

Smartinternz Externship

Data Analytics with IBM Cognos Analytics



TITLE: BASIC CALCULATIONS AND LOD EXPRESSIONS

Assignment 4

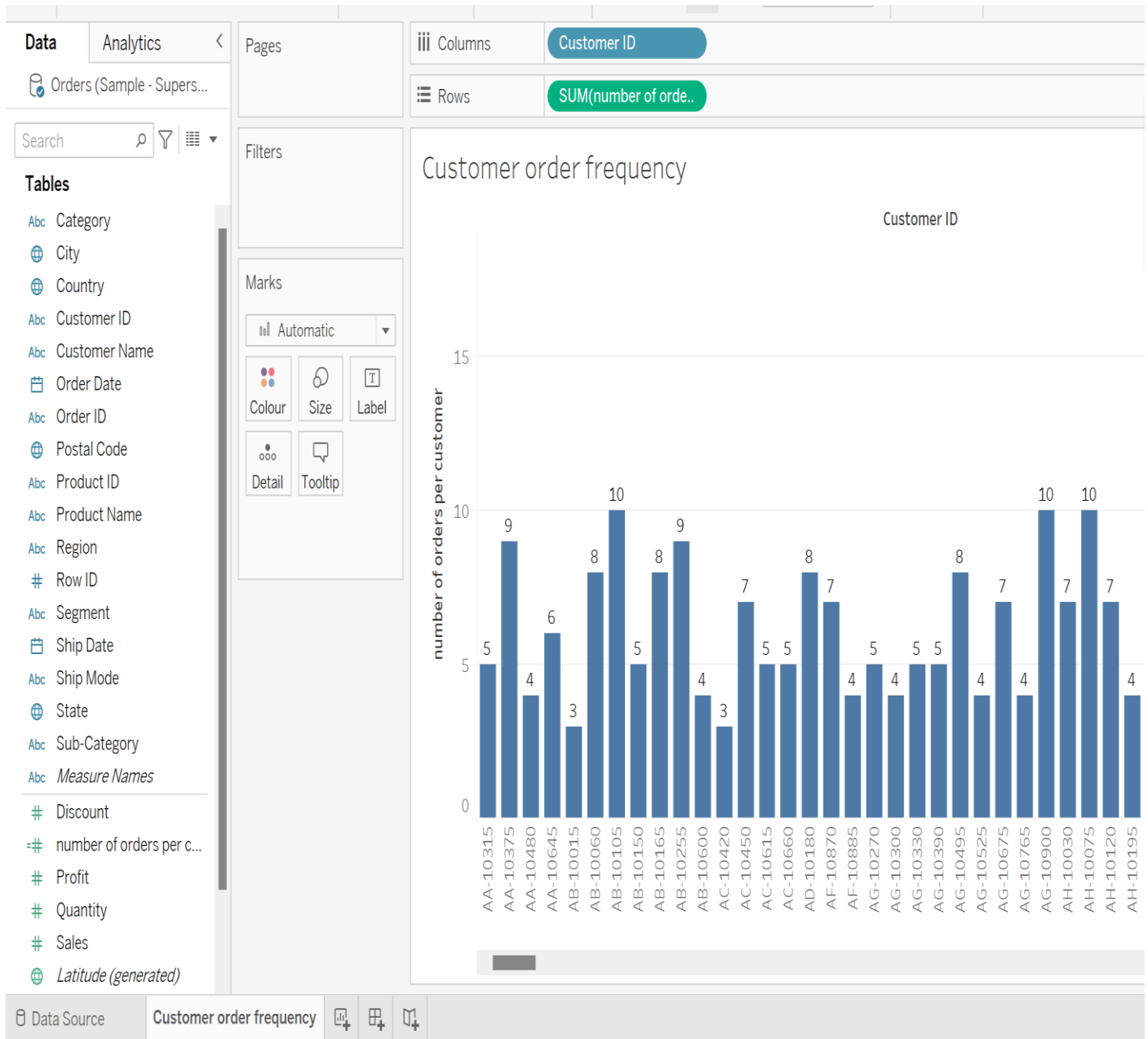
Name: Shreya Shamej

Email ID : shreya.21bce8432@vitapstudent.ac.in

Registration Number : 21BCE8432

1. Customer order frequency

Consider the sales database of a superstore that has multiple items per order. The distinct count of orders by customer gives the number of orders each customer made. A simple LOD expression can turn the number of orders into a dimension that breaks out the number of customers.



Calculation used for the attribute: number of orders per customer.

