**SQL vs SPARQL Queries side by side**

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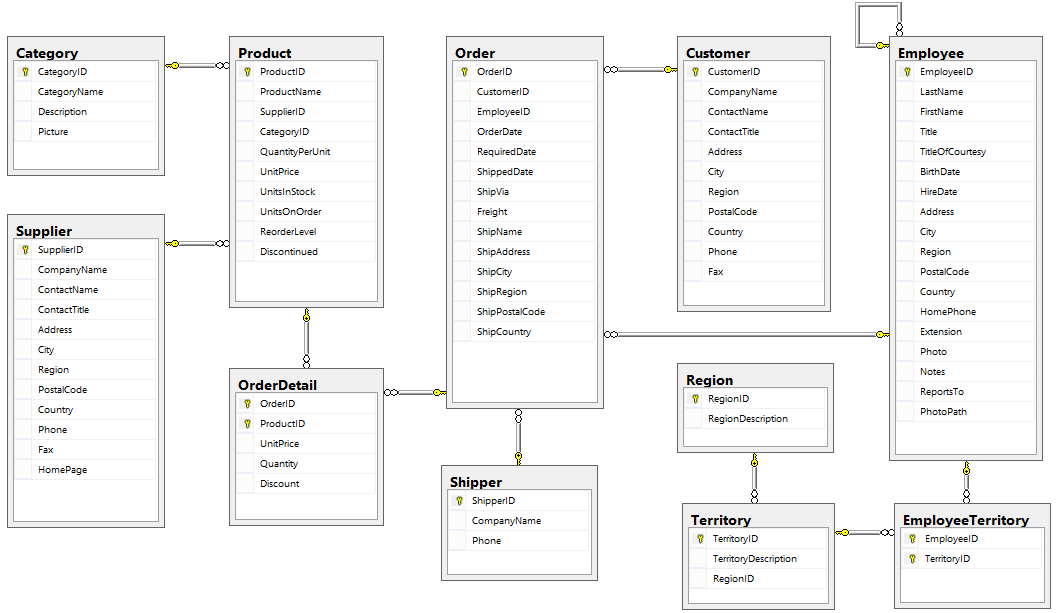
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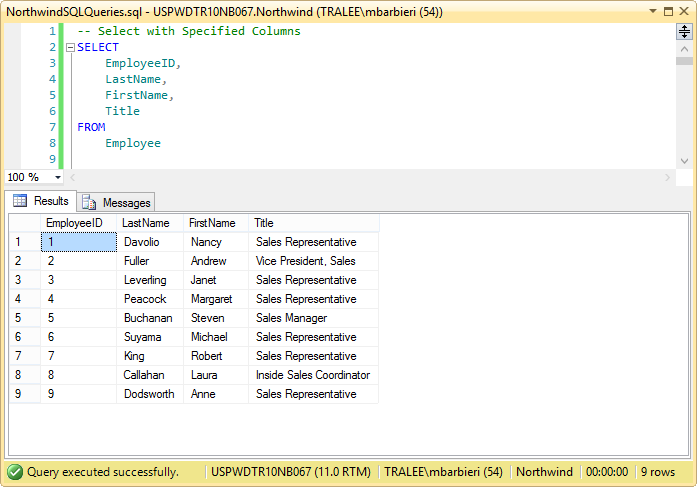
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## Microsoft Northwind sample database (ER Diagram)

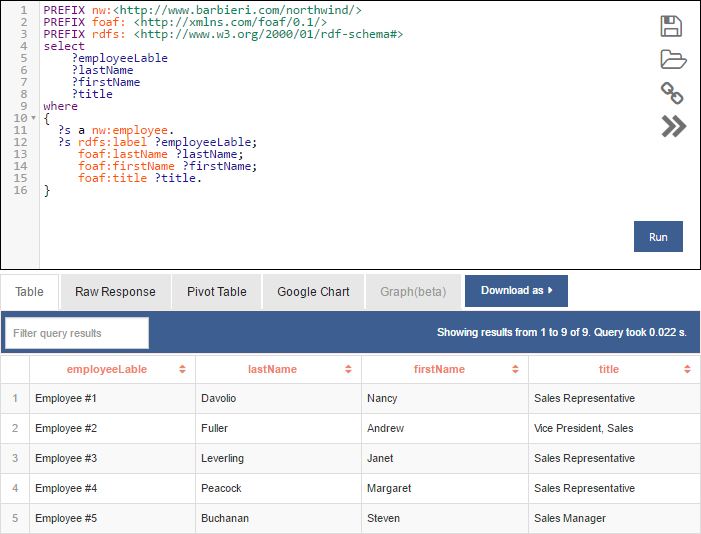


## Basic Select with Specified Columns

**SQL on SQL Server**

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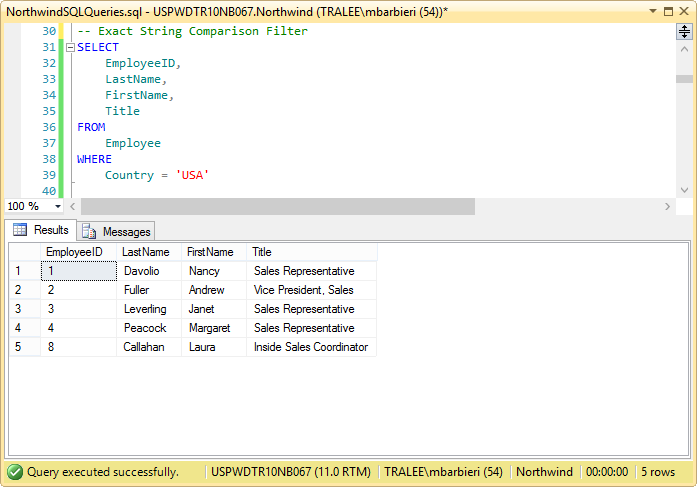
**SPARQL on GraphDB**

