.9
	Velo	109	15.6	15.6	84.4
	VTT	109	15.6	15.6	100.0
	Total	700	100.0	100.0	

Here, we can see that Paseo has the highest frequency of 202, and total frequency of all is 700.

❖ Generating frequency tables of Country

➔ **Frequencies**

[DataSet1]

**Statistics**

Country		
N	Valid	700
	Missing	0

		Country			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Canada	140	20.0	20.0	20.0
	France	140	20.0	20.0	40.0
	Germany	140	20.0	20.0	60.0
	Mexico	140	20.0	20.0	80.0
	United States of America	140	20.0	20.0	100.0
Total		700	100.0	100.0	

Here, we can see that all countries have same frequency and total frequency of them is 700.

❖ Generating frequency tables of Price.

➔ **Frequencies**

[DataSet1]

**Statistics**

Price		
N	Valid	700
	Missing	0

		Price			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	100	14.3	14.3	14.3
	12	100	14.3	14.3	28.6
	15	100	14.3	14.3	42.9
	20	100	14.3	14.3	57.1
	125	100	14.3	14.3	71.4
	300	100	14.3	14.3	85.7
	350	100	14.3	14.3	100.0
	Total	700	100.0	100.0	

Here, Sale Price frequency is same and the total frequency is 700.

- ❖ Generating frequency tables of Year.

## ➔ Frequencies

[DataSet1]

### Statistics

Year

N	Valid	700
	Missing	0

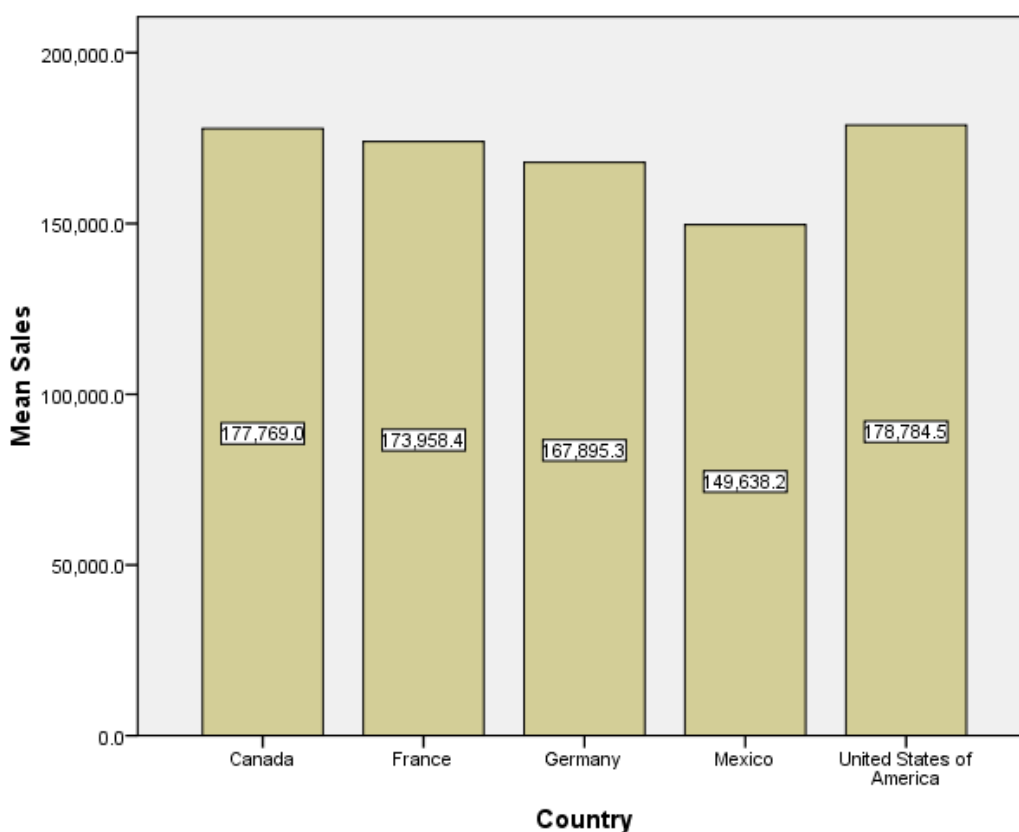
### Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2013	175	25.0	25.0	25.0
	2014	525	75.0	75.0	100.0
	Total	700	100.0	100.0	

Here, we can clearly see that in 2014 frequency was highest as compared to 2013.

