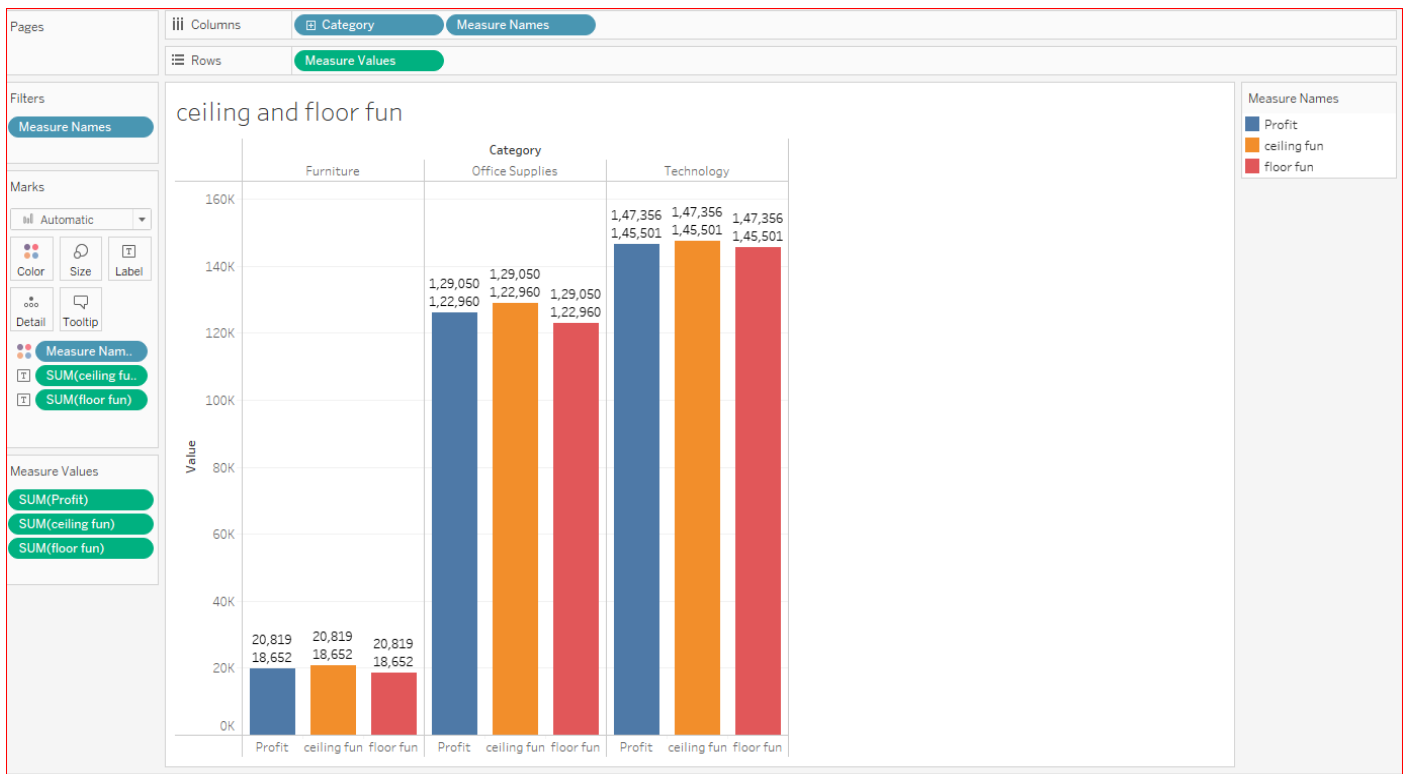


Tableau- Assignment 8

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

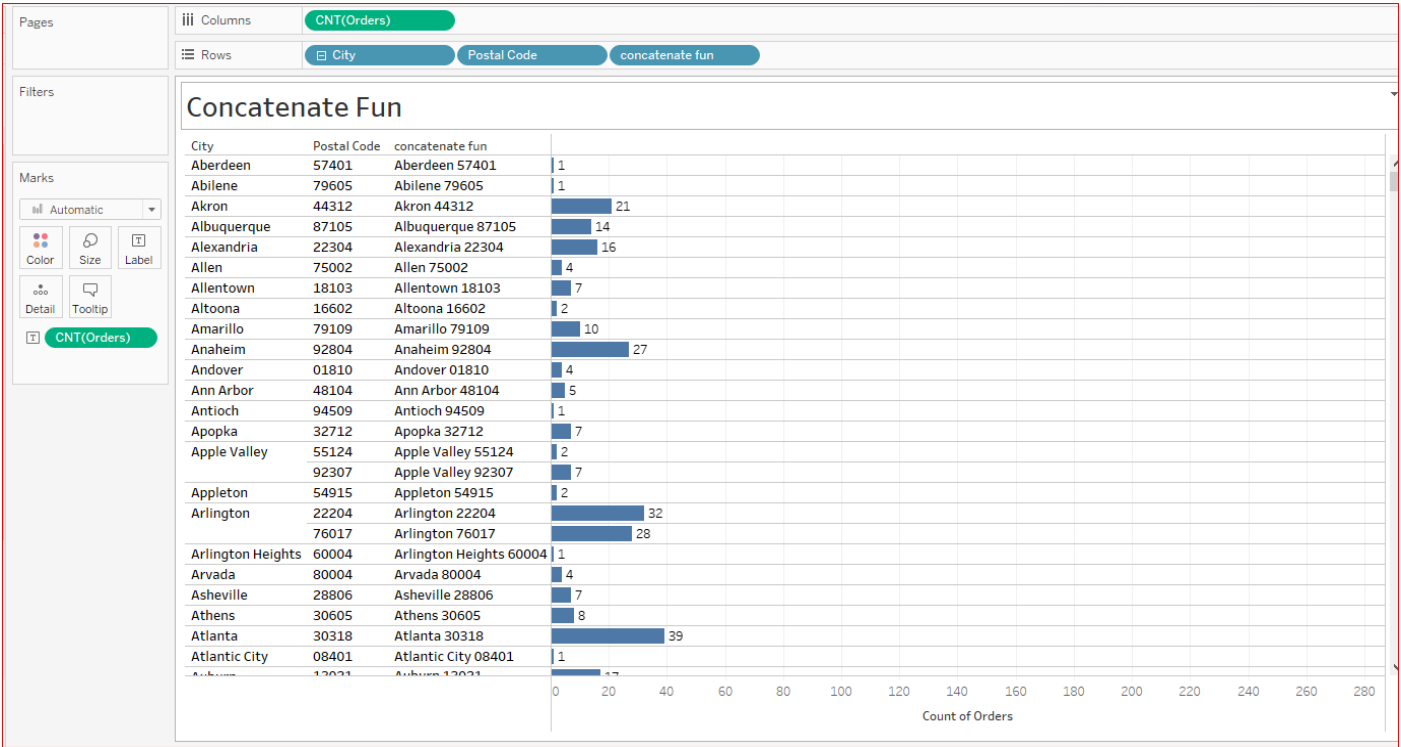


2. Tableau has a few string methods to make dealing with strings possible. With the help of a dataset of your own choice, illustrate the use of the string functions- concatenation, left() and Find(). Mention your inferences from the illustration.

