Tableau- Assignment 8

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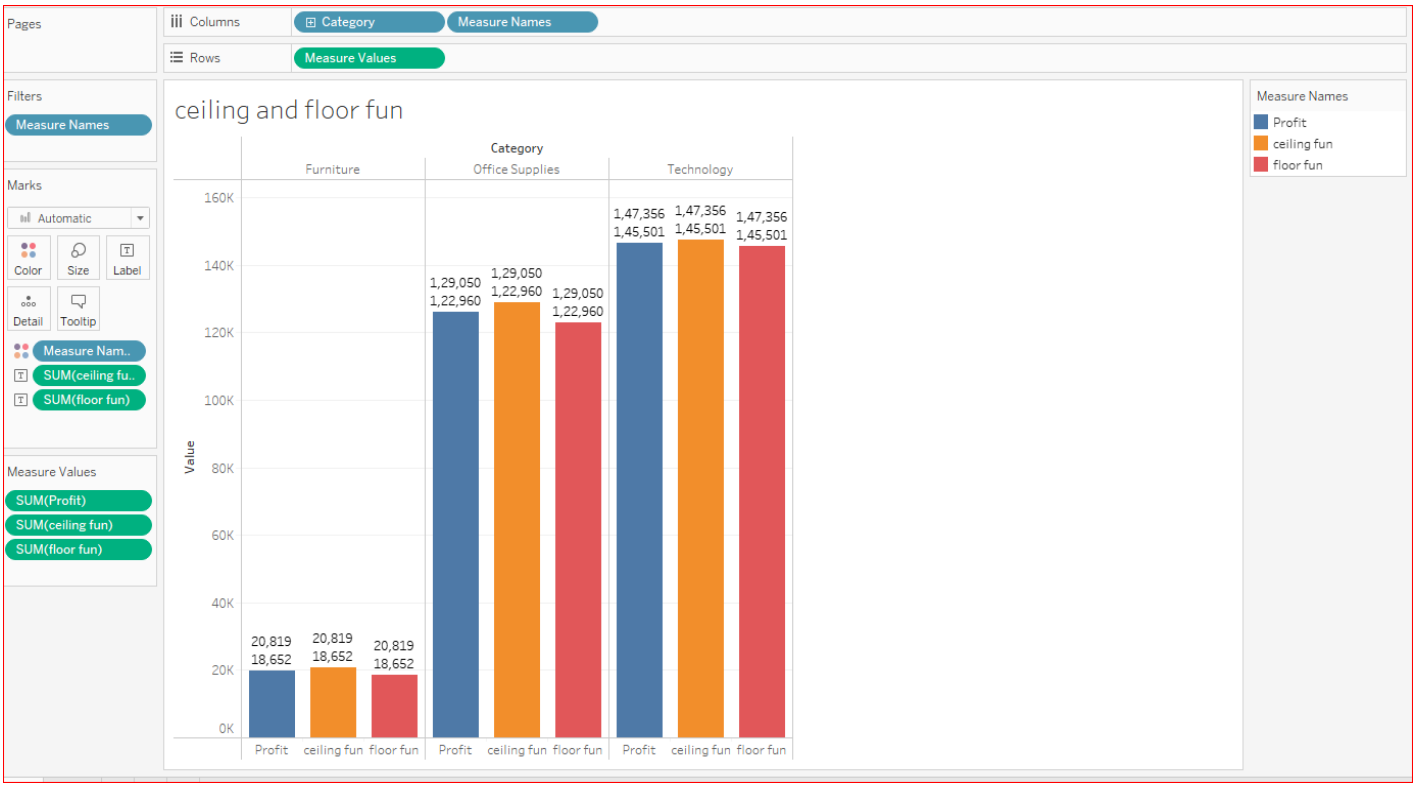
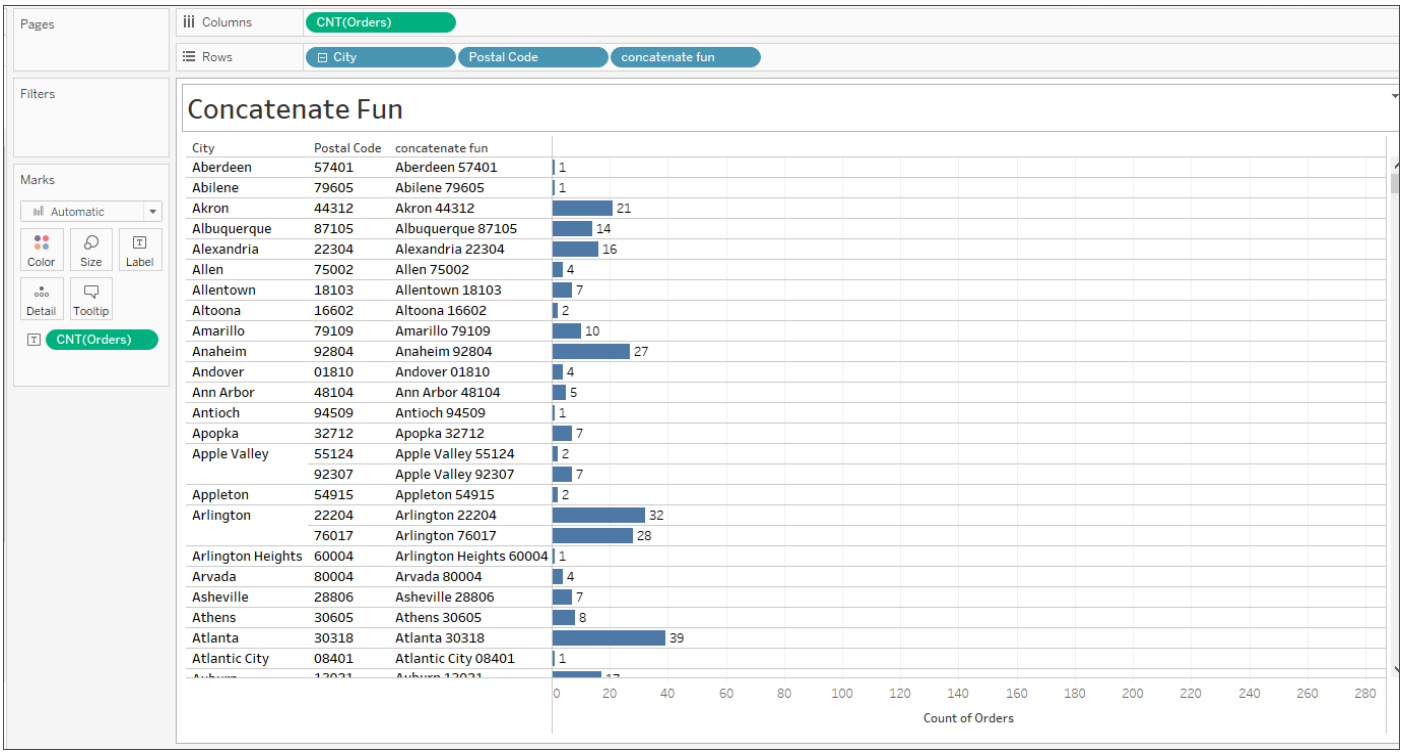
1. You can do calculations on the data values in your fields using number functions. Only fields with numerical values can be used with number functions. With the help of a dataset of your own choice, illustrate the use of the string functions CEILING (number) and FLOOR (number). Mention your inferences from the illustration.

