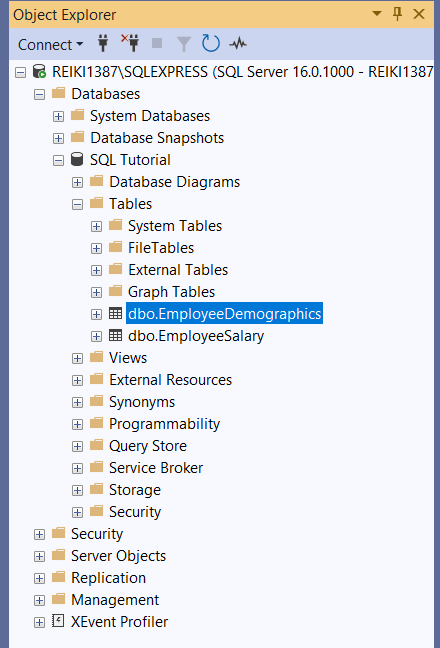
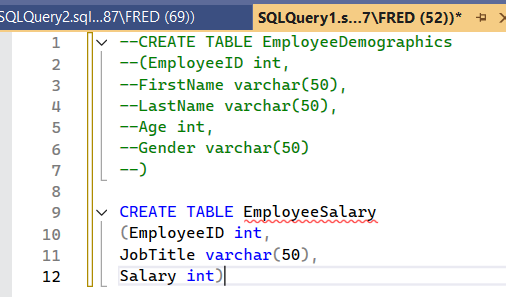
Learning SQL

<https://learn.microsoft.com/en-gb/ssms/install/install>

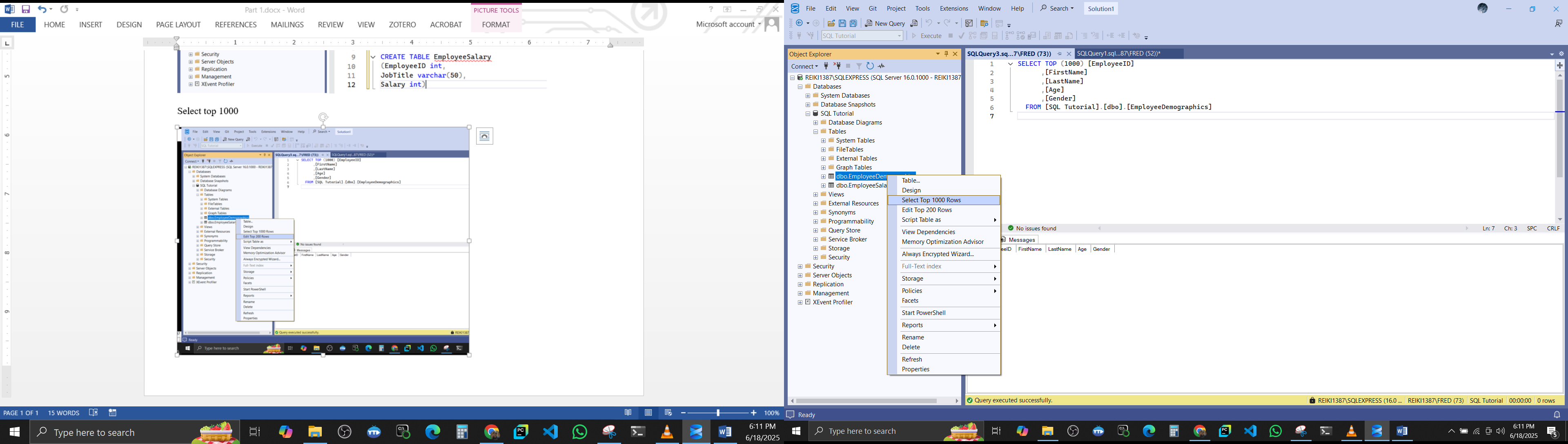
💻 Access the datasets used here: [https://github.com/AlexTheAnalyst](https://www.youtube.com/redirect?event=video_description&redir_token=QUFFLUhqbTVUa09MQ0hDYzJmY3RiQ1ZBeHVfUzBlaVlqQXxBQ3Jtc0trNEVOLTBjb3NsUjQ0Y1ZjaWEtRWg4eE9iX0lBbW1ydXh0ZlRNLU01QVVaMm5RM0gyTWtKWXNqYUFVSXJPRVhqbEdrXy1EREkyMFByelVjSVFZN0h2Rkt2cnZ5U0pmckR1TkIwemJTbURIWWsyQ0dVYw&q=https%3A%2F%2Fgithub.com%2FAlexTheAnalyst&v=PSNXoAs2FtQ)