✕

```
[City] + " " + [Postal Code]
```

The calculation is valid.
1 Dependency ▾
Apply
OK

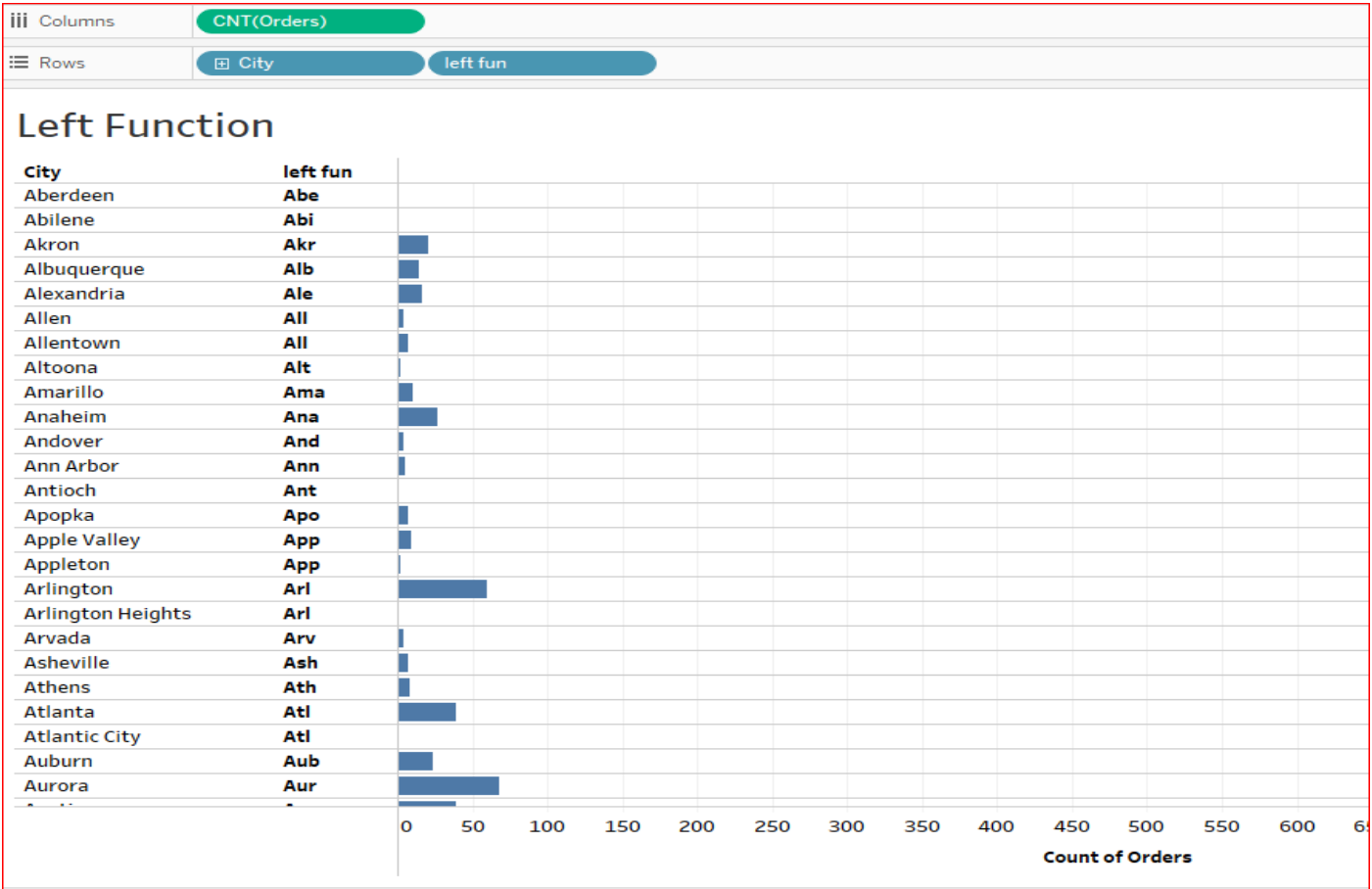


left fun

```
LEFT ([City], 3)
```

The calculation is valid. 1 Dependency

Apply OK

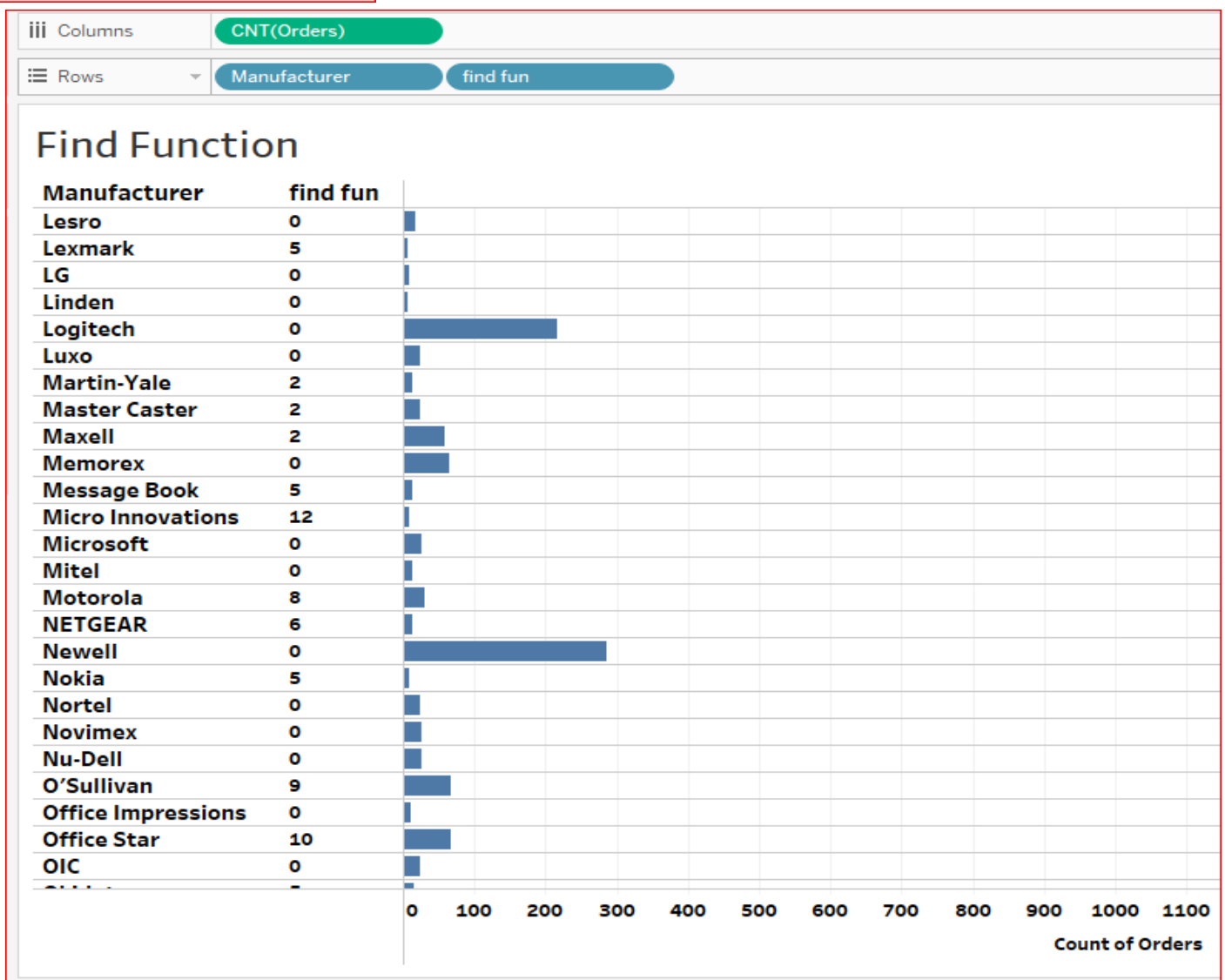


Calculation	Group
find fun	Manufacturer
5	Message Book
0	GBC
1	Avery
2	SAFCO
1	Avery
5	Global
0	Rogers
0	Dixon
0	Ibico
1	Alliance
0	Southworth
0	Xerox
0	Other
0	GE
4	Howard Miller
1	Acco
0	Newell

×

```
FIND([Manufacturer], 'a')
```

The calculation is valid.



