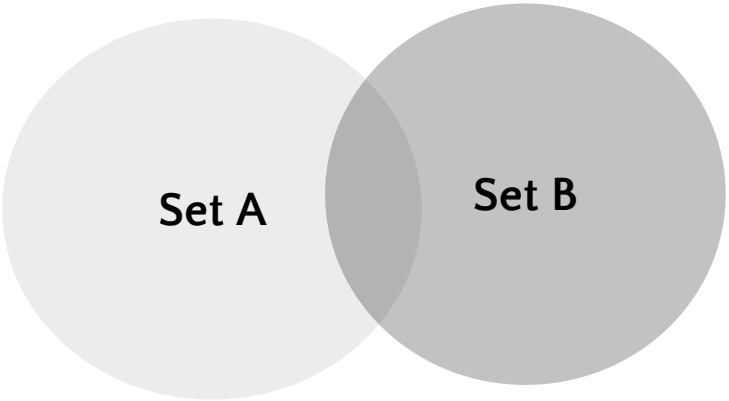


Mastering Set Analysis

Created by: Mastering QlikView Set Analysis course
Shilpan Patel, learnqlickview.com

Set Analysis Syntax

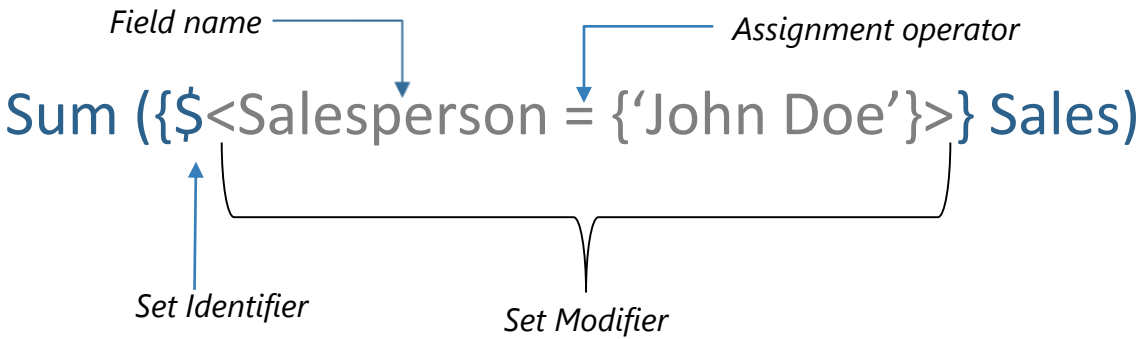
Three components:

- Set identifier (defines scope of the record set)
- Set modifier (adds filters)
- Set operators (allow interactions between sets)

Two curly braces:

{} Outer curly braces for the record set, inner curly braces for the element set

There is always an = sign between field name and element set in the modifier



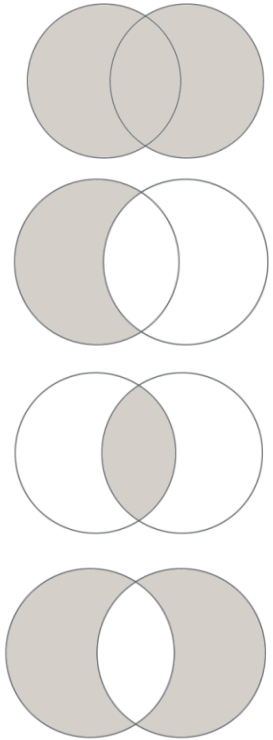
Set Identifiers

Identifier	Description
1	Represents the full set of all the records in the document.
$	Represents the records of the current selection. The set expression **{$}** is the equivalent of not stating a set expression.
$1	Represents the previous selection and is equivalent to pressing the Back button. $2 represents two selections back. **$0** represents the current selection.
$_1	Represents the next (forward) selection. $_2 represents the two selections forward. This only works if you have gone back from.

Set Identifiers

Examples	Results
sum({$} Sales)	Returns sales for the current selection, that is, it is the same as Sum(Sales).
sum({$1} Sales)	Returns sales for the previous selection.
sum({1} Sales)	Returns total sales within the application, disregarding the current selections but not the dimension. If used in a chart with, for example,with Products as dimension, each product gets a different value.
sum({1} TOTAL Sales)	Returns total sales within the application, disregarding both current selections and any chart dimensions. This is the sum of all sales.

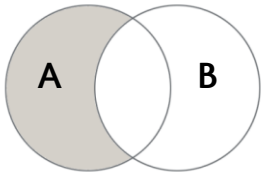
Set Operators



+	Union	Returns the set of all records that belong to the unioned sets
-	Exclusion	Returns records that belong to the first but not the other of the two set identifiers.
*	Intersection	Returns records that belong to both of the set identifiers.
/	Symmetric Difference	Returns a set that belongs to either, but not both of the set identifiers.