### 3. Generating Bar diagram for country wise sale (with data labels).

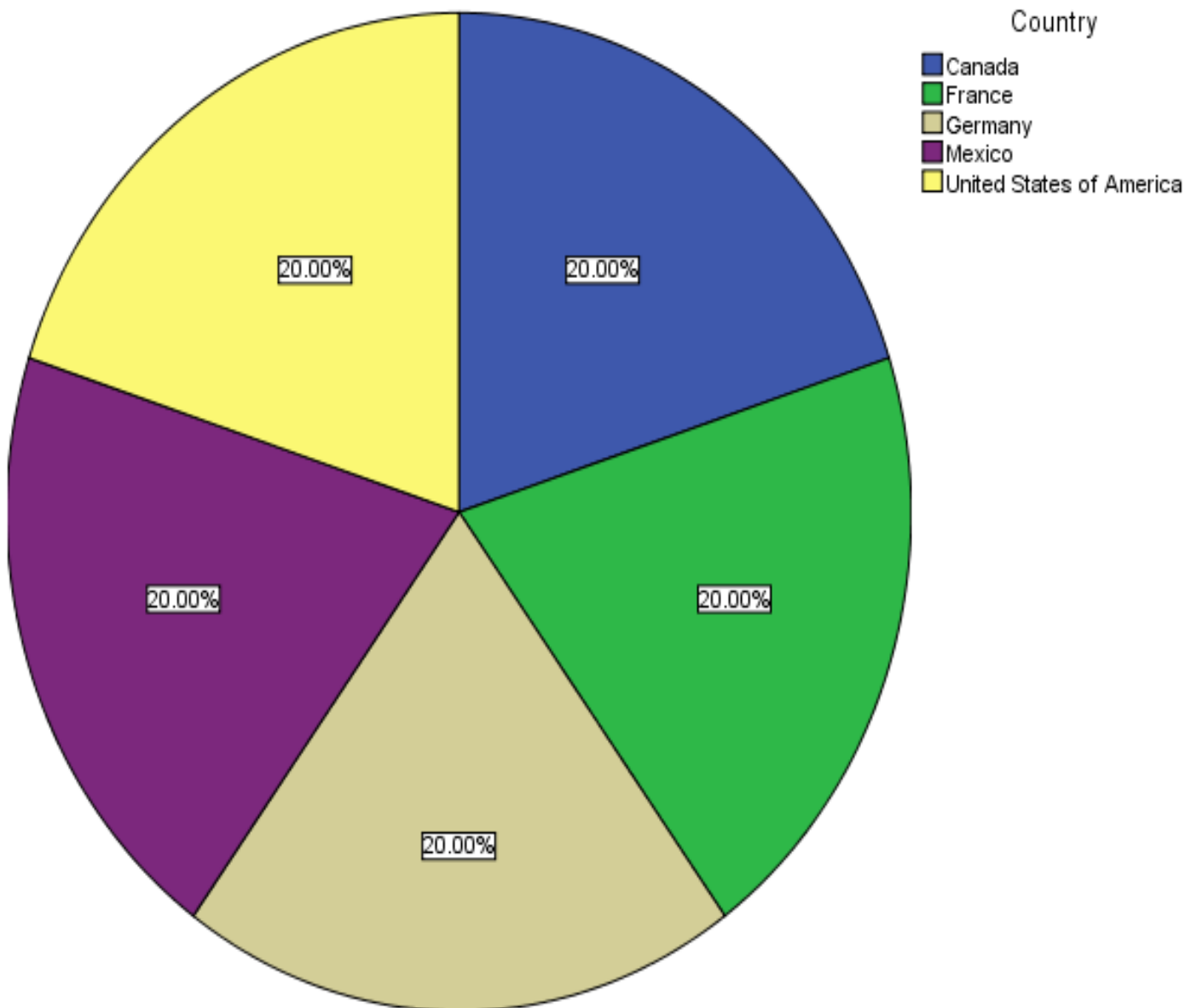
- To create bar diagram/graph of country wise sale, we need to select the **Graphs** tab, then select the **Char Builder**, then select **Bar graph** and choose the type of graph which is required, then select the variables(country in x-axis & sales in y-axis) required for x and y- axis of the Bar graph.
- **Graph tab >> Char Builder >>Select Bar graph >>select Variables >> click OK.**
- And to label it double click on the generated bar graph then select the **Elements tab** then select **Show Data Labels**.



Here, we can see that USA has highest sales of 178,784.5 and Mexico has lowest sales of 149,638.2 in all.

