Smart Interz Data Analyst with IBM Cognos

Assignment 4

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Question: - Make 5 out of the following Tableau LOD Expressions given in the following link 'https://www.tableau.com/blog/LOD-expressions'.

Tableau Page after adding data: -

Visualization of Data and Screenshots of it: -

(i) Daily profit KPI:

Profit Per Day   ✕

```
{ FIXED [Order Date] : SUM([Profit])}
```

The calculation is valid.   1 Dependency ▾   Apply   OK

Daily Profit KPI   ✕

```
IF [Profit Per Day] > 4000 THEN "Highly Profitable"
ELSEIF [Profit Per Day] <= 0 THEN "Unprofitable"
ELSE "Profitable" END
```

The calculation is valid.   Apply   OK
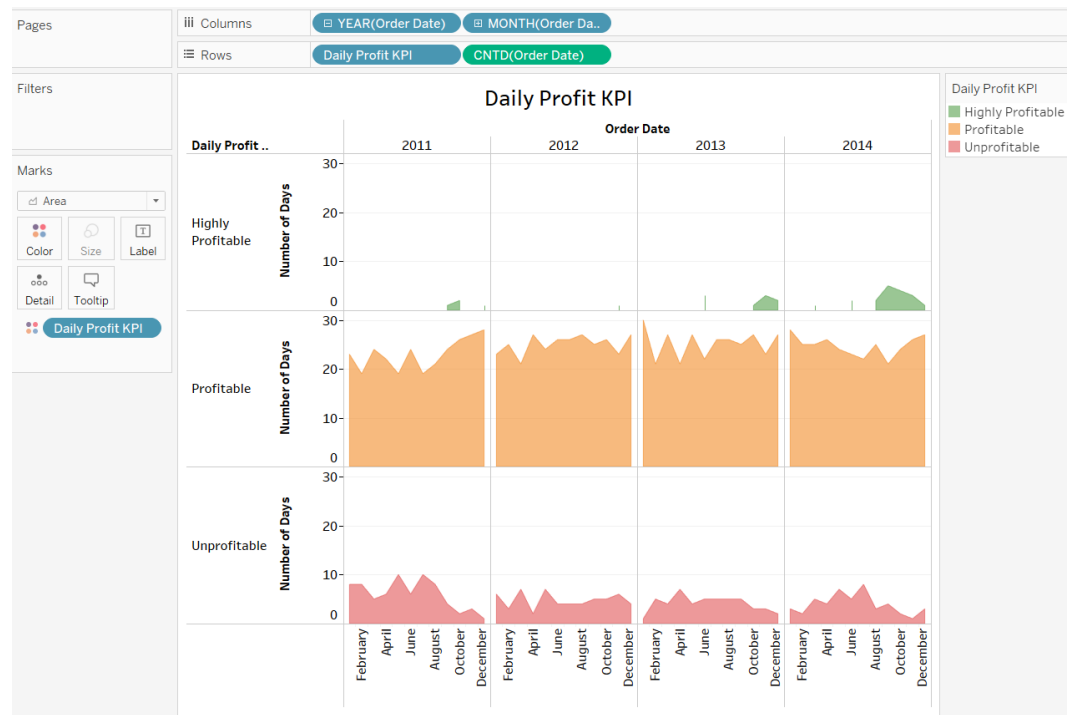
(ii) Percent of total sales using maps: -

Percent of Total Sales   ×

SUM([Sales])/ MIN({SUM(Sales)})