Creating table

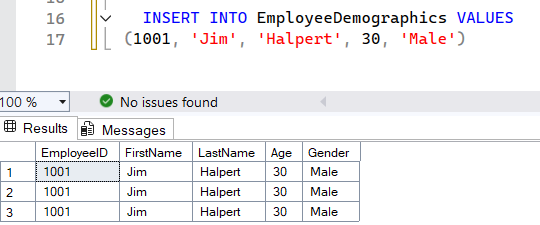
 

Opening table using - Select top 1000

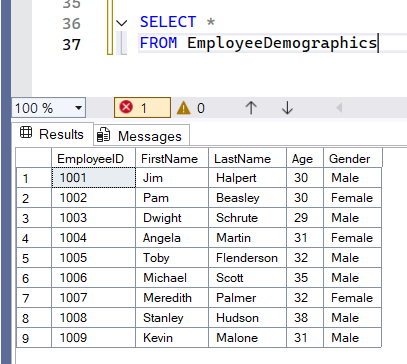
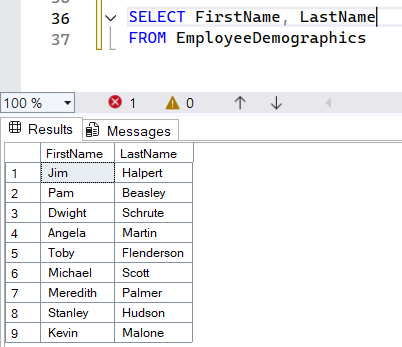
ctrl + shift + R = Refresh to remove the red squiggly lines



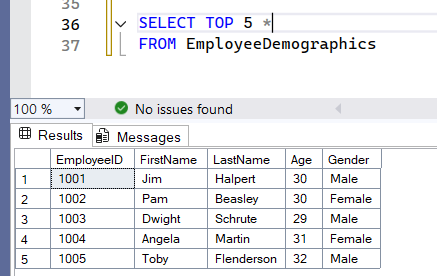
Inserting values into table



QUERYING FROM TABLES

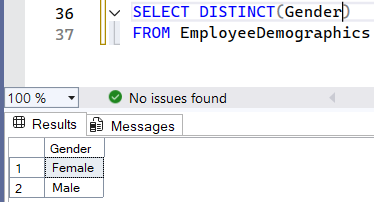
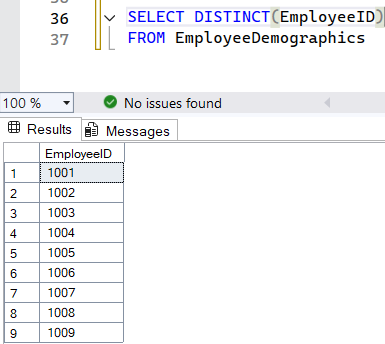
SELECT \* (Select all rows from all columns) Selecting all rows from specific column 

Querying top 5 rows of all columns



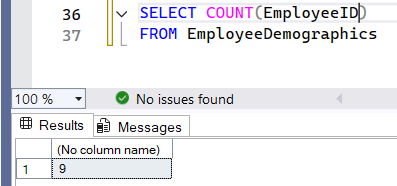
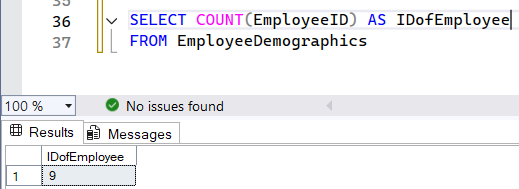
Querying unique values from specific columns

DISTINCT shows all rows from a column without its duplicate (showing only distinct values). So when we query ‘Gender’ it only displays 2 rows compared to querying employeeID

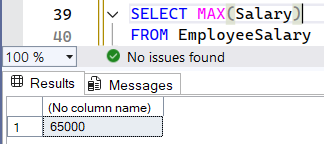
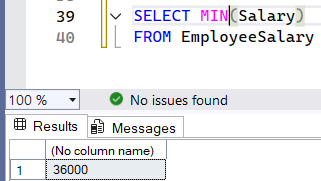
 

COUNT – Counts the number of rows that have a non-null value in the specified column.

