

# Chapter 5

## Calculations in Tableau

Year of Order Date	
2019	494,040
2020	472,993
2021	613,934
2022	745,568
<b>Grand Total</b>	<b>2,326,534</b>

Figure 5.1: Sales at the Year level.

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Year of Order Date	Quarter of Order Date	
2019	Q1	75,972
	Q2	89,285
	Q3	145,535
	Q4	183,249
2020	Q1	70,392
	Q2	89,239
	Q3	130,449
	Q4	182,912
2021	Q1	94,840
	Q2	136,809
	Q3	145,539
	Q4	236,745
2022	Q1	125,289
	Q2	134,991
	Q3	198,184
	Q4	287,104
<b>Grand Total</b>		<b>2,326,534</b>

Figure 5.2: Sales at the Quarter level.

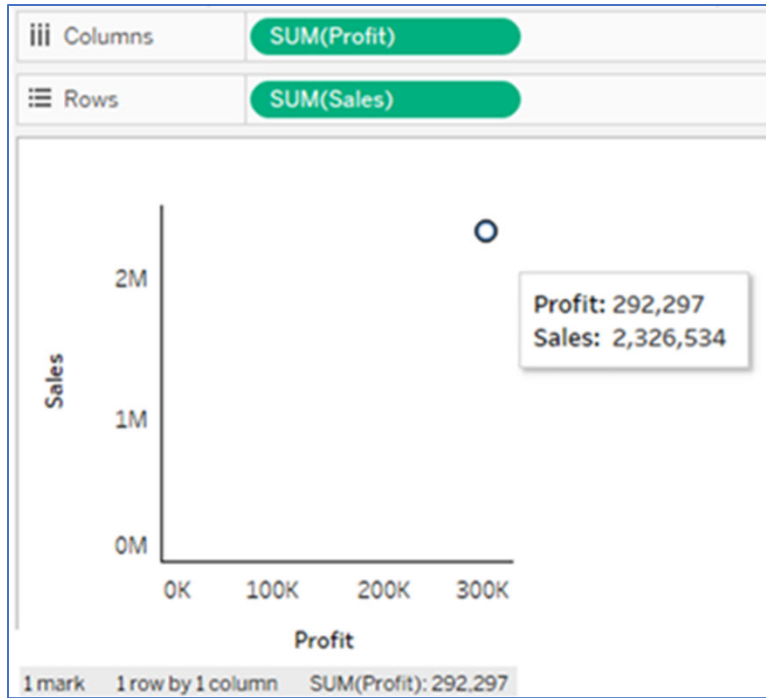


Figure 5.3: Profit and Sales for the entire data set.