****

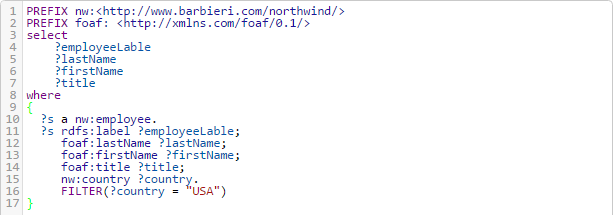
**Total of 9 records.**

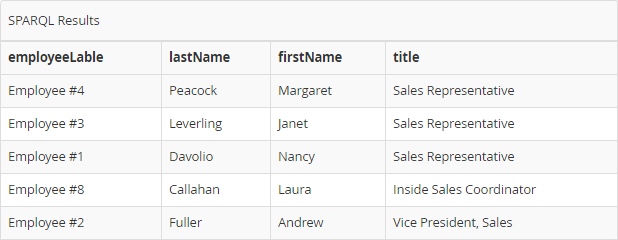
## Filtering Data on Exact String Comparison

**SQL on SQL Server**



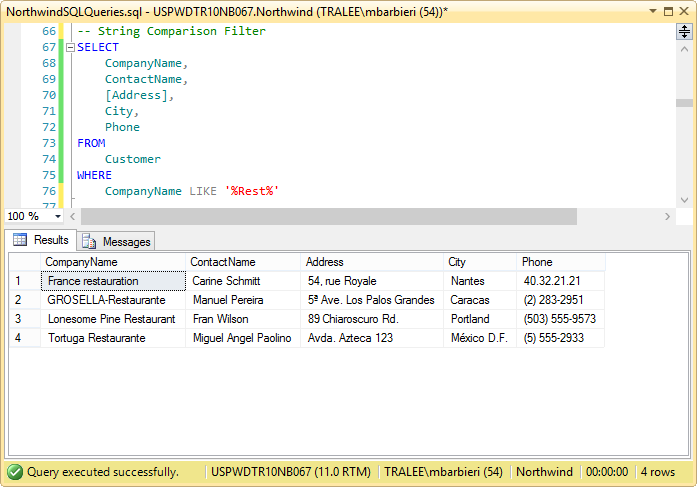
**SPARQL on Stardog**



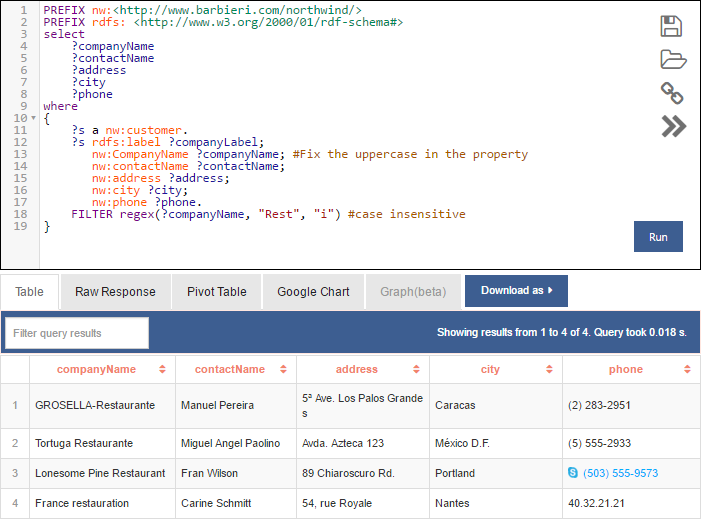


## Filtering Data on String Comparison (LIKE vs REGEX)

**SQL on SQL Server**

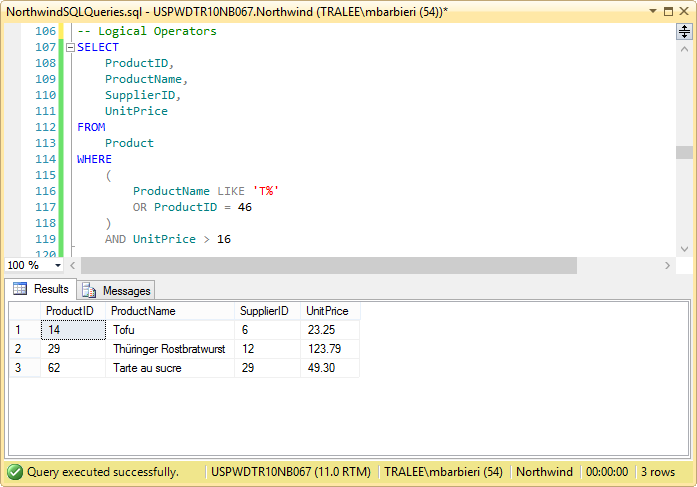


**SPARQL on GraphDB**

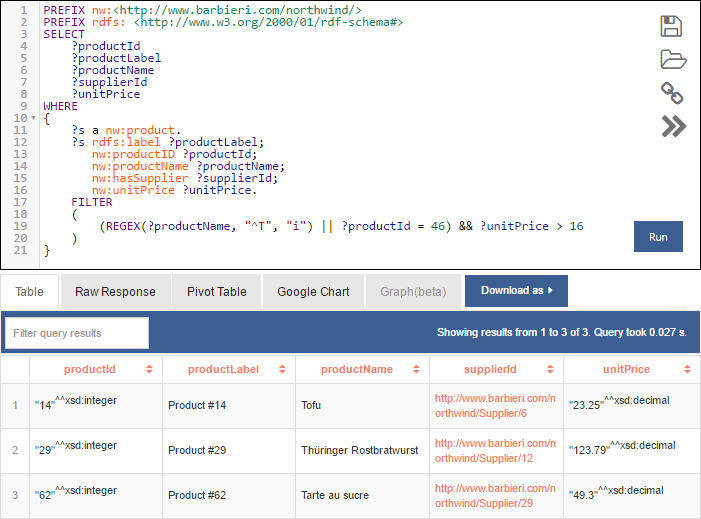


## Using Logical Operators

**SQL on SQL Server**

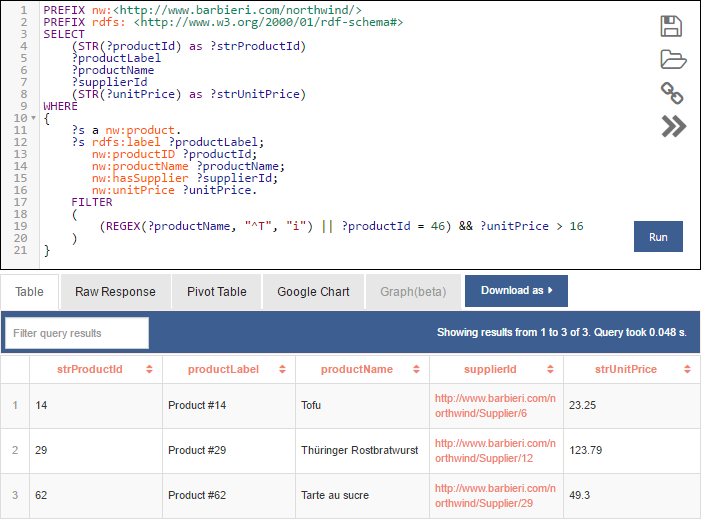


**SPARQL on GraphDB**



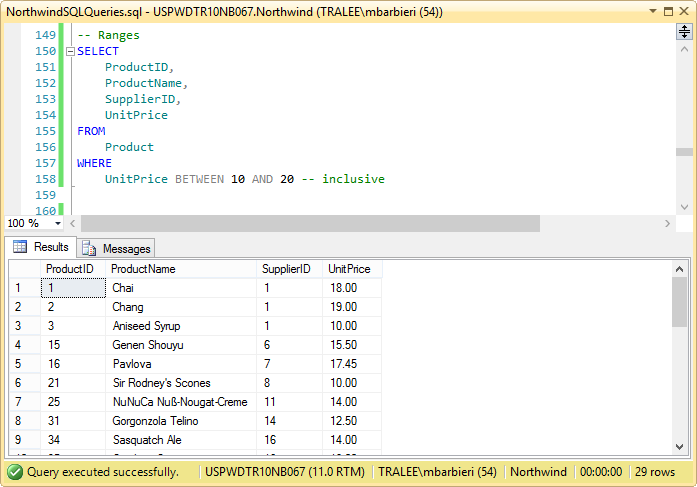
**Note that the SupplierId in the result set above contains URIs, which will be used to get the remaining Supplier Properties later on.**