- CEILING – This function rounds a number to the nearest integer of equal or greater value.
- FLOOR – This function rounds a number to the nearest integer of equal or lesser value.

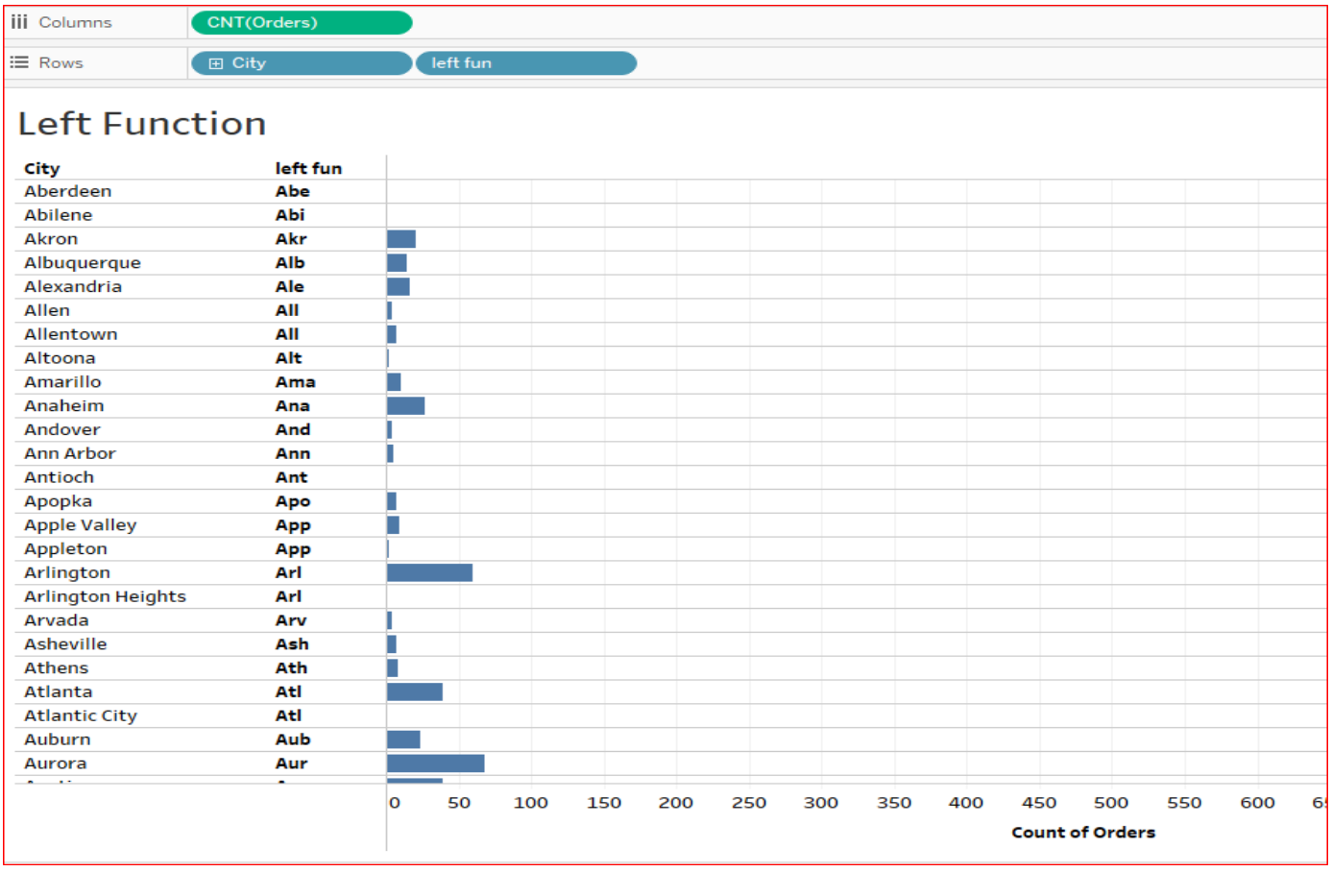
Orders Profit	Calculation ceiling fun	Calculation floor fun
5.55	6	5
-5.49	-5	-6
4.27	5	4
-64.77	-64	-65
4.88	5	4
746.41	747	746
1.48	2	1
5.24	6	5
274.49	275	274
0.31	1	0
3.01	4	3
9.33	10	9
204.11	205	204
113.67	114	113
-53.71	-53	-54
-18.25	-18	-19
1.17	2	1
9.75	10	9



