7810/4096 BI Lab3A

Exercise 1

Write MDX expression for the following queries and save the MDX codes in a MS Word file (just copy & paste the expression). Rename the file to lab3A-ans.docx. (You need to remove empty slice in all questions) [Please refer to your lab2B answers (A to H) to see if the results are the same]

//A. Total order quantity for each country

select [Measures].[Order Quantity] on 0,

non empty

([Dim Customer].[English Country Region Name].children

)

on 1

from [Adventure Works Cube]

//B. Total order quantity by country and product line

select [Measures].[Order Quantity] on 0,

non empty

([Dim Customer].[English Country Region Name].children,

[Dim Product].[Product Line].children

)

on 1

from [Adventure Works Cube]

//C. Total order quantity for each product color

select [Measures].[Order Quantity] on 0,

non empty

(

[Dim Product].[Color].children

)

on 1

from [Adventure Works Cube]

//D. Total sales amount by country and product line for married customers only

select [Measures].[Sales Amount] on 0,

non empty

(

[Dim Customer].[Country-State-City].children,

[Dim Product].[Product Line].children

)

on 1

from [Adventure Works Cube]

where

[Dim Customer].[Marital Status].&[M]

//E. Total sales amount by country by product line in 2014 only

select [Measures].[Sales Amount] on 0,

non empty

(

[Dim Customer].[Country-State-City].children,

[Dim Product].[Product Line].children

)

on 1

from [Adventure Works Cube]

where

[Dim Date].[Calendar Year].&[2014]

//F. Total sales amount by country in 2012 Quarter 2 only

select [Measures].[Sales Amount] on 0,

non empty

(

[Dim Customer].[Country-State-City].children

)

on 1

from [Adventure Works Cube]

Where

[Dim Date].[Calendar].[Calendar Year].&[2012].&[1].&[2]

//G. Compare sales amount quarter-by-quarter in each year

select

(

[Dim Date].[Calendar Year].children

)

on 1,

non empty

([Measures].[Sales Amount],

[Dim Date].[Calendar Quarter].children

) on 0

from [Adventure Works Cube]

//H. Compare sales amount for Q1 and Q2 in 2012

select

(

[Dim Date].[Calendar Year].[2012]

)

on 1,

non empty

([Measures].[Sales Amount],

[Dim Date].[Calendar Quarter].&[1]:

[Dim Date].[Calendar Quarter].&[2]

) on 0

from [Adventure Works Cube]

//I. Compare order quantities for Semester 1 and 2 in 2012, and calculate the difference using nextMember or prevMember function.

WITH

MEMBER [Order quantity 2012 Sem.1] AS

([Measures].[Order quantity], [Dim Date].[Calendar].[Calendar Year].&[2012].&[2].prevMember)

MEMBER [Order quantity 2012 Sem.2] AS

([Measures].[Order quantity], [Dim Date].[Calendar].[Calendar Year].&[2012].&[2])

MEMBER [Difference] AS ([Order quantity 2012 Sem.2]- [Order quantity 2012 Sem.1])

select { [Order quantity 2012 Sem.1], [Order quantity 2012 Sem.2],[Difference] } on 0,

{[Dim Product].[Products]} on 1

from [Adventure Works Cube]

//J. Find the top three sales year

select Measures.[Sales Amount] on 0,

TOPCOUNT

([Dim Date].[Calendar Year].children

, 3, [Measures].[Sales Amount]) on 1

from [Adventure Works Cube]

//K. Find the bottom three sales countries

select Measures.[Sales Amount] on 0,

HEAD(ORDER

([Dim Customer].[Country-State-City].children

, [Measures].[Sales Amount], asc),3)

on 1

from [Adventure Works Cube]