**Integer and Decimals converted to String**

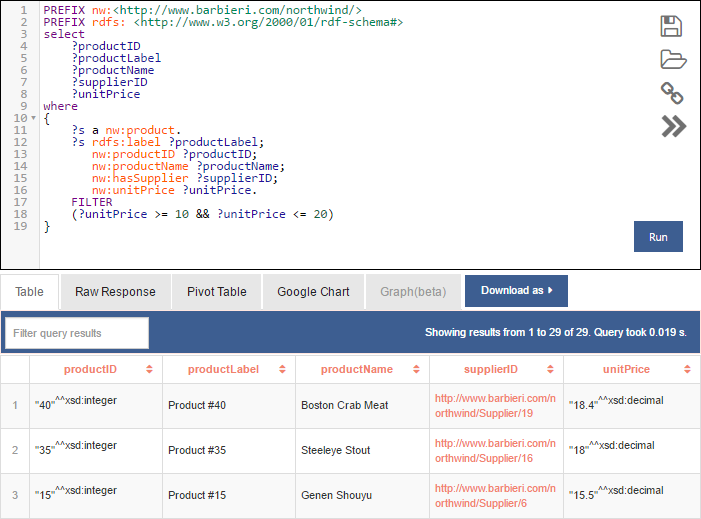


## Selecting Data Ranges

**SQL on SQL Server**

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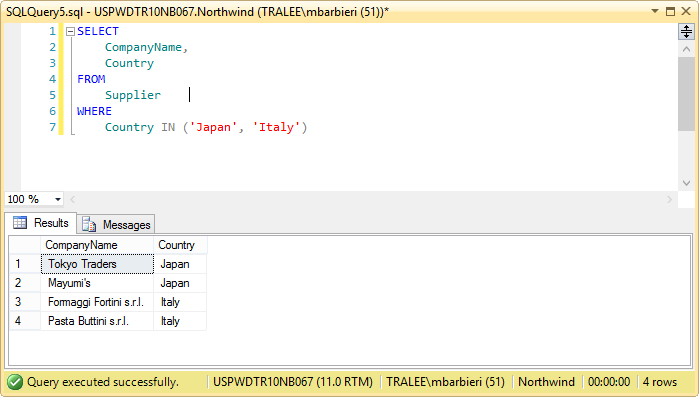
**SPARQL on GraphDB**



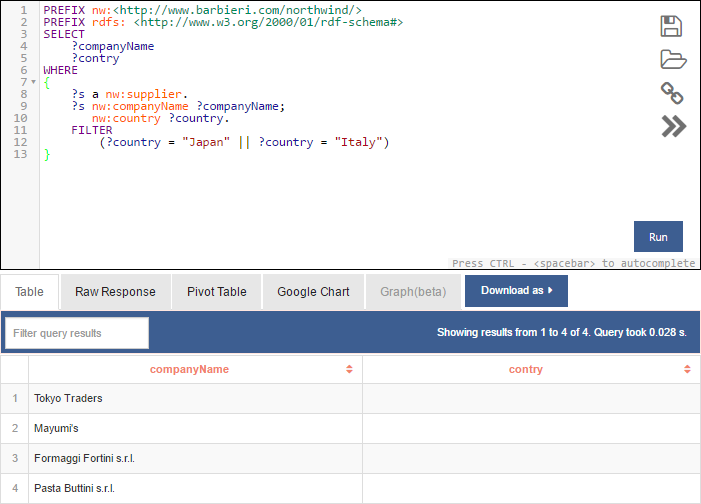
**29 items in the result set.**

## Filtering on List of Values

**SQL on SQL Server**

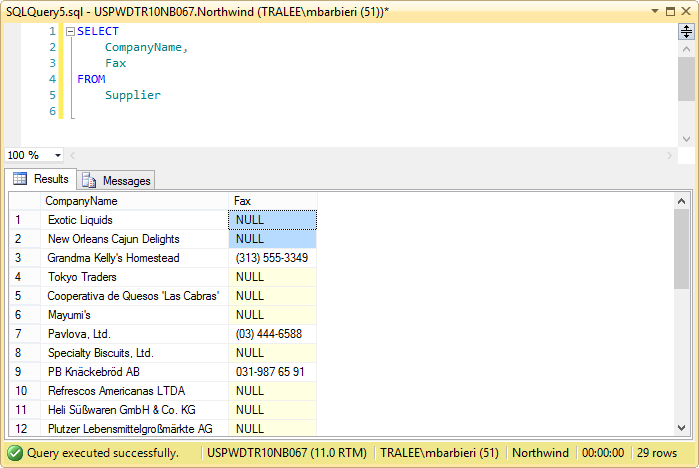
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**SPARQL on GraphDB**