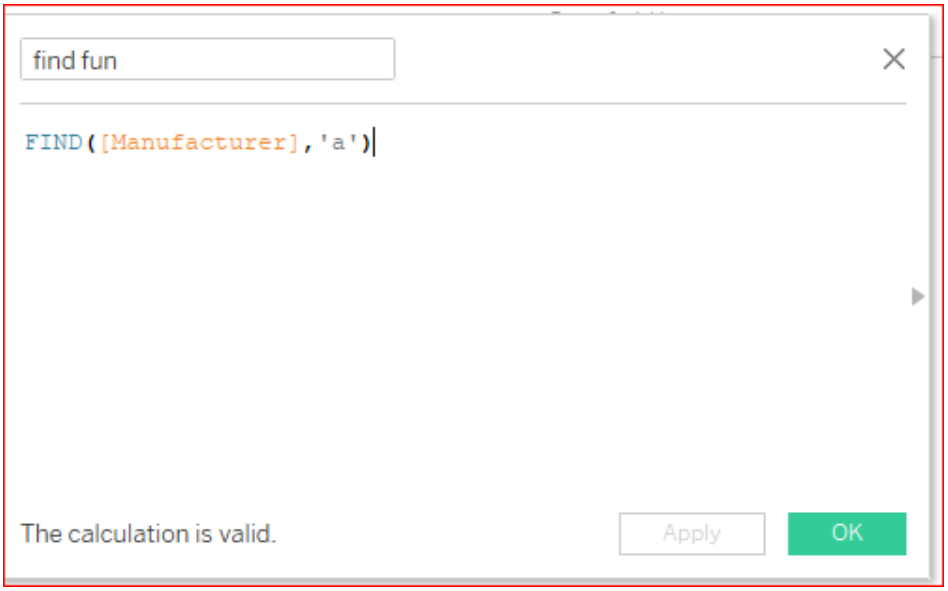
2. Tableau has a few string methods to make dealing with strings possible. With the help of a dataset of your own choice, illustrate the use of the string functions- concatenation, left() and Find(). Mention your inferences from the illustration.