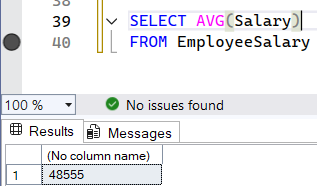
AS –used to give a name to the column during query

Querying using MAX &MIN – returns the maximum or minimum value in a certain column

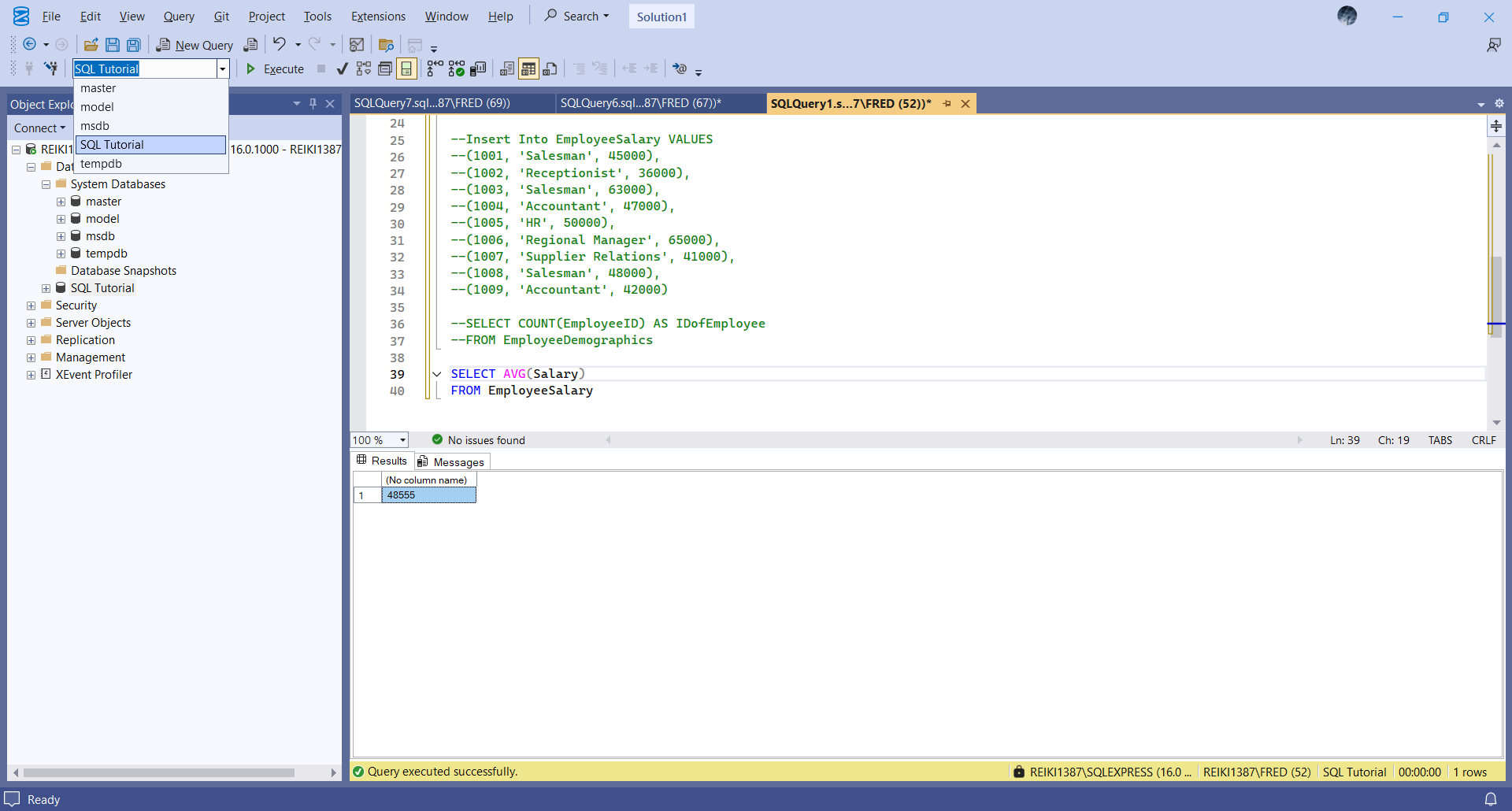
 

AVG – adds all rows in the queried column and divide it by the number of added rows