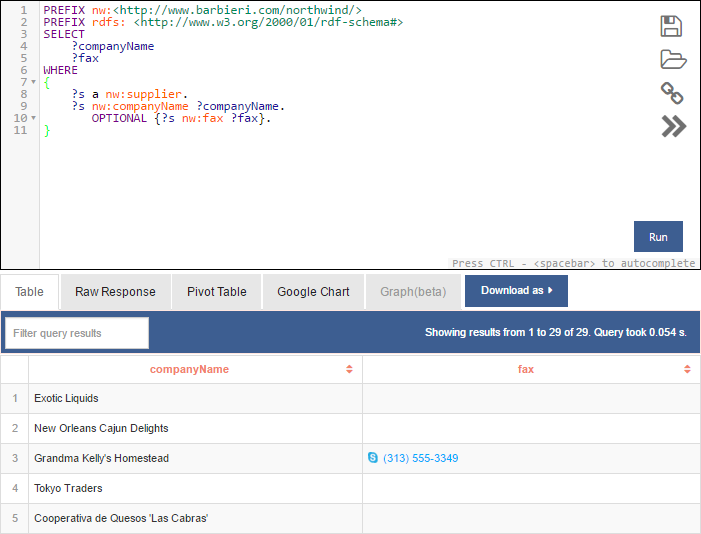


## Working with NULL Values In this example, Suppliers with and without Fax number. Yeap, some people still use them.

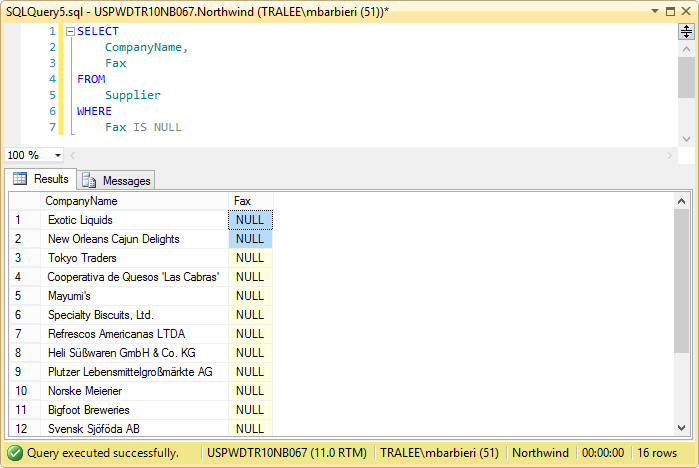
**SQL on SQL Server**



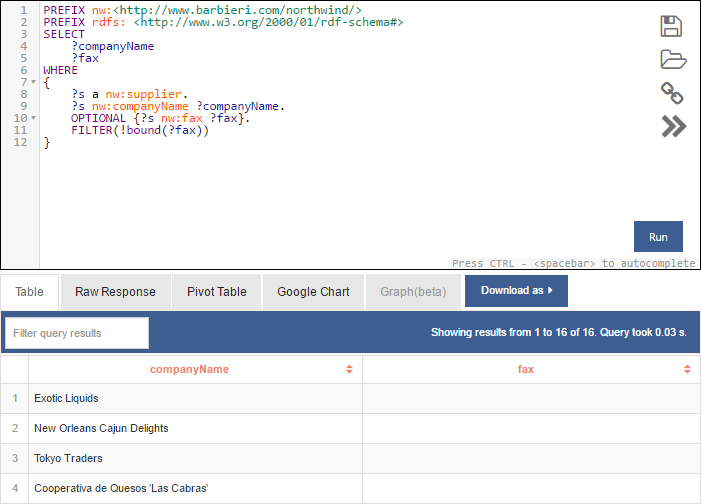
**SPARQL on GraphDB**



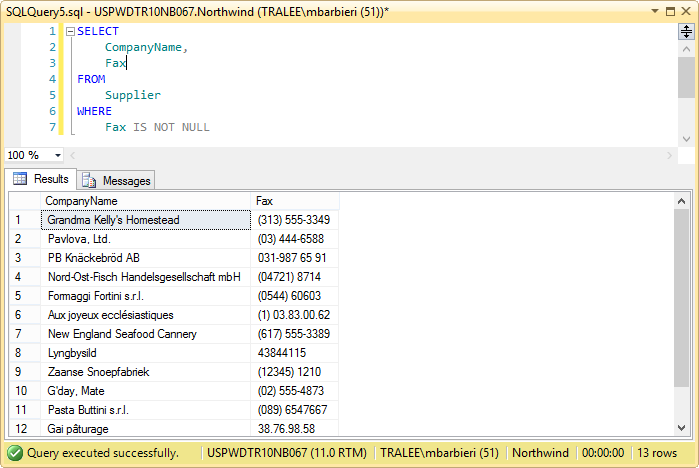
**SQL on SQL Server**



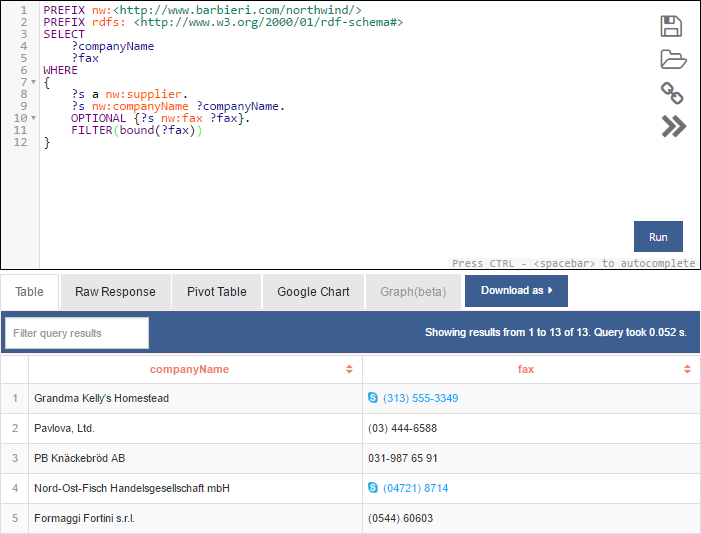