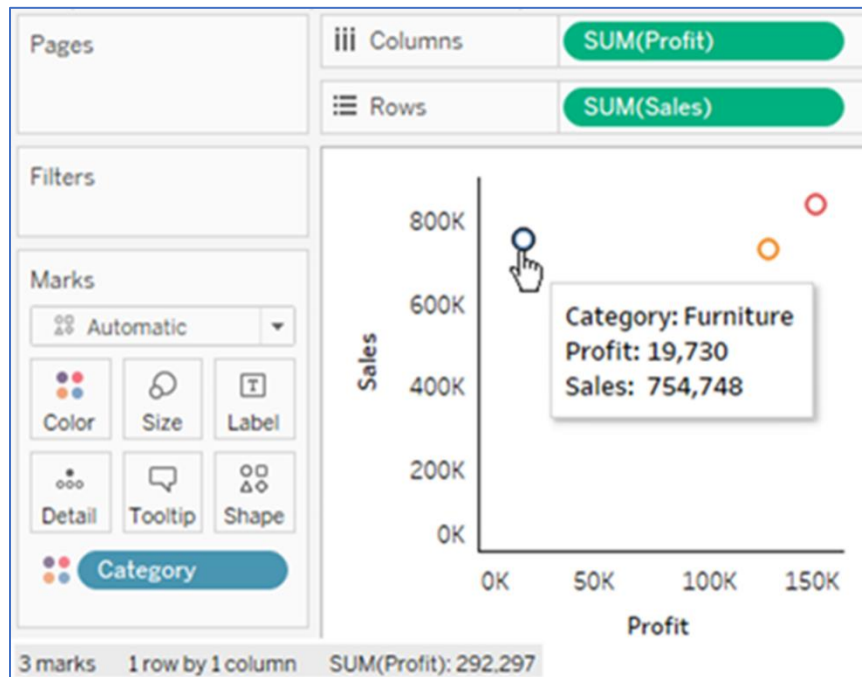


Figure 5.4: Profit and Sales by Category.

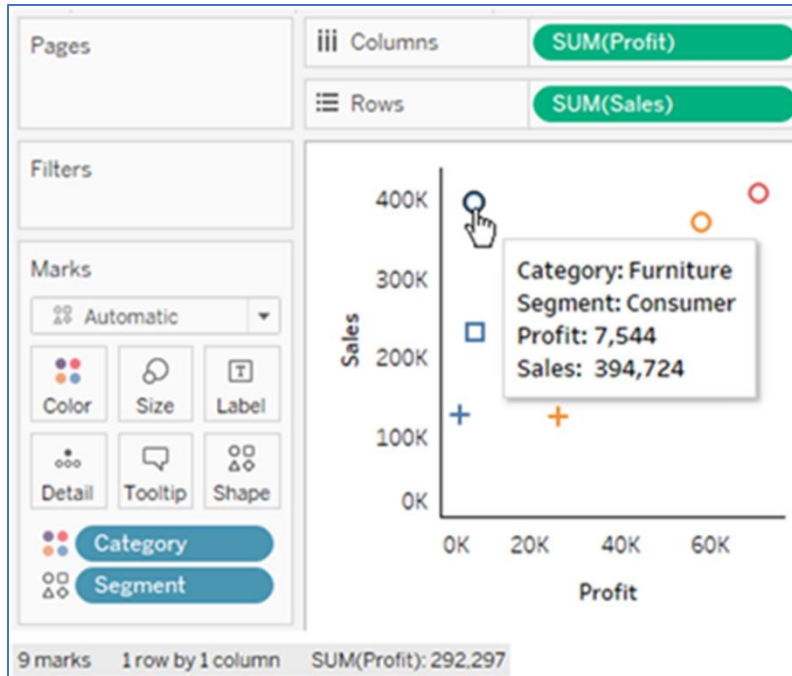


Figure 5.5: Profit and Sales by Category and Segment.

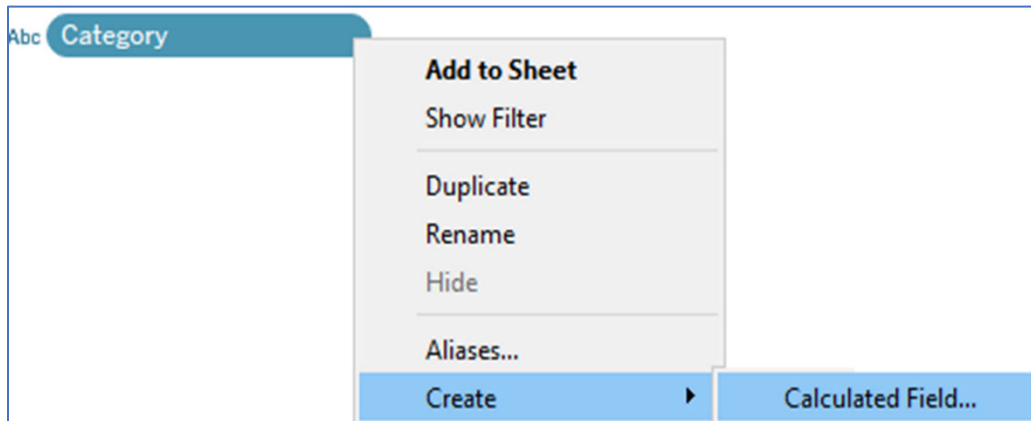


Figure 5.6: Creating Calculated field.