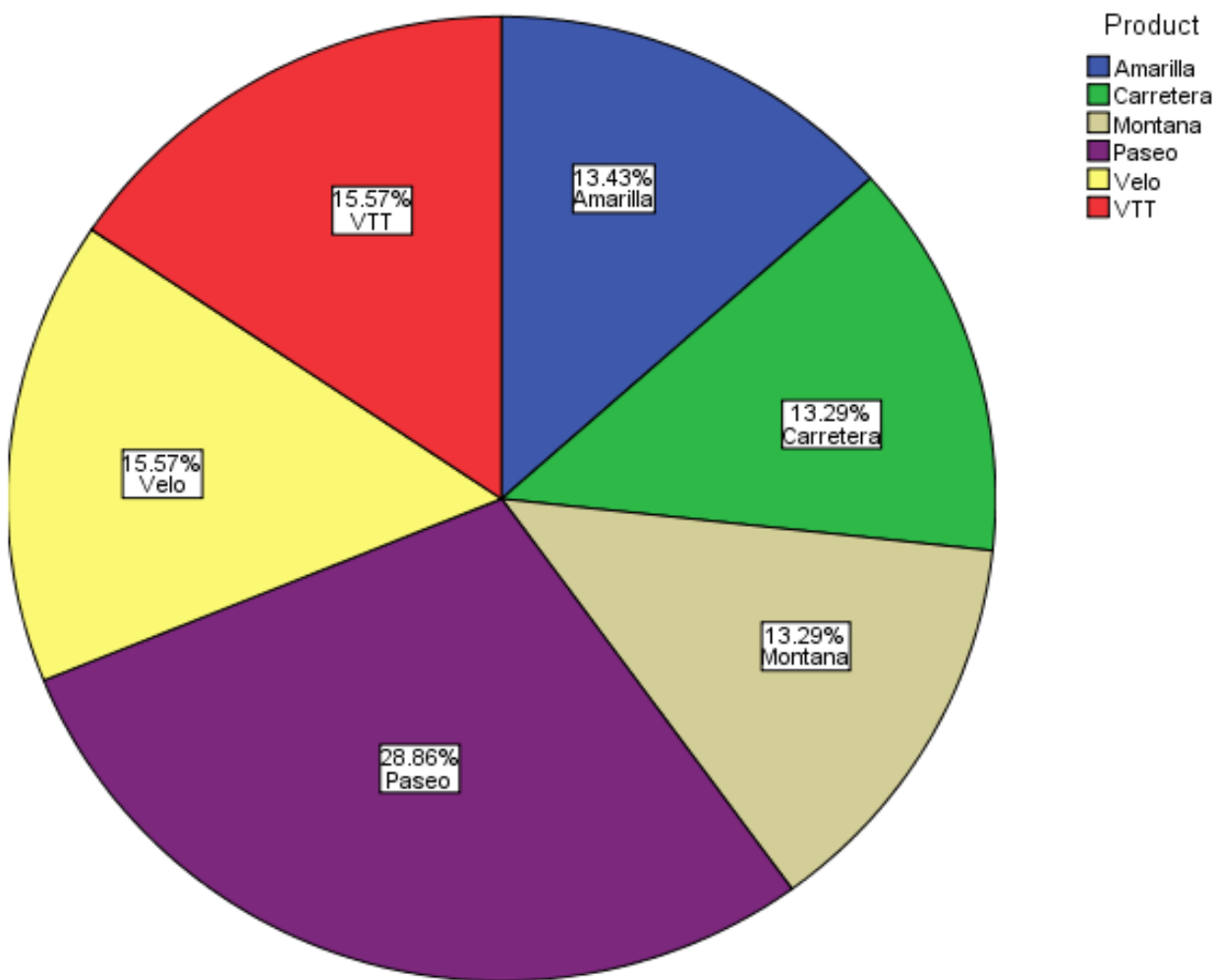
#### 4. Generating pie chart of countries (with data labels).

- To create Pie chart of countries, we need to select the **Graphs** tab, and then select the Char Builder, then select **Pie Chart** and then select the variable (country) required for the pie chart.
- **Graph tab >> Char Builder >> Select Pie Chart >> select Variable >> click OK.**
- And to label it double click on the generated Pie chart and then select the **Elements tab** then select **Show Data Labels**.



Here, we can see that all 5 countries have equal shares of 20%.