**SPARQL on GraphDB**

****

**SQL on SQL Server**

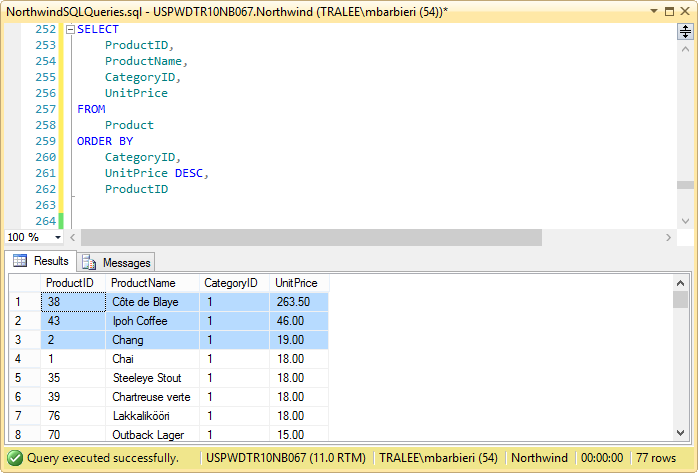


**SPARQL on GraphDB**

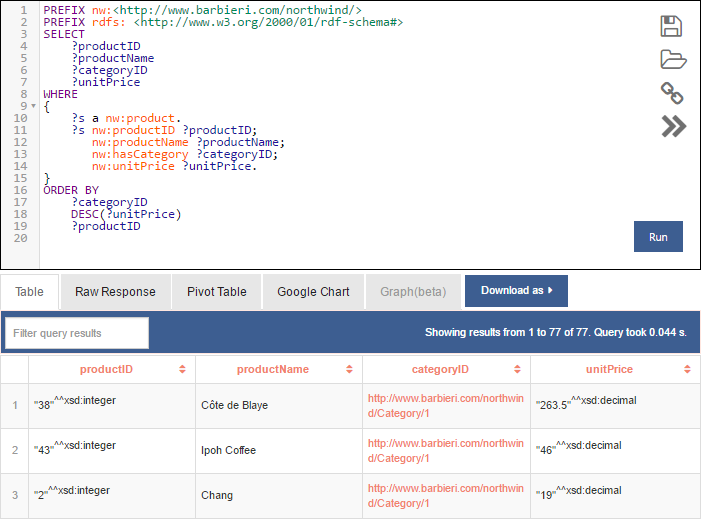
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## Sorting Data

**SQL on SQL Server**

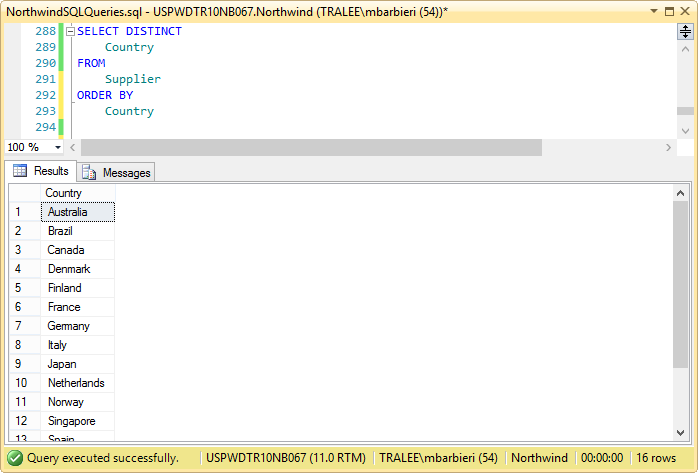


**SPARQL on GraphDB**

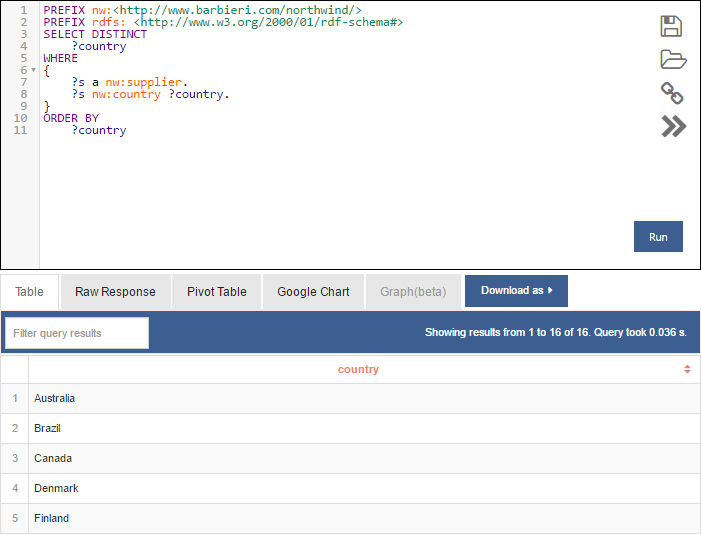
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## Eliminating Duplicates