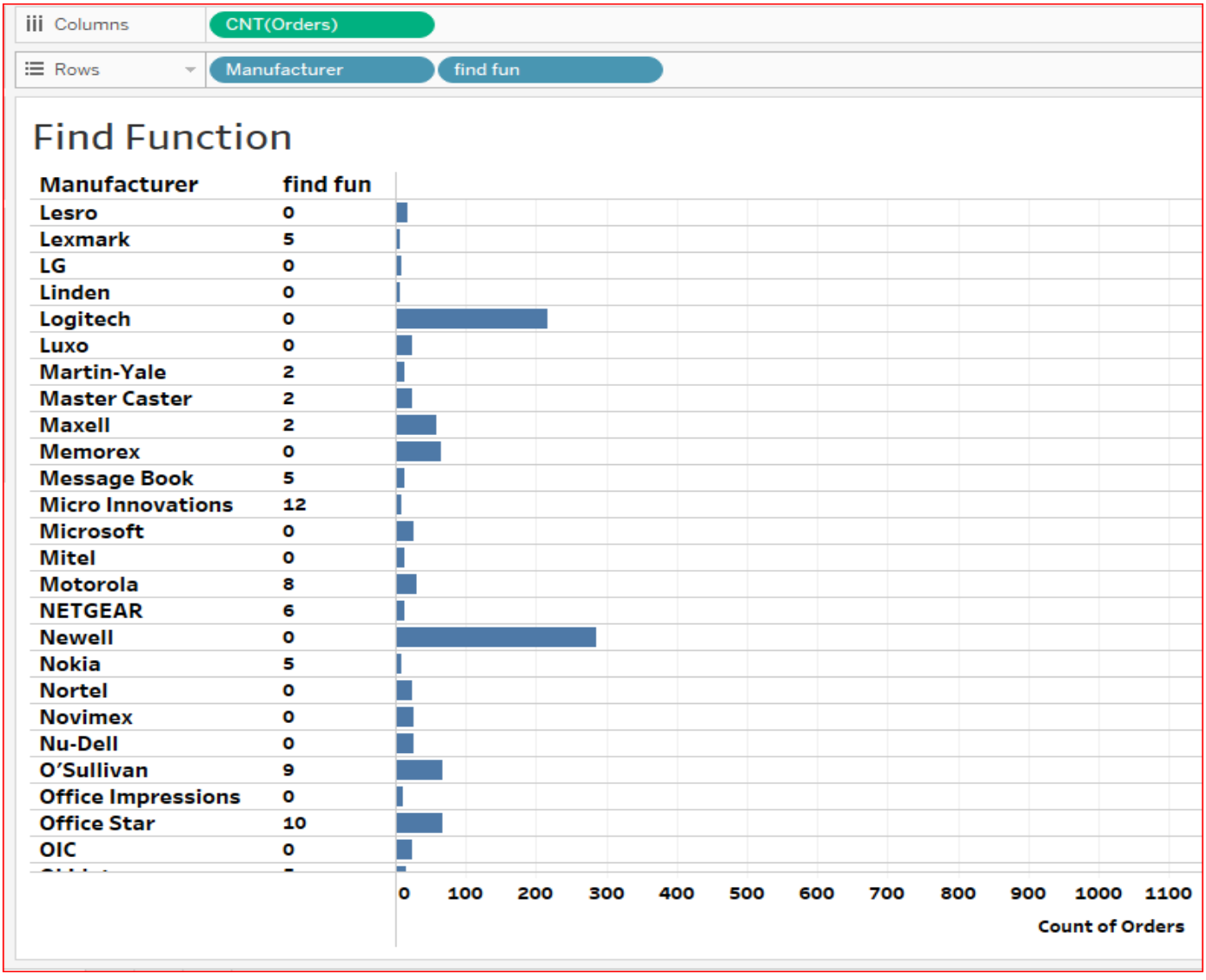

Pages
Columns
CNT(Orders)
Rows
City
Postal Code
concatenate fun
Filters
Marks
Automatic
Color
Size
Label
Detail
Tooltip
CNT(Orders)
Concatenate Fun
City
Postal Code
concatenate fun
Aberdeen 57401 Aberdeen 57401 1
Abilene 79605 Abilene 79605 1
Akron 44312 Akron 44312 21
Albuquerque 87105 Albuquerque 87105 14
Alexandria 22304 Alexandria 22304 16
Allen 75002 Allen 75002 4
Allentown 18103 Allentown 18103 7
Altoona 16602 Altoona 16602 2
Amarillo 79109 Amarillo 79109 10
Anaheim 92804 Anaheim 92804 27
Andover 01810 Andover 01810 4
Ann Arbor 48104 Ann Arbor 48104 5
Antioch 94509 Antioch 94509 1
Apopka 32712 Apopka 32712 7
Apple Valley 55124 Apple Valley 55124 2
92307 Apple Valley 92307 7
Appleton 54915 Appleton 54915 2
Arlington 22204 Arlington 22204 32
76017 Arlington 76017 28
Arlington Heights 60004 Arlington Heights 60004 1
Arvada 80004 Arvada 80004 4
Asheville 28806 Asheville 28806 7
Athens 30605 Athens 30605 8
Atlanta 30318 Atlanta 30318 39
Atlantic City 08401 Atlantic City 08401 1
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280
Count of Orders


