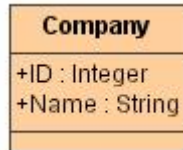


select

Syntax	<pre>select each from anArray where <where-expression> group by <group-by-expression> select first from anArray where <where-expression> group by <group-by-expression> select last from anArray where <where-expression> group by <group-by-expression> select distinct <distinct-expression> from anArray where <where-expression></pre>	
Semantics	<p>Selects array items by evaluating a boolean where-expression for each array element and optionally grouping it. In all expressions the array element is identified by the keyword element. The optional keyword each indicates that the select statement returns an Array containing the filtered and grouped elements. If only the first or last array element are to be selected use first respectively last. If an array of unique values is to be returned use the keyword distinct.</p> <div>Please note that select only selects the element references (not the content). The elements of the target array will reference to the same elements as the selected elements from the source array. Changes to an element of the target array will also change the related element in the source array.</div>	
Substitutables	anArray	Can be any variable or object attribute having the type Array .
	<where-expression>	This is can be any expression evaluating to Boolean and containing the keyword element . The where-clause (where <where-expression>) is mandatory for all select statements except for select distinct .
	<group-by-expression>	<p>This is can be any expression containing the keyword element and returning any simple type except Blob. The resulting (grouped) array is an array of type Group, where values contains the array elements that belong into that group.</p> <div>Group +key : Any [1] +values : Any [0..*]</div> <p>The group-by-clause (group by <group-by-expression>) is optional. The group-by-clause must not be used in conjunction with the distinct-clause (distinct <distinct-expression>).</p>
	<distinct-expression>	This is can be any expression containing the keyword element returning any simple type except Blob . The distinct-clause (distinct <distinct-expression>) must not be used in conjunction with the group-by clause.
Examples	<p>The examples below use an instance of InputContainer as input:</p> <div>InputContainer +myList : String [0..*]</div> <div><pre>set filteredElements = select each from inputContainer.myList where element = "a"; set firstFilteredElement = select first from inputContainer.myList where element = "a"; set filteredElements = select each from inputContainer.myList where element like "a.+"; set lastFilteredElement = select last from inputContainer.myList where element like "a.+";</pre></div> <p>Please note that select only selects the element references (not the content), so e.g. the elements of filteredElements will reference to the same elements as the selected elements from inputContainer.myList. Changes to an element of filteredElements will also change the related element in inputContainer.myList.</p>	

The examples below use an array of **Company** objects as input:



```
set distinctArray = select distinct element.ID from companyArray;
set filteredDistinctArray = select distinct element.ID.convertToString().concat(":", element.
Name)
    from companyArray
    where element.Name.startsWith("M");
set groupedArray = select each from companyArray group by element.ID;
set filteredAndGroupedArray =
select each from companyArray
    where element.Name.startsWith("M")
    group by element.ID.convertToString().concat(":", element.Name);
```

Example File (Builder project E2E Action Language/Array):



<your example path>\E2E Action Language\Array\uml\arrayFilter.xml