**SQL on SQL Server**

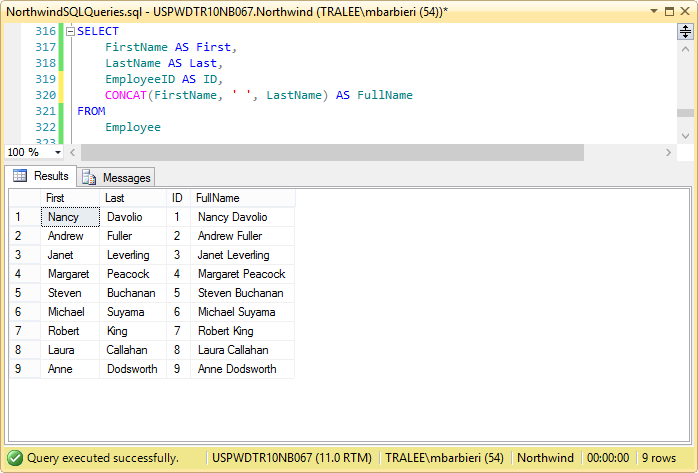


**SPARQL on GraphDB**

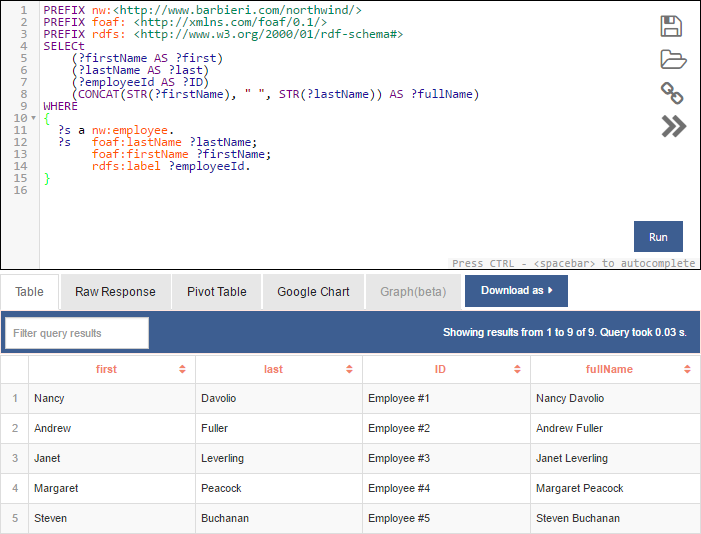
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## Using Alias and String Concatenation