left fun
LEFT([City],3)
The calculation is valid.
1 Dependency
Apply
OK

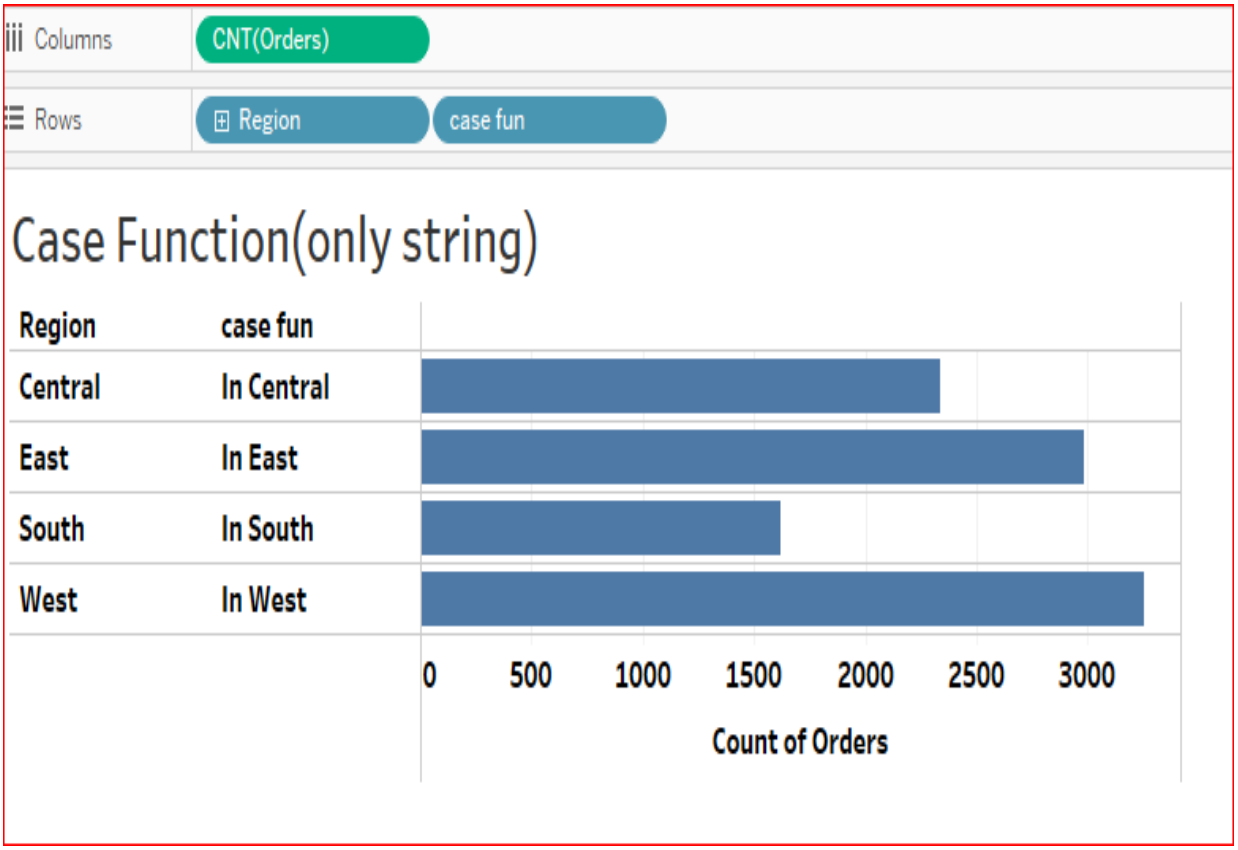

Columns
CNT(Orders)
Rows
City
left fun
Left Function
City
left fun
Aberdeen Abe
Abilene Abi
Akron Akr
Albuquerque Alb
Alexandria Ale
Allen All
Allentown All
Altoona Alt
Amarillo Ama
Anaheim Ana
Andover And
Ann Arbor Ann
Antioch Ant
Apopka Apo
Apple Valley App
Appleton App
Arlington Arl
Arlington Heights Arl
Arvada Arv
Asheville Ash
Athens Ath
Atlanta Atl
Atlantic City Atl
Auburn Aub
Aurora Aur
0 50 100 150 200 250 300 350 400 450 500 550 600
Count of Orders

Calculation find fun	Group Manufacturer
5	Message Book
0	GBC
1	Avery
2	SAFCO
1	Avery
5	Global
0	Rogers
0	Dixon
0	Ibico
1	Alliance
0	Southworth
0	Xerox
0	Other
0	GE
4	Howard Miller
1	Acco
0	Newell





3. **Tableau has a few logical methods to make dealing with strings possible. With the help of a dataset of your own choice, illustrate the use of the logic functions- CASE() and IF ELSE(). Mention your inferences from the illustration.**



Pages

Columns

Rows | Sub-Category | If Else fun

Filters

Marks

Automatic

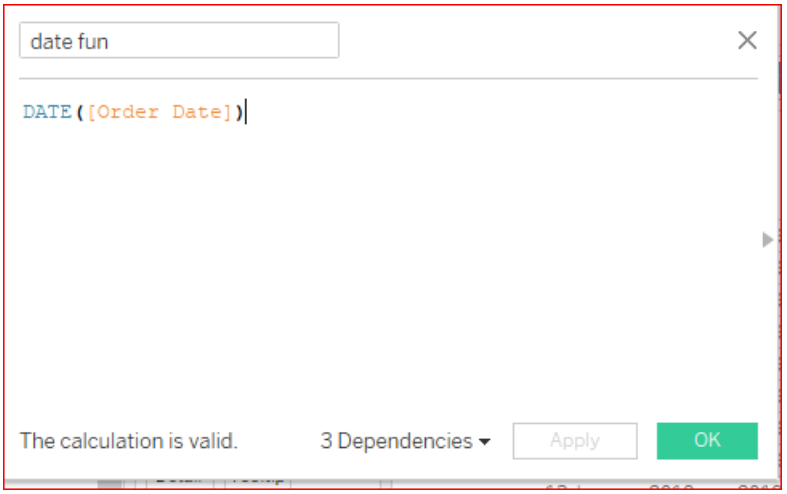
Color | Size | Text | Detail | Tooltip

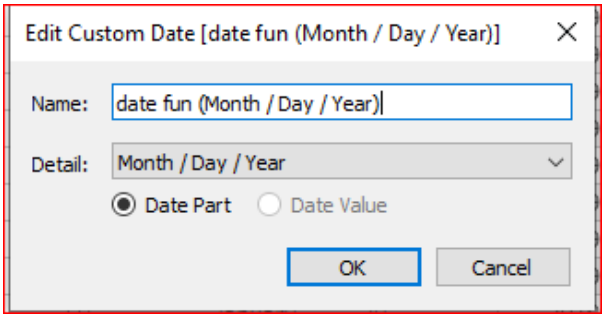
SUM(Profit)

