

## Sales Data Exploratory Analysis

- Sales dataset has below data.
  - Product Name
  - Temperature
  - Product Category
  - Sales amount for three years.
- Given Dataset has 101 rows and 7 columns.
- Total sales we are analysing is for 3 years.
- Given dataset contains total 6 products and 100 products based on product categories.
- Below is the Descriptive Analysis for three years.

Total 2011 Sales		Total 2012 Sales		Total 2013 Sales	
Mean	15464.91	Mean	15619.61	Mean	15920.82
Standard Error	1027.626	Standard Error	1037.900743	Standard Error	1058.568
Median	15206	Median	15357.5	Median	15636.5
Mode	4117	Mode	4159	Mode	4231
Standard Deviation	10276.26	Standard Deviation	10379.00743	Standard Deviation	10585.68
Sample Variance	1.06E+08	Sample Variance	107723795.3	Sample Variance	1.12E+08
Kurtosis	0.521543	Kurtosis	-0.521535349	Kurtosis	-0.5253
Skewness	0.317674	Skewness	0.317699814	Skewness	0.317405
Range	47647	Range	48122	Range	49050
Minimum	591	Minimum	598	Minimum	613
Maximum	48238	Maximum	48720	Maximum	49663
Sum	1546491	Sum	1561961	Sum	1592082
Count	100	Count	100	Count	100
Confidence Level(95.0%)	2039.033	Confidence Level(95.0%)	2059.420249	Confidence Level(95.0%)	2100.428

### Below are the findings from the sales Dataset given.

- Maximum sale product category is Food and minimum sale category is Hygeine.
- Average salary by each year is 15465 for year-2011, 45620 for year-2012 and 15921 for year-2013.

- The sale is increasing by each year.
- October month has the bigger sales in all the years.
- Below table shows the sum of total sales per year.

Product Categories	Sum of Total 2011 Sales	Sum of Total 2012 Sales	Sum of Total 2013 Sales
Beverage	498586	503562	512816
Drug	68382	69062	70452
Food	855895	864474	881196
Gambling	83266	84100	86139
Hygeine	3799	3837	3895
Leisure	36563	36926	37584
<b>Grand Total</b>	<b>1546491</b>	<b>1561961</b>	<b>1592082</b>

- Max of total sales per year.

Product Categories	Max of Total 2011 Sales	Max of Total 2012 Sales	Max of Total 2013 Sales
Beverage	48238	48720	49663
Drug	23402	23635	24179
Food	31887	32206	32874
Gambling	29471	29764	30301
Hygeine	3799	3837	3895
Leisure	22250	22471	22877
<b>Grand Total</b>	<b>48238</b>	<b>48720</b>	<b>49663</b>