**SQL on SQL Server**

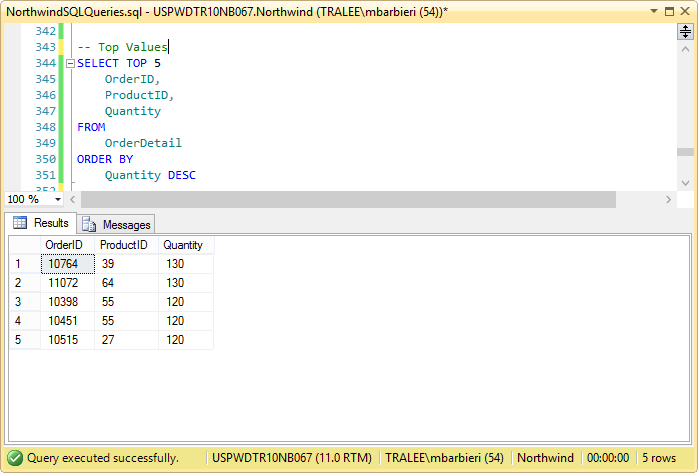


**SPARQL on GraphDB**

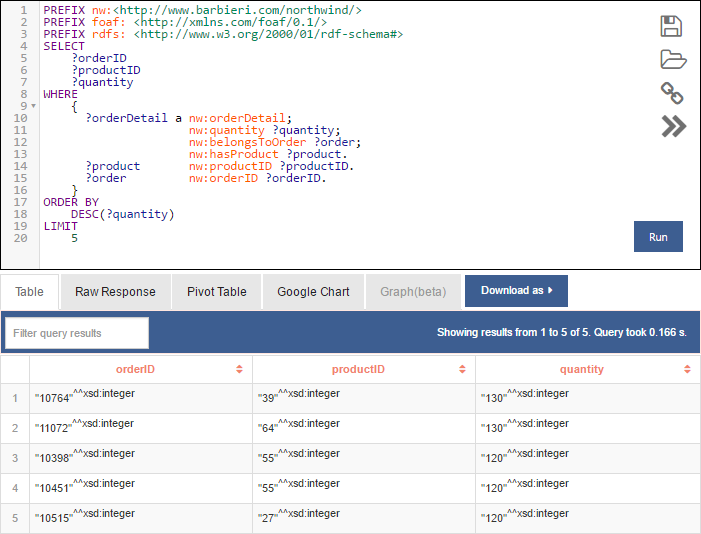


## Selecting Top Values

**SQL on SQL Server**

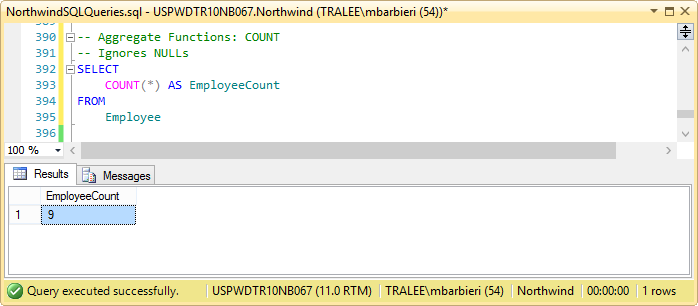


**SPARQL on GraphDB**



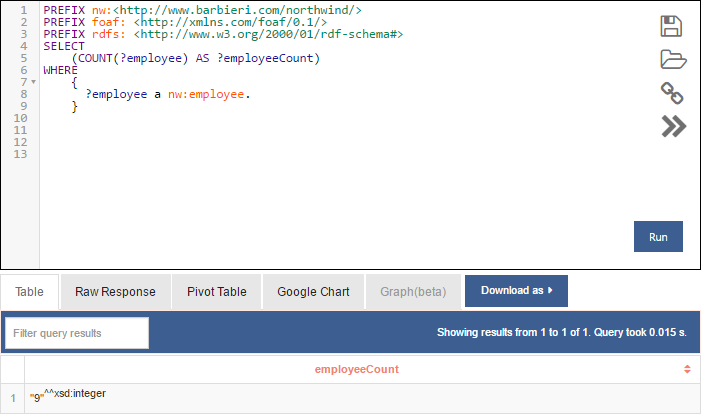
## Counting Records

**SQL on SQL Server**



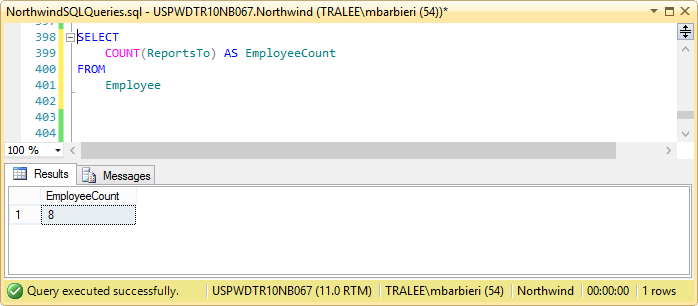