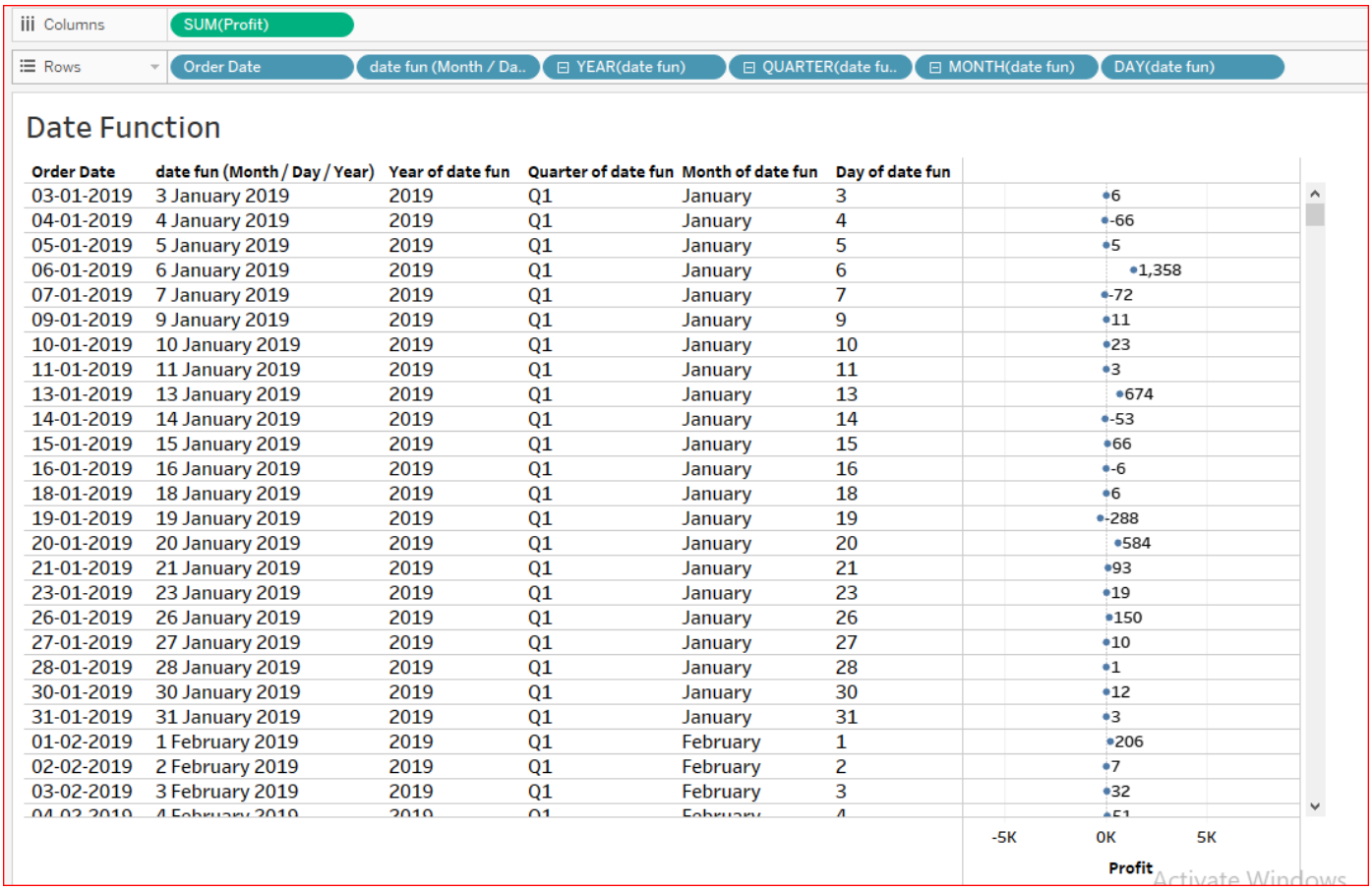
If Else Function

Sub-Category	If Else fun	
Accessories	Breakeven	0
	Loss	-931
	Profitable	42,867
Appliances	Loss	-8,630
	Profitable	26,959
Art	Loss	-24
	Profitable	6,677
Binders	Loss	-38,563
	Profitable	69,990
Bookcases	Breakeven	0
	Loss	-12,350
	Profitable	8,718
Chairs	Breakeven	0
	Loss	-10,135
	Profitable	37,359
Copiers	Profitable	56,094
Envelopes	Profitable	6,988
Fasteners	Breakeven	0
	Loss	-33
	Profitable	2,462
Furnishings	Breakeven	0
	Loss	-6,687
	Profitable	20,578
Labels	Loss	-31
	Profitable	5,604
Machines	Loss	-30,119
	Profitable	33,581

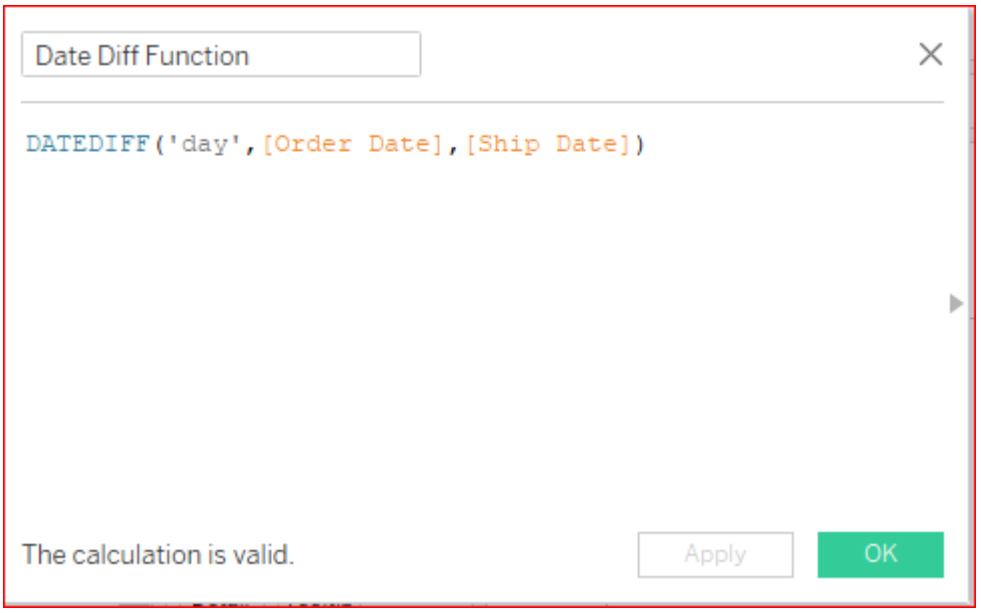
4. **Tableau has a few date methods to make dealing with dates possible. With the help of a dataset of your own choice, illustrate the use of the date functions- DATEDIFF() and DATE(). Mention your inferences from the illustration.**