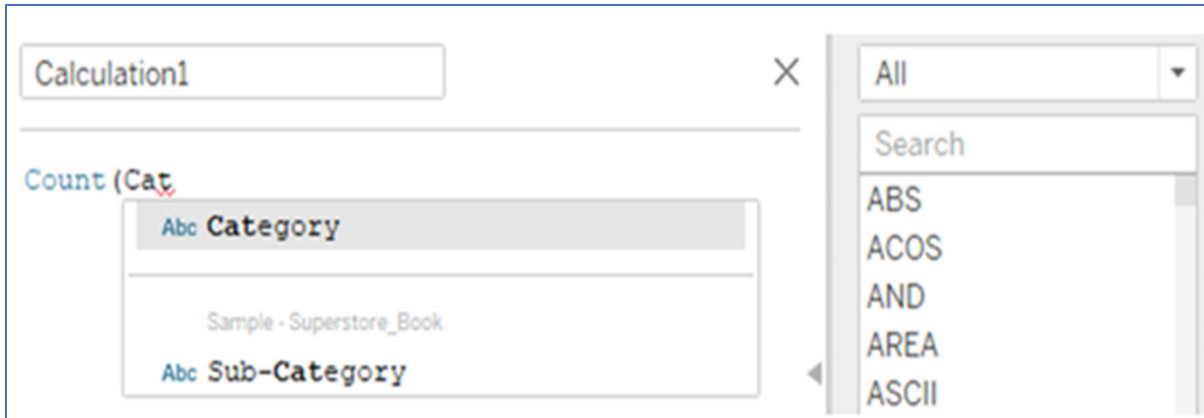


Figure 5.7: Calculated field editor.

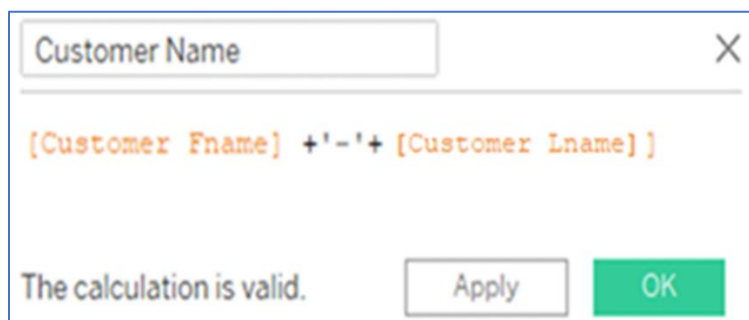


Figure 5.8: Calculation for creating Customer name.

Customer Name	
Aaron-Bergman	886
Aaron-Hawkins	1,745
Aaron-Smayling	3,051
Adam-Bellavance	7,756
Adam-Hart	3,250
Adam-Shillingsburg	3,255
Adrian-Barton	14,474

Figure 5.9 Sales by Customer name.

# of Customers	10,194
Sales	2,326,534

Figure 5.10: Count of Customers and Sales.

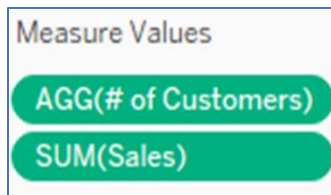


Figure 5.11 Value displayed with AGG.