Pages

Filters

Marks

Automatic

Colour

Size

Label

Detail

Tooltip

number of orders per customers

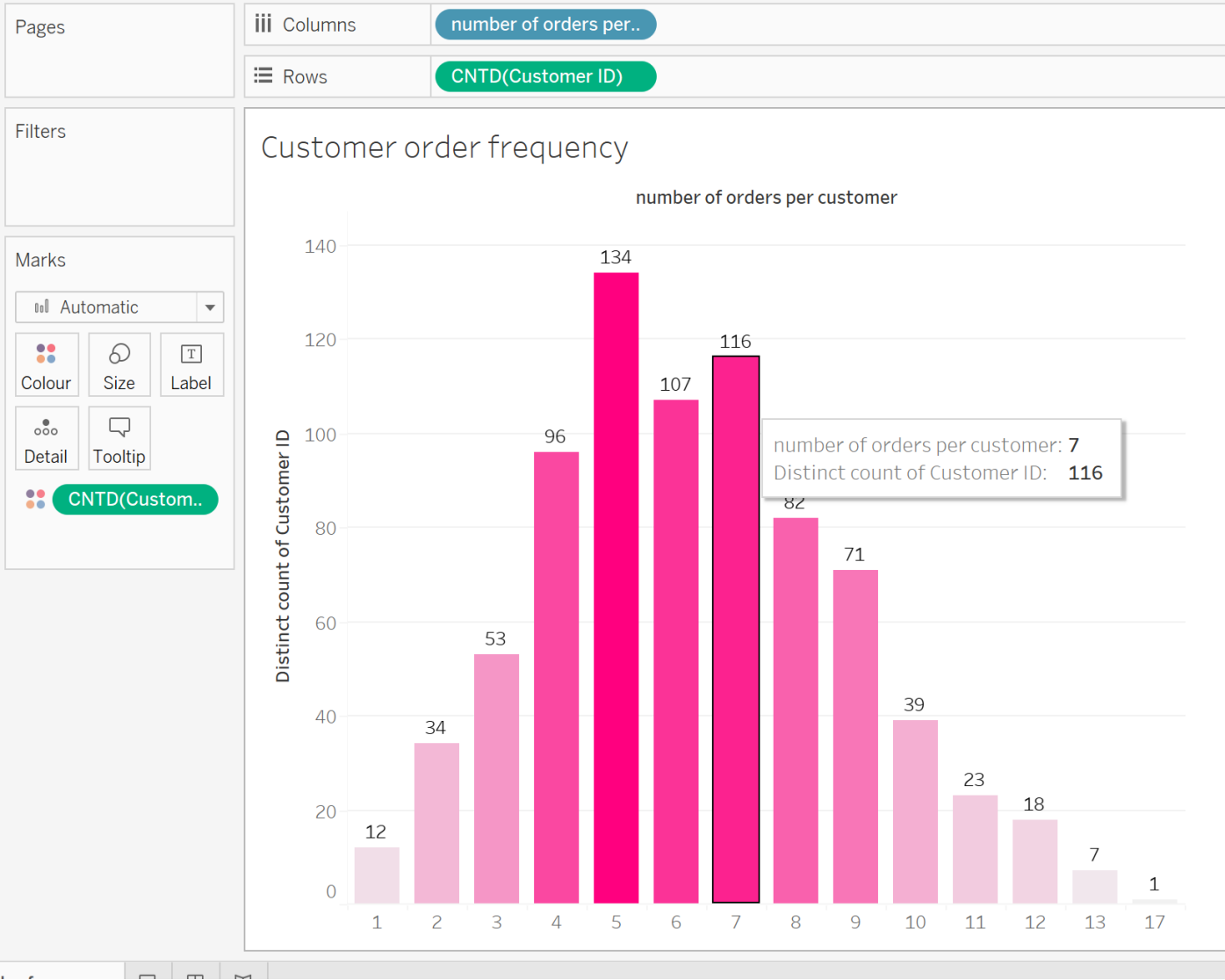
{ FIXED [Customer ID] : COUNTD([Order ID]) }

The calculation is valid.

