

Power BI - DAX - p4 - Lecture 18

ASSIGNMENT: LOGICAL FUNCTIONS

1. Create a calculated column in the Customer Lookup table named Customer Priority:

- If the customer is a parent and has an annual income > \$100,000, Customer Priority = Priority
- Otherwise, Customer Priority = Standard

```
Customer Priority =  
IF(  
    'Customer Lookup'[Is Parent?] = "Yes" && 'Customer Lookup'[AnnualIncome] > 100000,  
    "Priority",  
    "Standard")
```

2. Create a calculated column in the Customer Lookup table named Income Level:

- If annual income is >= \$150,000, Very High
- If annual income is >= \$100,000, High
- If annual income is >= \$50,000, Average
- Otherwise, Income Level = Low

```
Income Level =  
IF(  
    'Customer Lookup'[AnnualIncome] > 150000 , "Very High",  
    IF(  
        'Customer Lookup'[AnnualIncome] > 100000 , "High",  
        IF('Customer Lookup'[AnnualIncome]>50000 , "Average",  
        "Low")  
    ))
```

```
Income Level =  
SWITCH(  
    TRUE(),  
    'Customer Lookup'[AnnualIncome] > 150000 , "Very High",  
    'Customer Lookup'[AnnualIncome] > 100000 , "High",  
    'Customer Lookup'[AnnualIncome] > 50000 , "Average",  
    "Low")
```

BONUS: Use a SWITCH function* to create another column named Education Category:

- If EducationLevel is High School or Partial High School, Education Category = High School
- If EducationLevel is Bachelors or Partial College, Education Category = Undergrad
- If EducationLevel is Graduate Degree, Education Category = Graduate

- ☒ (Select all)
- ☒ Bachelors
- ☒ Graduate Degree
- ☒ High School
- ☒ Partial College
- ☒ Partial High School

- ☒ (Select all)
- ☒ Graduate
- ☒ High School
- ☒ Undergrad

Education Category =

```
SWITCH(
    'Customer Lookup'[EducationLevel],
    "High School" , "High School",
    "Partial High School" , "High School",
    "Bachelors" , "Undergrad",
    "Partial College" , "Undergrad",
    "Graduate Degree" , "Graduate")
```

TEXT FUNCTIONS

LEN

Returns the number of characters in a string

=LEN(Text)

CONCATENATE

Joins two text strings into one

=CONCATENATE(Text1, Text2)

UPPER
/LOWER

Converts a string to upper or lower case

=UPPER/LOWER (Text)

LEFT/
RIGHT/MID

Returns a number of characters from the start/middle/end of a text string

=LEFT/RIGHT(Text, [NumChars])
=MID(Text, StartPosition, NumChars)

SUBSTITUTE

Replaces an instance of existing text with new text in a string

=SUBSTITUTE(Text, OldText, NewText, [InstanceNumber])

SEARCH

Returns the position where a specified string or character is found, reading left to right

=SEARCH(FindText, WithinText, [StartPosition], [NotFoundValue])

2

"-1"

Month Short (DAX)

Sort ascending
Sort descending
Clear sort
Clear filter
Clear all filters
Text filters

Search

☒ (Select all)
☒ Apr
☒ Aug
☒ Dec
☒ Feb
☒ Jan
☒ Jul
☒ Jun
☒ Mar
☒ May
☒ Nov
☒ Oct
☒ Sep

OK Cancel

Month Short (DAX) =
LEFT(
'Calendar Lookup'[Month Name] ,
3)

Customer Full Name =
'Customer Lookup'[Prefix] & " " & 'Customer Lookup'[FirstName] & " " & 'Customer Lookup'[LastName]

ASSIGNMENT: TEXT FUNCTIONS

1. Update the Month Short column in the Calendar Lookup table to extract and capitalize the first 3 characters of the month name.

```
Month Short (DAX) =
UPPER(
LEFT(
'Calendar Lookup'[Month Name] ,
3))
```

2. Create a new column in the Product Lookup table named SKU Category, to return any number of characters before the first hyphen in the ProductSKU column.

SKU Category =

```
LEFT(
'Product Lookup'[ProductSKU],
SEARCH(
"-",
'Product Lookup'[ProductSKU]
)-1)
```

3

HL-U509-R

→ HL [SKU Category]

No. of character

LEFT(Text, [NumberOfCharacters])

Returns the specified number of characters from the start of a text string.

LEFT(

3 index for the first "-"