The calculation is valid.   Apply   OK
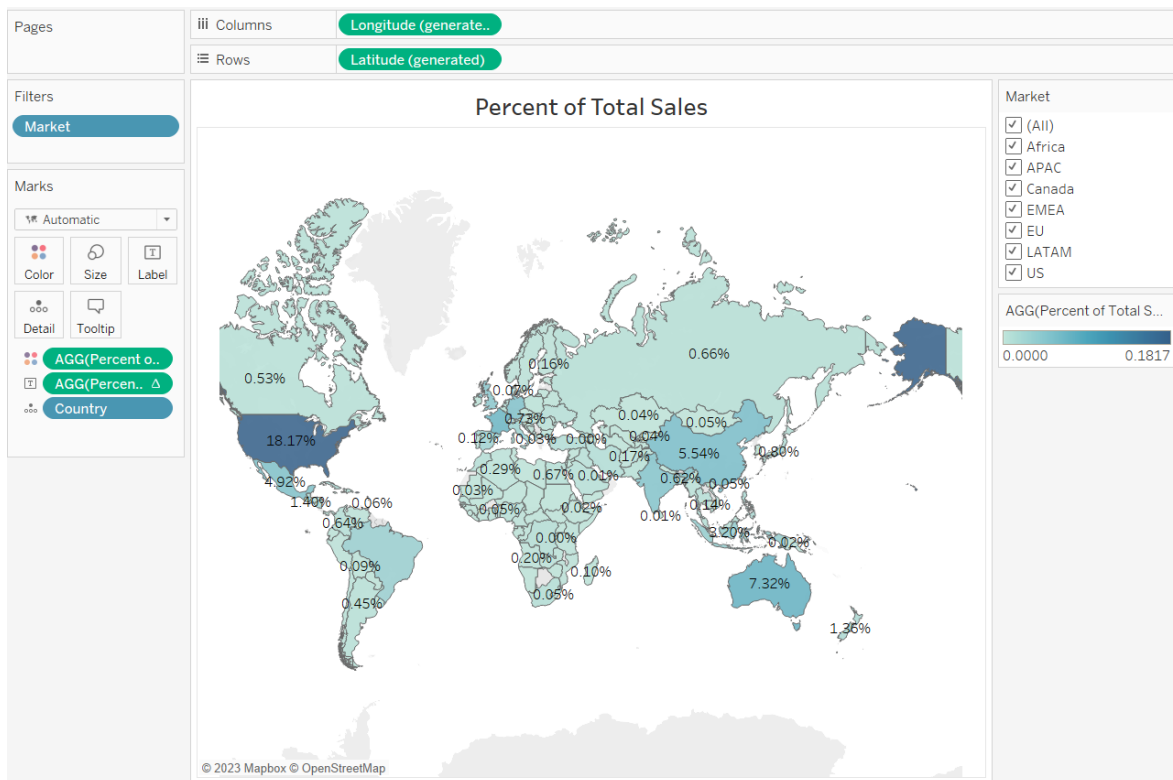
(iii) Average of Top Deals by City: -