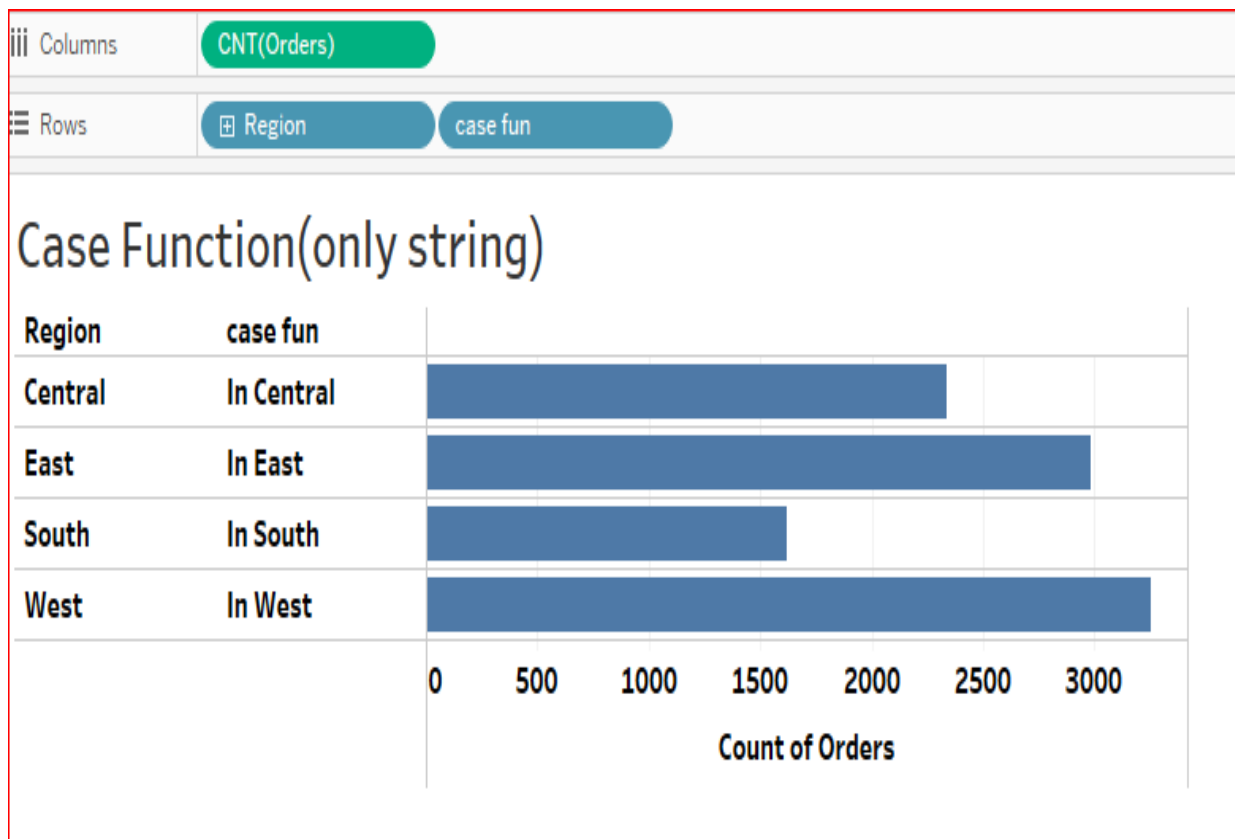
3. Tableau has a few logical methods to make dealing with strings possible. With the help of a dataset of your own choice, illustrate the use of the logic functions- CASE() and IF ELSE(). Mention your inferences from the illustration.

```
CASE [Region]
WHEN "Central" THEN "In Central"
WHEN "East" THEN "In East"
WHEN "West" THEN "In West"
WHEN "South" THEN "In South"
END
```

The calculation is valid.

Apply

OK



If Else fun

×

```
IF [Profit] > 0 THEN 'Profitable'
ELSEIF [Profit] = 0 THEN 'Breakeven'
ELSE 'Loss'
END
```

The calculation is valid.