Note: One Employee doesn’t report to anybody, and therefore ReportsTo is NULL.

**SPARQL on GraphDB**

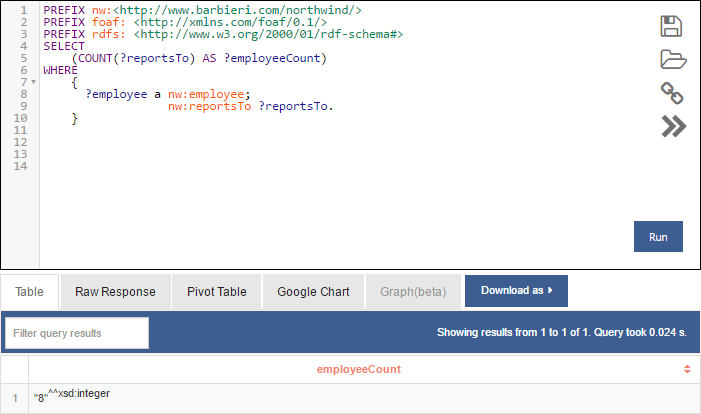


## Counting Records on Specific Column (ignores null values)

**SQL on SQL Server**

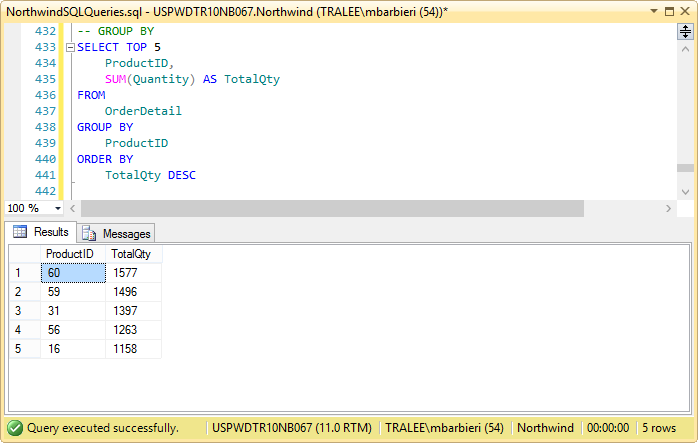


**SPARQL on GraphDB**

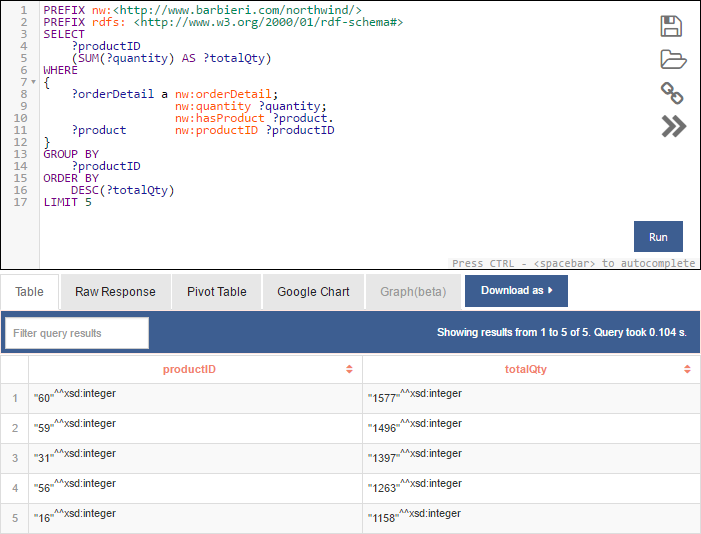


## Grouping Data

**SQL on SQL Server**



**SPARQL on GraphDB**



**SPARQL on GraphDB (Pivot Table)**