argest Sales Deal by City   ✕

`{ INCLUDE [City] : MAX([Sales])}`

The calculation is valid.   1 Dependency ▾   Apply   OK

Conditional Formating   ✕

Results are computed along Table (across).
`MAX(Sales) > WINDOW_AVG(MAX(Sales))`

Default Table Calculation

The calculation is valid.   1 Dependency ▾   Apply   OK
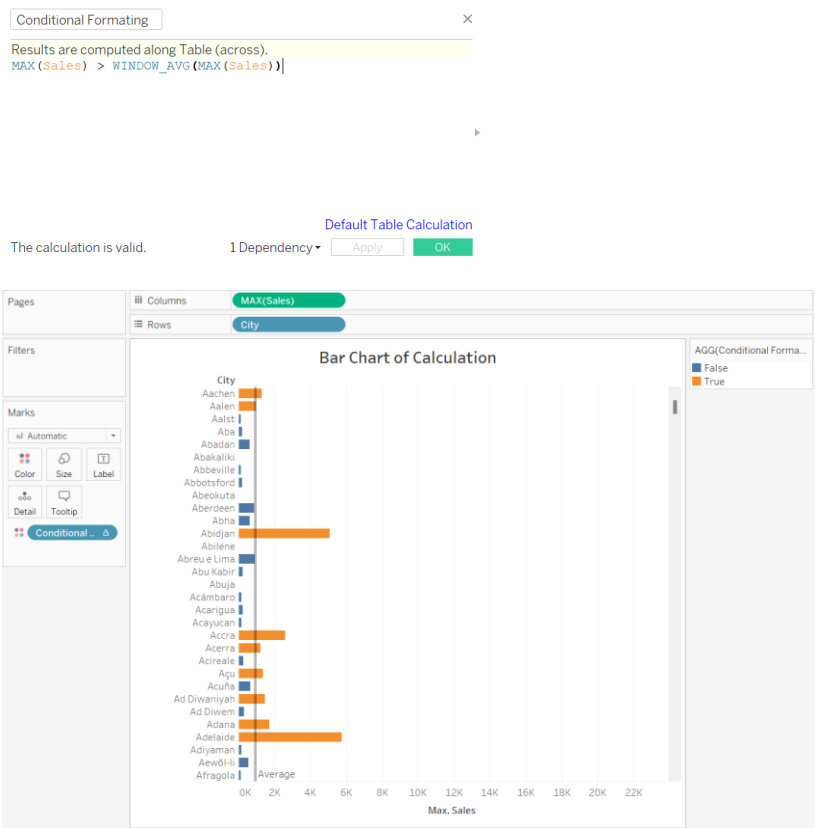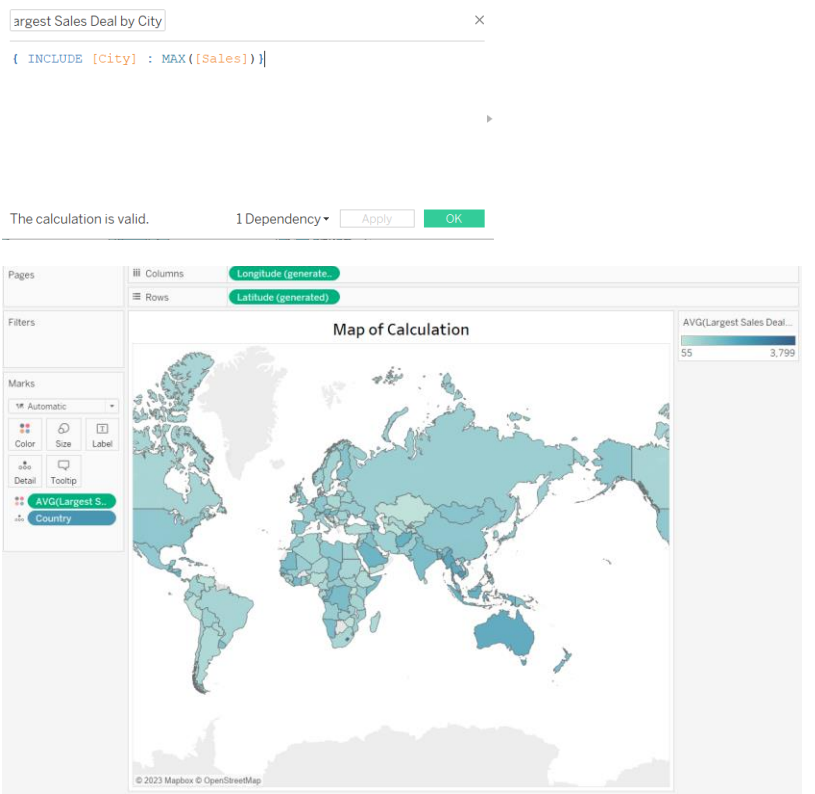
(iv) Return Purchase by Quaterly Cohort:

First Order Date ✕

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

The calculation is valid.   2 Dependencies ▾   Apply   OK

Repeat Purchase ✕

```
IIF([Order Date]>[First Order Date],[Order Date],null)
```

The calculation is valid.   Apply   OK

2nd Purchase ✕

```
{ FIXED [Customer ID] : MIN([Repeat Purchase])}
```

The calculation is valid.   Apply   OK

ırters to repeat purchase ✕

```
DATEDIFF('quarter',[First Order Date],[2nd Purchase])
```