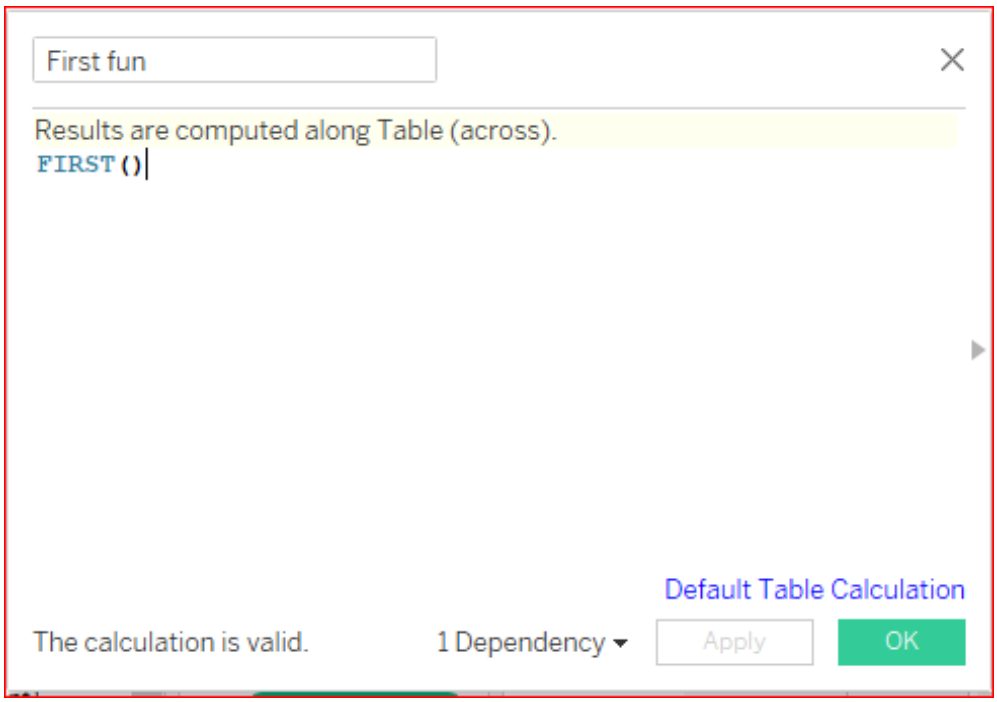
Order Date	date fun (Month / Day / Year)	Year of date fun	Quarter of date fun	Month of date fun	Day of date fun
03-01-2019	3 January 2019	2019	Q1	January	3
04-01-2019	4 January 2019	2019	Q1	January	4
05-01-2019	5 January 2019	2019	Q1	January	5
06-01-2019	6 January 2019	2019	Q1	January	6
07-01-2019	7 January 2019	2019	Q1	January	7
09-01-2019	9 January 2019	2019	Q1	January	9
10-01-2019	10 January 2019	2019	Q1	January	10
11-01-2019	11 January 2019	2019	Q1	January	11
13-01-2019	13 January 2019	2019	Q1	January	13
14-01-2019	14 January 2019	2019	Q1	January	14
15-01-2019	15 January 2019	2019	Q1	January	15
16-01-2019	16 January 2019	2019	Q1	January	16
18-01-2019	18 January 2019	2019	Q1	January	18
19-01-2019	19 January 2019	2019	Q1	January	19
20-01-2019	20 January 2019	2019	Q1	January	20
21-01-2019	21 January 2019	2019	Q1	January	21
23-01-2019	23 January 2019	2019	Q1	January	23
26-01-2019	26 January 2019	2019	Q1	January	26
27-01-2019	27 January 2019	2019	Q1	January	27
28-01-2019	28 January 2019	2019	Q1	January	28
30-01-2019	30 January 2019	2019	Q1	January	30
31-01-2019	31 January 2019	2019	Q1	January	31
01-02-2019	1 February 2019	2019	Q1	February	1
02-02-2019	2 February 2019	2019	Q1	February	2
03-02-2019	3 February 2019	2019	Q1	February	3
04-02-2019	4 February 2019	2019	Q1	February	4