Apply

OK

Pages

Columns

Rows

Sub-Category

If Else fun

Filters

Marks

Automatic

Color

Size

Text

Detail

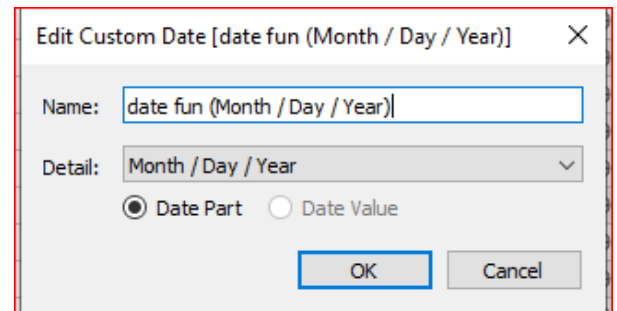
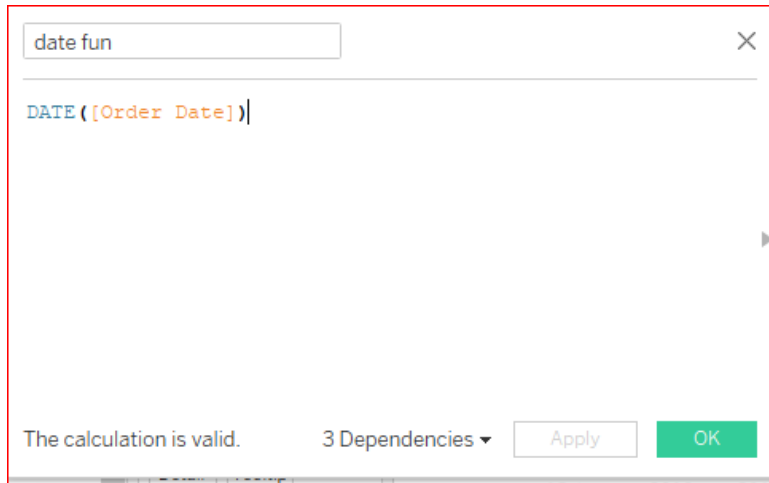
Tooltip

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.



Columns						
SUM(Profit)						
Rows						
Order Date						
date fun (Month / Day / Year)						
YEAR(date fun)						
QUARTER(date fun)						
MONTH(date fun)						
DAY(date fun)						
Date Function						
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	6
04-01-2019	4 January 2019	2019	Q1	January	4	-66
05-01-2019	5 January 2019	2019	Q1	January	5	5
06-01-2019	6 January 2019	2019	Q1	January	6	1,358
07-01-2019	7 January 2019	2019	Q1	January	7	-72
09-01-2019	9 January 2019	2019	Q1	January	9	11
10-01-2019	10 January 2019	2019	Q1	January	10	23
11-01-2019	11 January 2019	2019	Q1	January	11	3
13-01-2019	13 January 2019	2019	Q1	January	13	674
14-01-2019	14 January 2019	2019	Q1	January	14	-53
15-01-2019	15 January 2019	2019	Q1	January	15	66
16-01-2019	16 January 2019	2019	Q1	January	16	-6
18-01-2019	18 January 2019	2019	Q1	January	18	6
19-01-2019	19 January 2019	2019	Q1	January	19	-288
20-01-2019	20 January 2019	2019	Q1	January	20	584
21-01-2019	21 January 2019	2019	Q1	January	21	93
23-01-2019	23 January 2019	2019	Q1	January	23	19
26-01-2019	26 January 2019	2019	Q1	January	26	150
27-01-2019	27 January 2019	2019	Q1	January	27	10
28-01-2019	28 January 2019	2019	Q1	January	28	1
30-01-2019	30 January 2019	2019	Q1	January	30	12
31-01-2019	31 January 2019	2019	Q1	January	31	3
01-02-2019	1 February 2019	2019	Q1	February	1	206
02-02-2019	2 February 2019	2019	Q1	February	2	7
03-02-2019	3 February 2019	2019	Q1	February	3	32
04-02-2019	4 February 2019	2019	Q1	February	4	51
						-5K 0K 5K
						Profit

Date Diff Function

×

DATEDIFF('day',[Order Date],[Ship Date])

The calculation is valid.

Apply

OK

Orders	Orders
Order Date	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.**