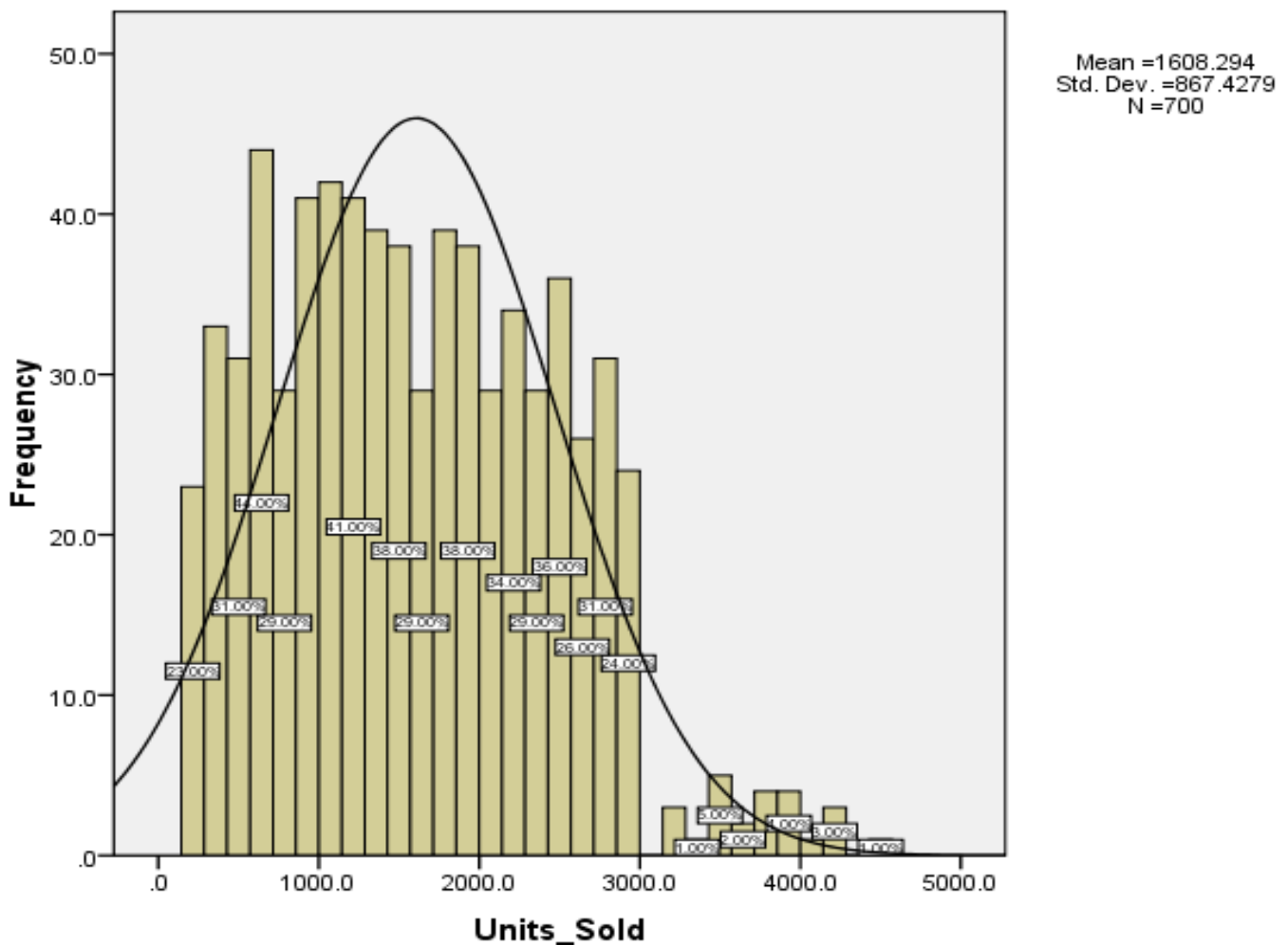
❖ Generating pie chart of Products



- Here we can clearly see that Paseo has the highest share of 28.86% and Montana and Carretera lowest of 13.29%.

## 5. Generating histogram of Unit Sold with normal curve.

- To create Histogram of Unit Sold, we need to select the **Graphs** tab, and then select the **Char Builder**, then select **Histogram** and then select the variable (**Unit sold**) required for the Histogram, then select the **Elements Properties**, check the **Display Normal Curve** option box and click OK.
- Graph tab >> Char Builder >> Select Histogram >> select Variable >> Select Element Properties >> Check Display Normal Curve >> click OK.**



Here, we can see that the frequency distribution slope is in peak at between 100 – 200 units and declining, showing uniform distribution.

Thanking You

By: Shubham Prakash