Apply

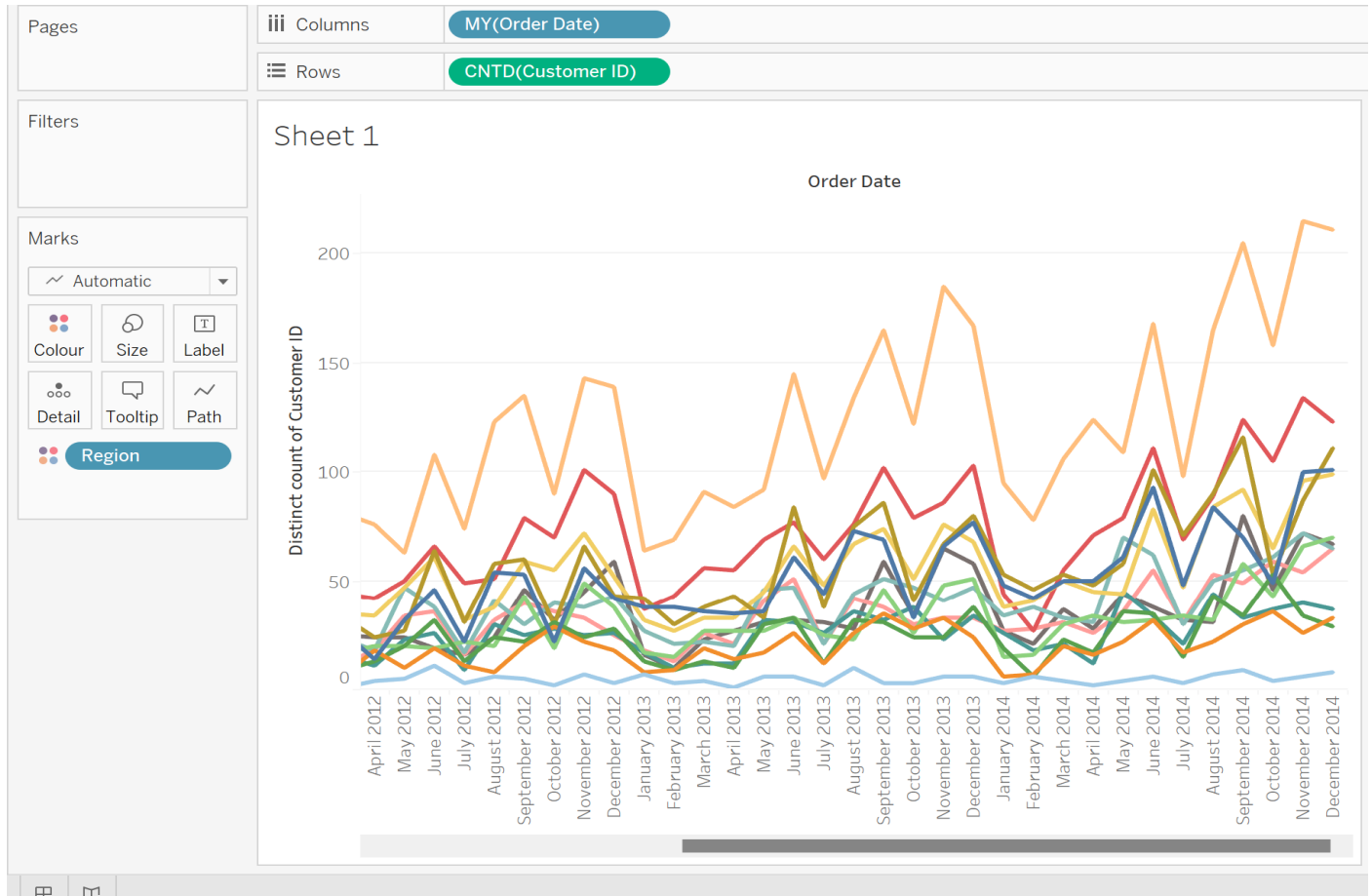
OK

Final LOD expression visualization



2.Cohort analysis

The view below groups customers by the year of their first purchase to compare sales contributions annually across cohorts. The minimum order date per customer will give the first purchase date. However, since the data in the view is not displayed by customer.



Calculation for first order date.

rd Story Analysis Map Format Server Window Help

Standard

Pages Columns Rows

MY(Order Date)

CNTD(Customer ID)

Filters

Marks

Automat

Colour Size

Detail Tool

Region

first order date

```
{FIXED [Customer ID] : MIN([Order Date]) }
```

The calculation is valid.

Apply OK

Columns

Rows

Customer IDMDY(Order Date)MDY(first order date)

Sheet 2

Customer IDDay, Month, Year o..Day, Month, Year o..

New or Existing

IIF([first order date] = [Order Date], 'New', 'Existing')

The calculation is valid.