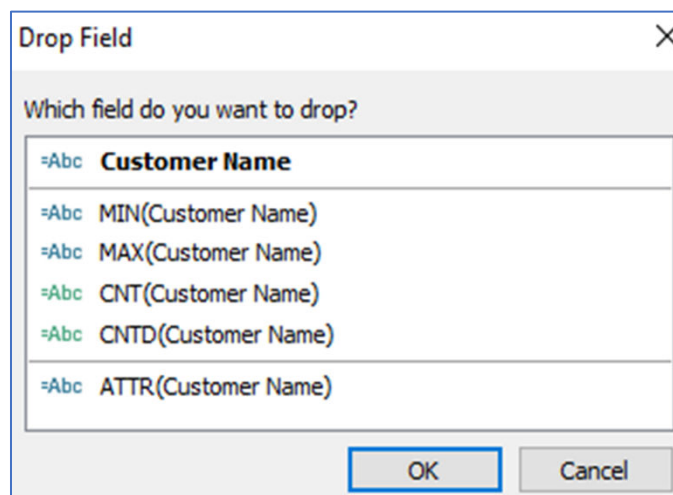


Figure 5.12: Drop field option.

```
High-Medium-Low Sales
IF      Sum([Sales]) > 200000 THEN 'High'
ELSEIF  Sum([Sales]) > 100000 AND Sum([Sales]) < 200000 THEN 'Medium'
ELSE    'Low'
END
```

Figure 5.13: High-Medium-Low Sales calculation.

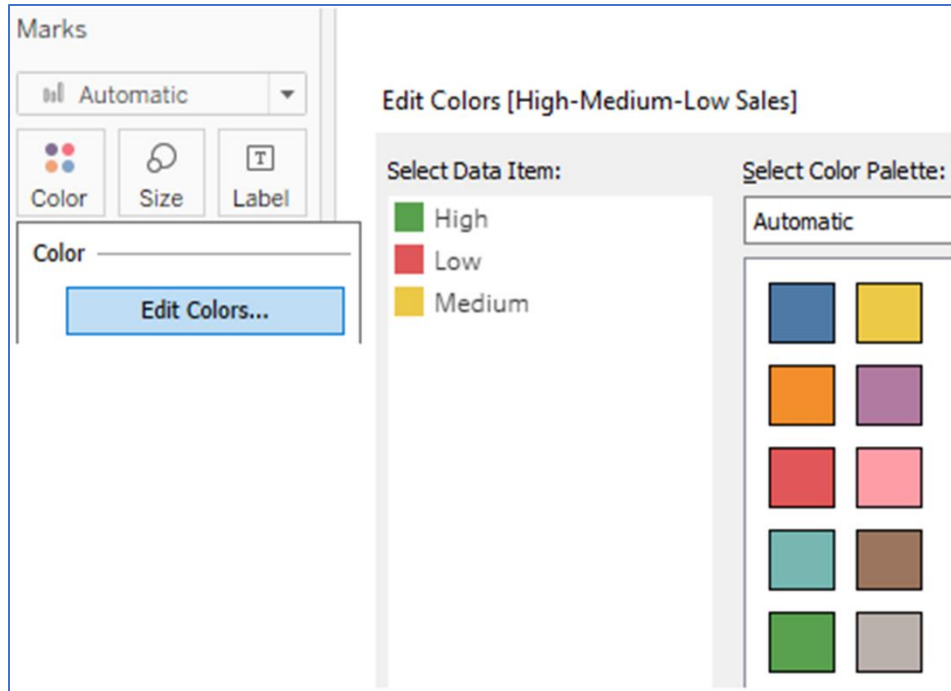


Figure 5.14: Editing colors.