Interesting Operators: Examples

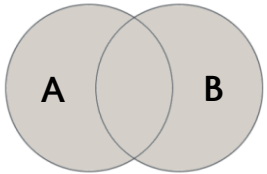
Exclusion



< [Category Name] -= {'Seafood'}>

Removes Seafood category from user selection

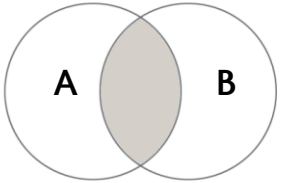
Union



< [Category Name] += {'Seafood'}>

Includes all selected categories and Seafood

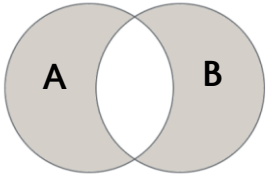
Intersection



< [Category Name] *= {'Seafood'}>

Excludes all categories but Seafood

Symmetric Difference



< [Category Name] /= {'Seafood'}>

Includes all categories but Seafood

Set Modifiers: Examples

- count({1<Modality= {‘Radiology’} >} PatientID)

Returns Radiology patient count disregarding the current selection.

- sum({$<Year = {2000}, Region = {‘US’, ‘SE’, ‘DE’, ‘UK’, ‘FR’}>} Sales)

Returns the sales for current selection, but with new selections both in 'Year' and in 'Region'.

- sum({$<Year = {"2*"}>} Sales)

Returns the sales for the current selection, but with all years beginning with the number . Since this is a Year field, it is for all years from 2000 onwards.

- sum({$<Year ={"2*","198*"} - {2000}>} Sales)

As above, but also the 1980’s are included in the selection, but the year 2000 is excluded.

Remember!

String values

Require single quotes within the element set.

Example:
< SalesPerson = {‘Joe’}>

Numeric values

Do not require single or double quotes

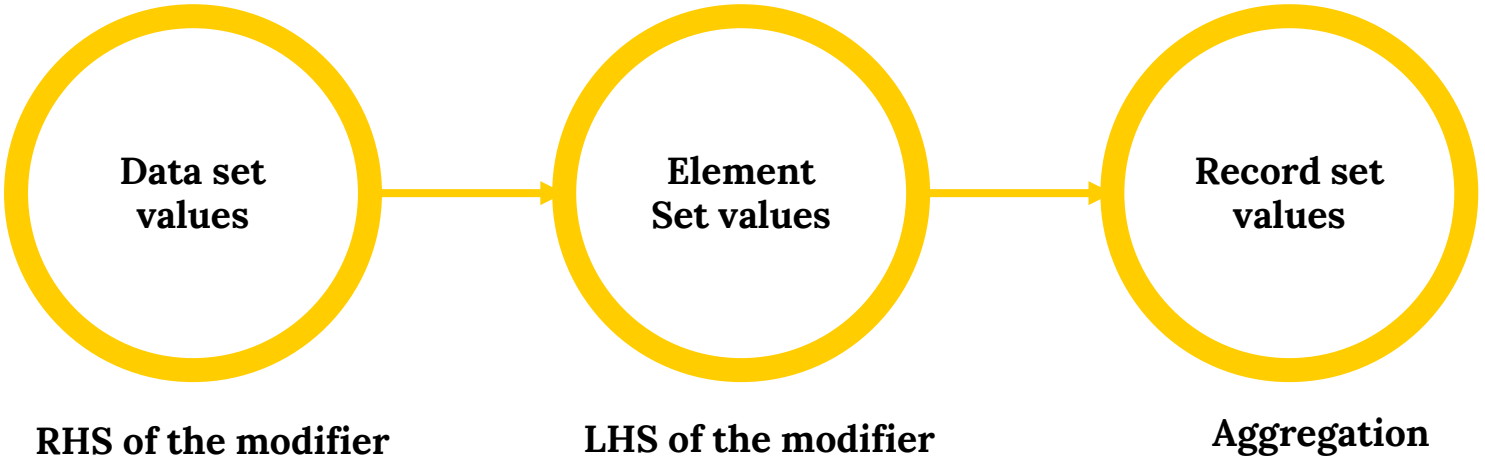
Example:
< OrderID = {1001}>

Expressions or Search

Require double quotes

Example:
<Year = {“>=2011"} >
<Year = {“(2009)|(201*)”}>

Under the hood



Let's review some concepts

Modifiers are sets too!

Remember that both LHS and RHS of the modifiers are sets

= Sign in the modifier

Is not an equal sign. It is an assignment by association

Two Curly braces {}

Outer curly braces for the record set and inner curly braces for the elementset

< > Angle brackets

Modifier starts with left angle bracket and ends with right bracket.

Quotes

Litteral values need single quote; search string or expression requires double quotes and numeric values require no quotes.

Mixed state

Record set can be in a default state while element set can be in different state such as alternate state.

Thanks!

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