Apply

OK

AA-480	21 June 2011	21 June 2011	Abc
	7 June 2012	21 June 2011	Abc
	8 August 2012	21 June 2011	Abc
	30 September 2013	21 June 2011	Abc
	20 February 2014	21 June 2011	Abc
AA-645	22 April 2011	22 April 2011	Abc
	5 December 2011	22 April 2011	Abc
	9 June 2012	22 April 2011	Abc
	13 September 2012	22 April 2011	Abc

Pages

Columns

Rows

Customer IDMDY(Order Date)MDY(first order date)

Sheet 2

Customer IDDay, Month, Year o..Day, Month, Year o..

AA-315	8 June 2011	8 June 2011	New
	8 August 2013	8 June 2011	Existing
	27 August 2013	8 June 2011	Existing
	19 September 2013	8 June 2011	Existing
	5 June 2014	8 June 2011	Existing
	31 July 2014	8 June 2011	Existing
	29 December 2014	8 June 2011	Existing
AA-375	1 June 2011	1 June 2011	New
	2 September 2011	1 June 2011	Existing
	6 January 2012	1 June 2011	Existing
	16 April 2012	1 June 2011	Existing
	14 June 2012	1 June 2011	Existing
	27 September 2012	1 June 2011	Existing
	7 March 2014	1 June 2011	Existing
AA-480	22 April 2014	1 June 2011	Existing
	21 June 2011	21 June 2011	New
	7 June 2012	21 June 2011	Existing
	8 August 2012	21 June 2011	Existing
	30 September 2013	21 June 2011	Existing
AA-645	20 February 2014	21 June 2011	Existing
	22 April 2011	22 April 2011	New
	5 December 2011	22 April 2011	Existing
	9 June 2012	22 April 2011	Existing
	13 September 2012	22 April 2011	Existing