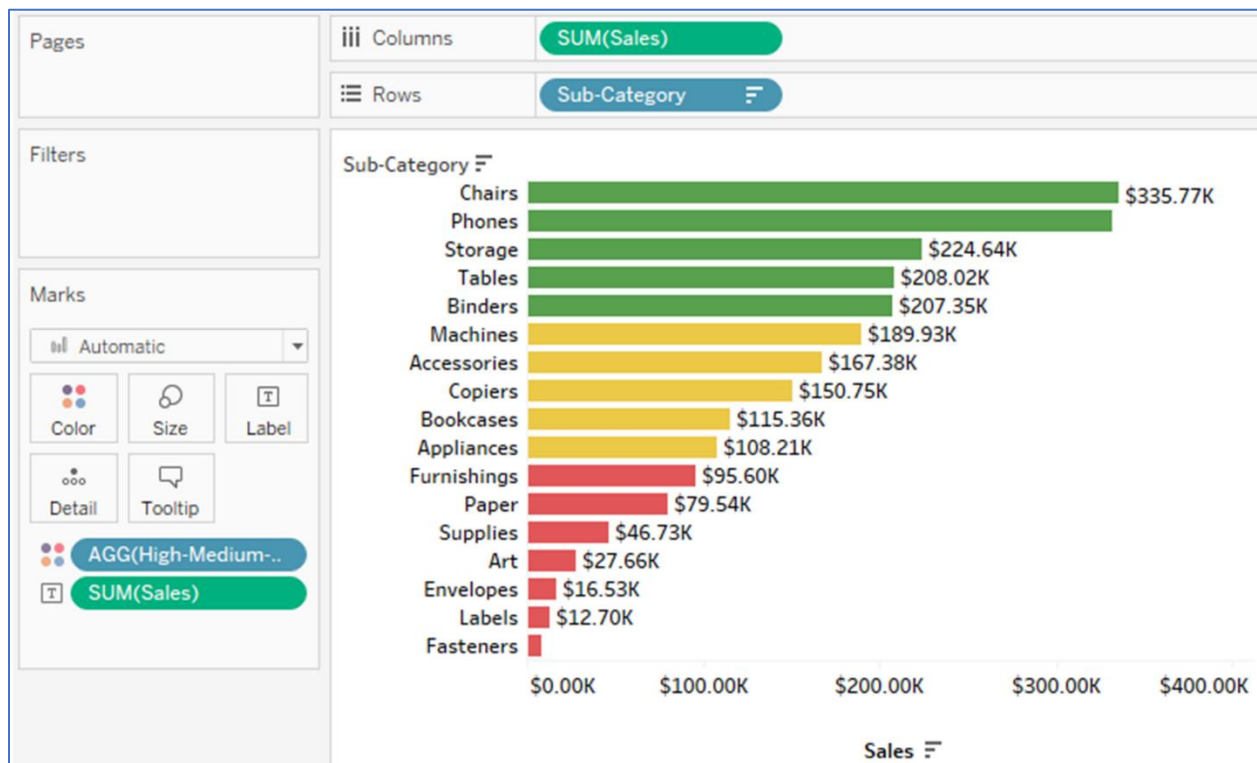


Figure 5.15: Bar chart displaying High-Medium-Low Sales.

New Sub-Category	
Accessories	167,380
Appliances	108,213
Art	27,659
Books	402,257
Copiers	150,745
Furnishings	95,598
Machines	189,925
Office Furniture	543,788
Phones	331,843
Stationery	37,756
Storage	224,645
Supplies	46,725

Figure 5.16: Sales with New Sub-Category groupings.

Postal Code	Customer Name	
01040	Paul-Prost	302
01453	Guy-Phonely	192
	Sung-Shariari	26
01752	Patrick-O'Donnell	207
01810	Pamela-Stobb	436
01841	Alejandro-Grove	38
	Alex-Russell	15
	Bart-Pistole	830
	Ben-Ferrer	1,843

Figure 5.17: Multiple Customers residing in one Postal Code.

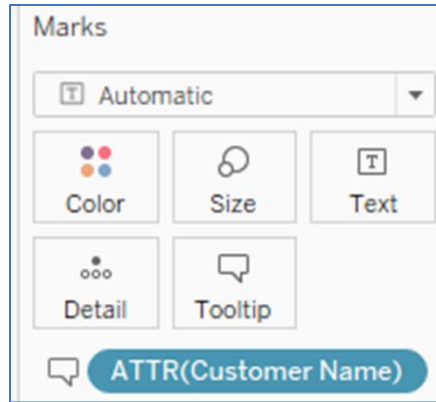


Figure 5.18: ATTR Customer Name on Tooltip.

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Postal Code	Customer Name	
01040	Paul-Prost	302
01453	*	217
01752	Patrick-O'Donnell	207
01810	Pamela-Stobb	436
01841	*	6,109
01852	*	4,838
01915	Anthony-Jacobs	2,583

Figure 5.19: ATTR on Rows displays Asterisk.