The calculation is valid.   Apply   OK

Return Purchase by Quaterly Cohort

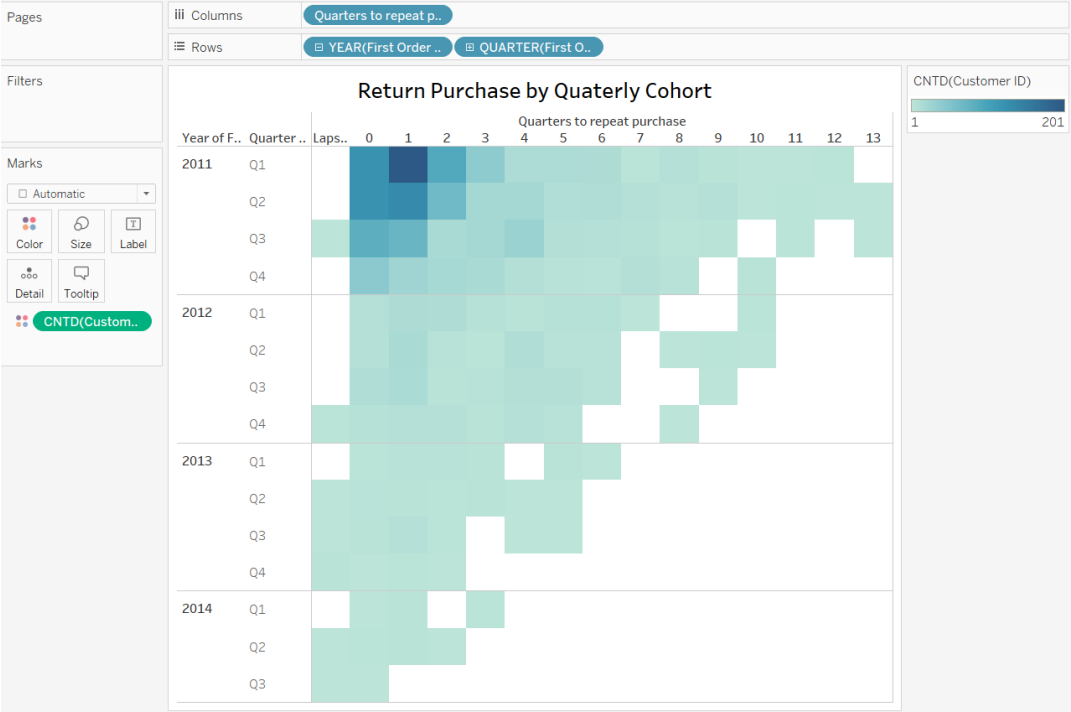| Year of F..	Quarter ..	Laps..	0	1	2	3	4	5	6	7	8	9	10	11	12	13
2011	Q1															
	Q2															
	Q3															
	Q4															
2012	Q1															
	Q2															
	Q3															
	Q4															
2013	Q1															
	Q2															
	Q3															
	Q4															
2014	Q1															
	Q2															
	Q3															

(v)Relative Period Filtering: -

Max Date

`{MAX([Order Date])}`

The calculation is valid.

Apply   OK

Table Calculation
Difference in Running Sum of Profit

Primary Calculation Type
Running Total
Sum

Compute Using
Table (across)
Cell
Specific Dimensions
☑ Year of Order Date
☑ Week of Order Date

Restarting every
Sort order   Specific Dimens...

Secondary Calculation Type
Difference From

Compute Using
Table (across)
Cell
Specific Dimensions
☑ Year of Order Date
☑ Week of Order Date

At the level   Year of Order Date
Relative to   Previous
Sort order   Specific Dimensions

☑ Add secondary calculation
☑ Show calculation assistance

Day of Year of Max Date   ✕

DATEPART('dayofyear',[Max Date])

The calculation is valid.   Apply   OK

Day of Year of Order Date   ✕

DATEPART('dayofyear',[Order Date])

The calculation is valid.   Apply   OK

Period Filter   ✕
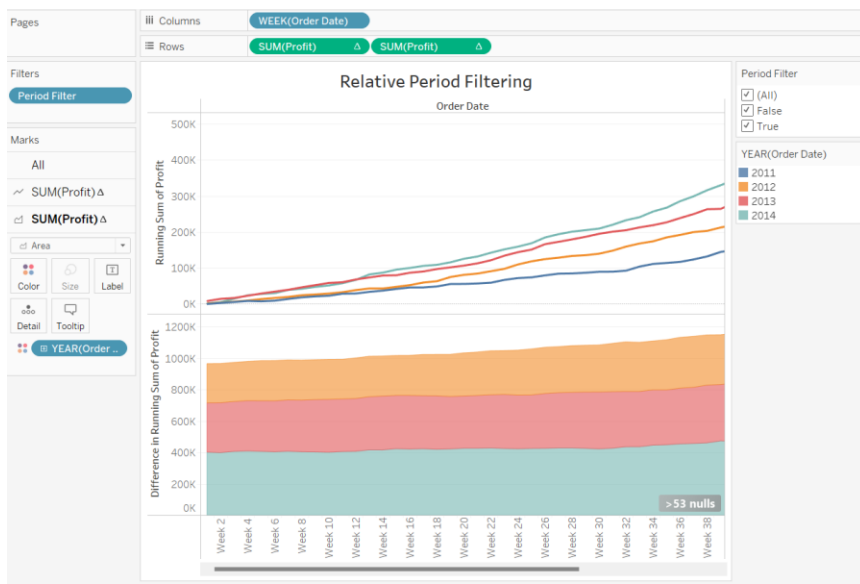
[Day of Year of Order Date] <= [Day of Year of Max Date]

The calculation is valid.   Apply   OK

(vi) Annual Purchase Frequency by Customer Cohort: -

Cohort   ✕

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

The calculation is valid.   [Apply]   [OK]

---

se per year per customer   ✕

```
{FIXED [Customer ID],[Order Date (Years)]:COUNTD([Order ID
```

The calculation is valid.   [Apply]   [OK]

Table Calculation   ✕
Running Sum of Distinct count of Cus...