Marks

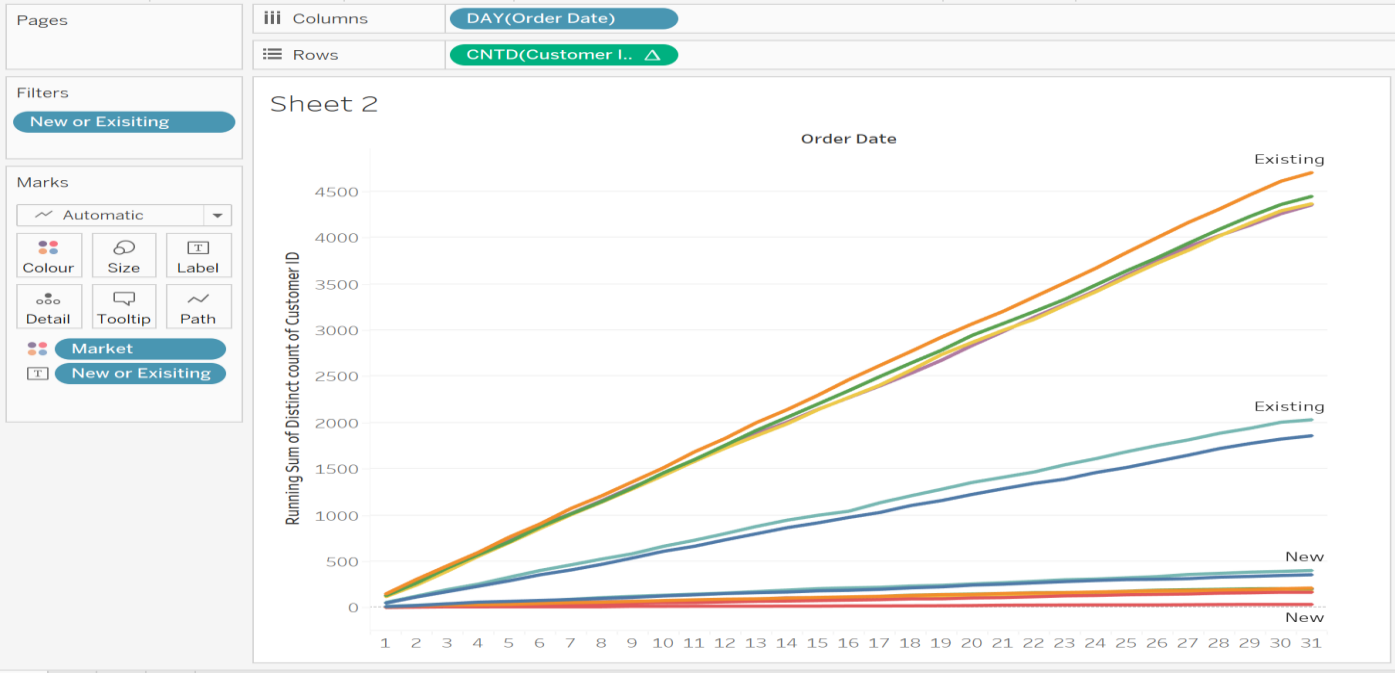
Automatic

ColourSizeText

DetailTooltip

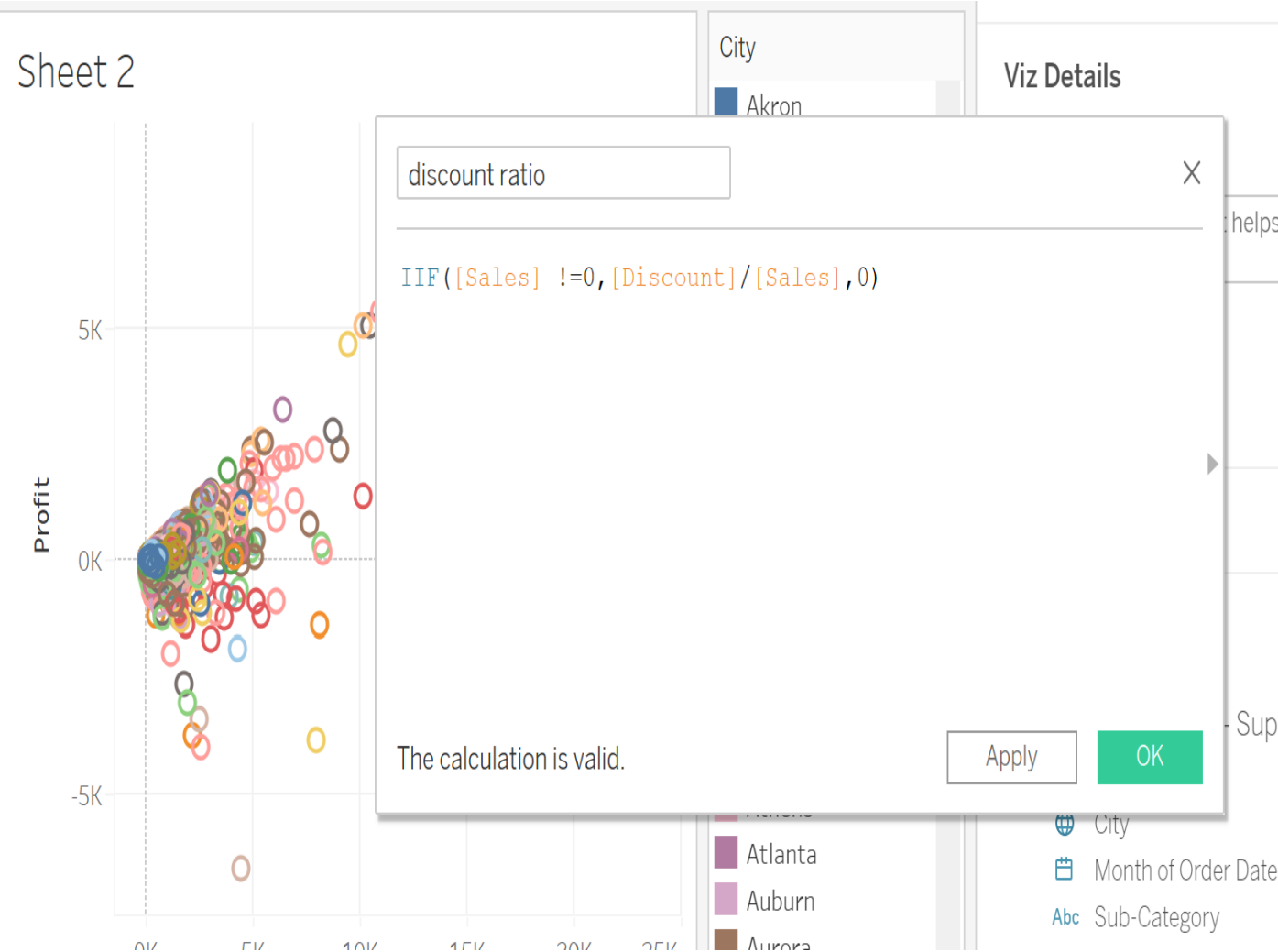
New or Existing

Final Visualization



3.Profit Analysis

Calculation to find Discount ratio



Pages

Columns

Product Name

Rows

SUM(discount ratio)

Filters

Product Name

Marks

Automatic

Colour Size Label

Detail Tooltip