---

```
Sales for Postal Code 01453

IF [Postal Code] = '01453' THEN
SUM([Sales]).
END

The calculation contains errors ▼
Cannot mix aggregate and non-aggregate comparisons or results in 'IF' expressions
```

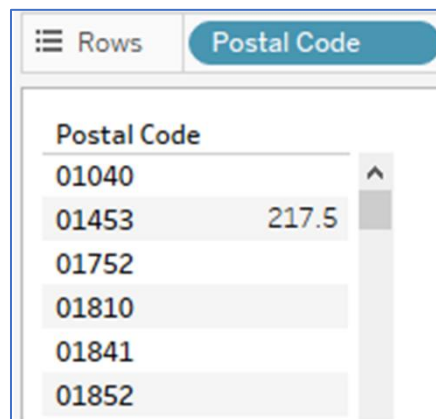
Figure 5.20: Calculation error.

```
Sales for Postal Code 01453

IF ATTR([Postal Code]) = '01453' THEN
    SUM([Sales])
END
```

Figure 5.21: Resolving error by using ATTR.

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Postal Code	Sales
01040	
01453	217.5
01752	
01810	
01841	
01852	

Figure 5.22: Sales for Postal Code 01453.

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```
Sales for Postal Code 01453

ZN(
  IF ATTR([Postal Code]) = '01453' THEN
    SUM([Sales])
  END
)
```

Figure 5.23: Using ZN function.

Postal Code	
01040	0.0
01453	217.5
01752	0.0
01810	0.0
01841	0.0
01852	0.0

Figure 5.24: ZN function displays 0 instead of Nulls.

Product Name
3-ring staple pack
Aastra 57i VoIP phone
Aastra 6757i CT Wireless VoIP phone
Acco Hot Clips Clips to Go
Acco Pressboard Covers with Storage Hooks, 9 1/2" x 11", Executive Red
ACCOHIDE Binder by Acco
AT&T 1080 Corded phone

Figure 5.25: Product Names not in proper case.

Product Name	Proper Product Names
3-ring staple pack	3-Ring Staple Pack
Aastra 57i VoIP phone	Aastra 57i Voip Phone
Aastra 6757i CT Wireless VoIP phone	Aastra 6757i Ct Wireless Voip Phone
Acco Hot Clips Clips to Go	Acco Hot Clips Clips To Go
Acco Pressboard Covers with Storage Hooks, 9 1/2" x 11", Executive Red	Acco Pressboard Covers With Storage Hooks, 9 1/2" X 11", Executive Red
ACCOHIDE Binder by Acco	Accohide Binder By Acco
AT&T 1080 Corded phone	At&T 1080 Corded Phone

Figure 5.26: Product Names with proper case.

Pages	Columns	
Filters	Rows	Product Name
Adjustable Products..		
Marks		
Automatic		
Color	Size	Text
Detail	Tooltip	
SUM(Sales)		
Product Name		
Adjustable Depth Letter/Legal Cart		7,367
Adjustable Personal File Tote		179
Bretford "Just In Time" Height-Adjustable Multi-Task Work Tables		5,635
Global Manager's Adjustable Task Chair, Storm		2,959
Hon 4700 Series Mobuis Mid-Back Task Chairs with Adjustable Arms		6,514
KI Adjustable-Height Table		2,687
Logitech G500s Laser Gaming Mouse with Adjustable Weight Tuning		1,400
Luxo Adjustable Task Clamp Lamp		1,155
Office Star - Contemporary Swivel Chair with Padded Adjustable Ar..		3,651
Office Star - Contemporary Task Swivel chair with 2-way adjustable ..		694
Office Star - Ergonomic Mid Back Chair with 2-Way Adjustable Arms		579
Office Star - Mid Back Dual function Ergonomic High Back Chair with..		3,606
SAFCO PlanMaster Heigh-Adjustable Drafting Table Base, 43w x 30..		3,250
Smead Adjustable Mobile File Trolley with Lockable Top		1,006
Telescoping Adjustable Floor Lamp		112

Figure 5.27: Sales of Adjustable Products.