Calculation Type

Running Total   ▾

Sum   ▾

Compute Using

Table (across)
Cell
Specific Dimensions

☑ Number of Purchase per ye...
☐ Order Date (Years)

Restarting every   ▾

Sort order   Custom Sort   ▾

☐ Add secondary
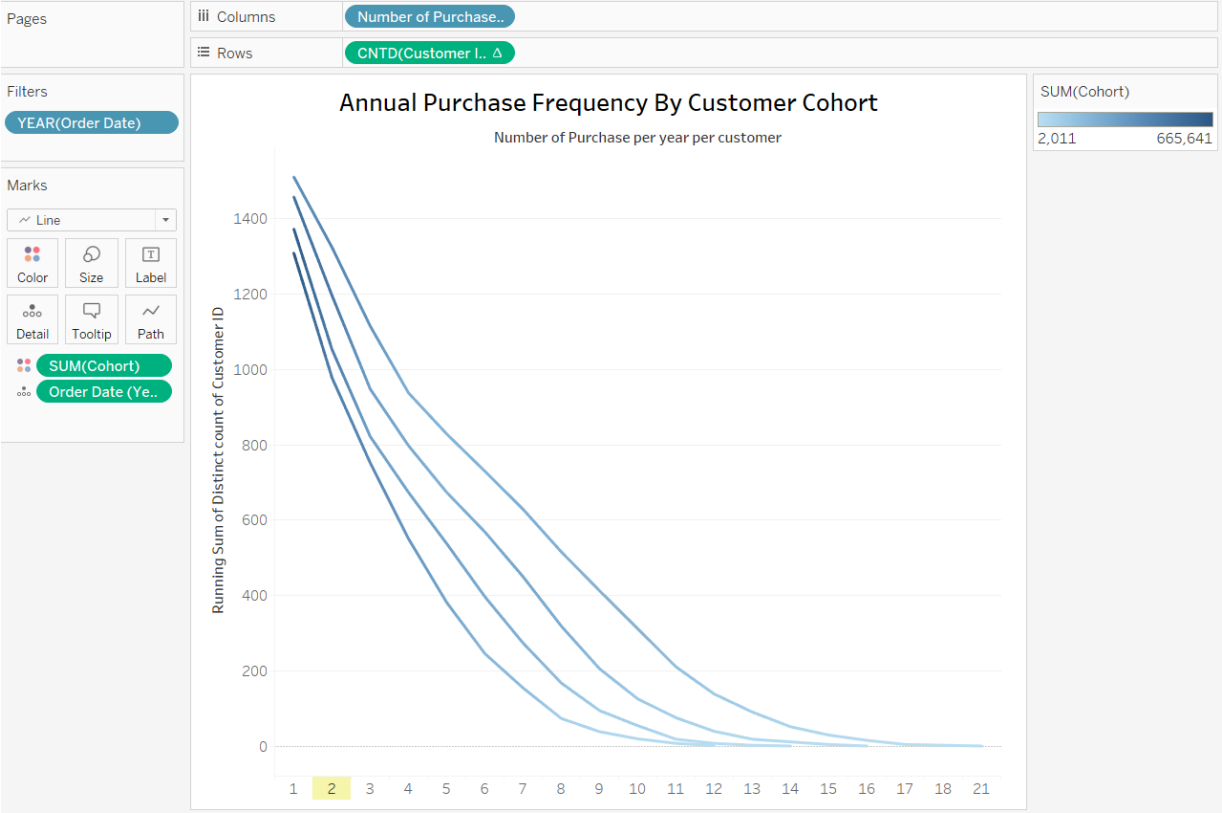☑ Show calculatio

○ Specific dimensions   ⦿ Custom

Number of Purchase per year per cu... ▾   Average

⦿ Descending   ○ Ascending

Annual Purchase Frequency By Customer Cohort