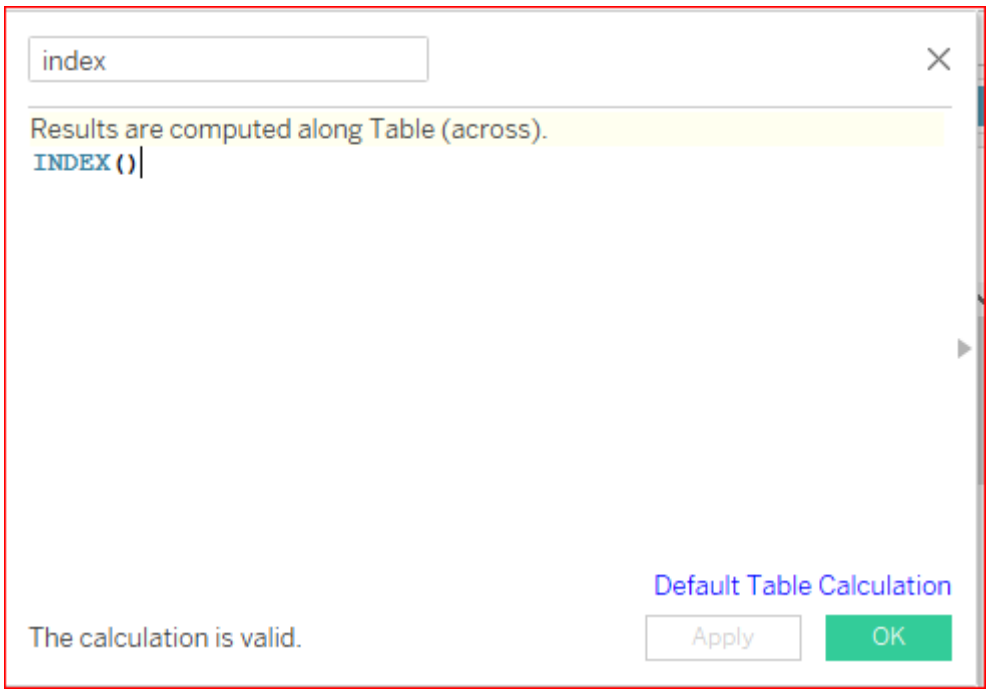


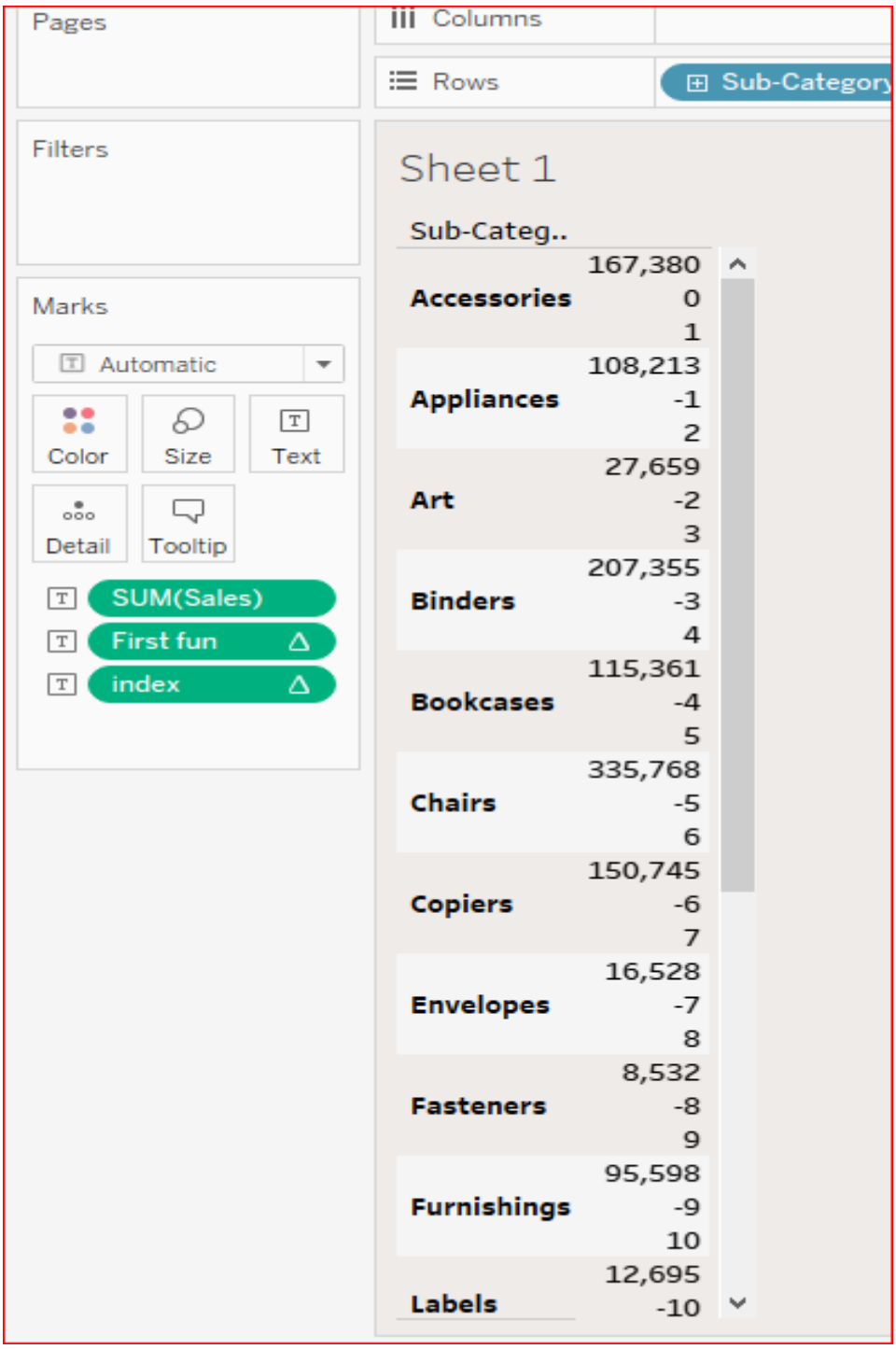
Orders Order Date	Orders Ship Date
03-01-2019	07-01-2019
04-01-2019	08-01-2019
04-01-2019	08-01-2019
04-01-2019	08-01-2019
05-01-2019	12-01-2019
06-01-2019	10-01-2019
06-01-2019	10-01-2019
06-01-2019	07-01-2019
06-01-2019	10-01-2019
06-01-2019	10-01-2019
06-01-2019	10-01-2019
06-01-2019	08-01-2019
06-01-2019	10-01-2019
06-01-2019	10-01-2019
07-01-2019	12-01-2019
07-01-2019	12-01-2019
09-01-2019	13-01-2019
09-01-2019	13-01-2019

Calculation Date Diff Function
4
4
4
4
7
4
4
1
4
4
4
2
4
4
5
5
4
4

5. **Calculations that are performed on a whole table are called table calculations. Table computations basically involve applying some sort of aggregation level to values that are returned from the database. With the help of a dataset of your own choice, illustrate the use of the table calculations- First() and Index(). Mention your inferences from the illustration**.






Pages
Columns
Rows
Sub-Category
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
SUM(Sales)
First fun
index
Sheet 1
Sub-Categ..
Accessories
Appliances
Art
Binders
Bookcases
Chairs
Copiers
Envelopes
Fasteners
Furnishings
Labels
167,380
0
1
108,213
-1
2
27,659
-2
3
207,355
-3
4
115,361
-4
5
335,768
-5
6
150,745
-6
7
16,528
-7
8
8,532
-8
9
95,598
-9
10
12,695
-10