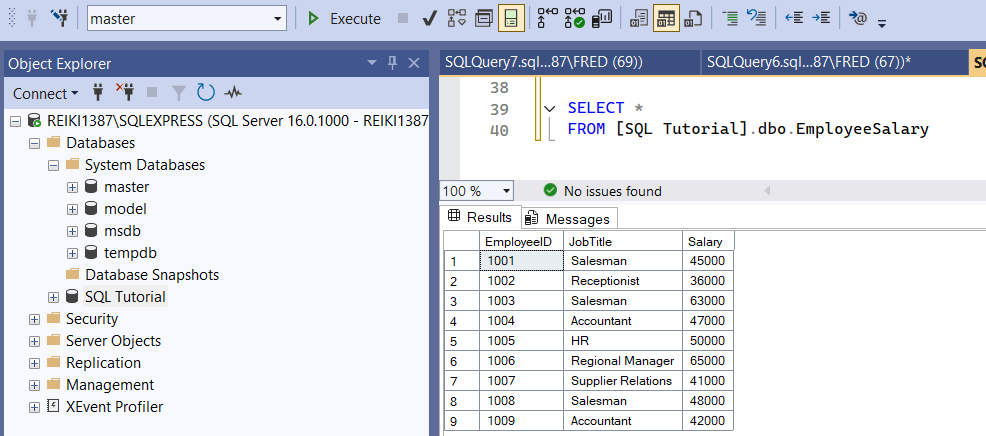


**QUERYING TABLES FROM OTHER DATABASE**

Currently we are in the ‘SQL Tutorial” Database

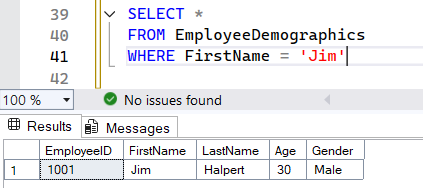
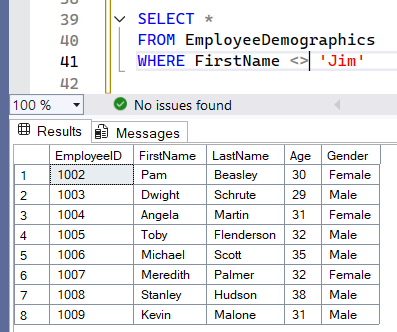


Then here we are querying form ‘master’ database to a certain table from ‘SQL Tutorial” database

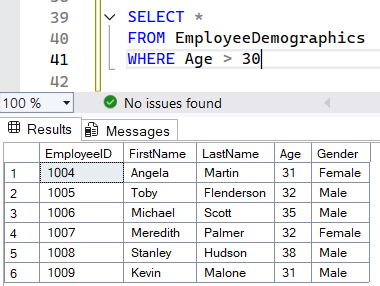
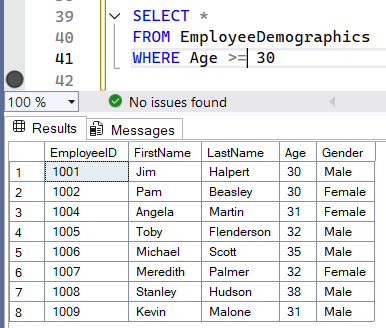


**Querying using WHERE statement using =, <>, <, >, AND, OR, LIKE, NULL, NOT NULL, IN**

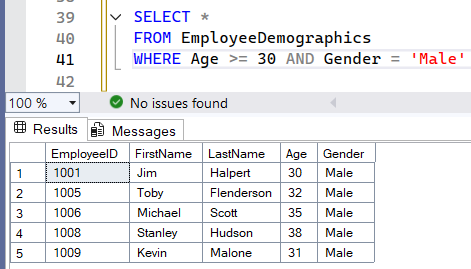
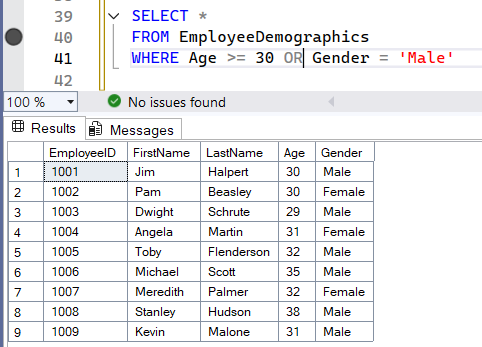
WHERE- limit and specify the data < > means ‘not equal’

30 is not included 30 is included

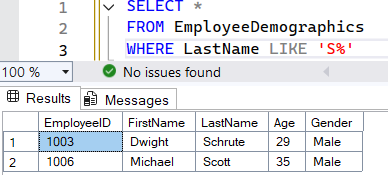
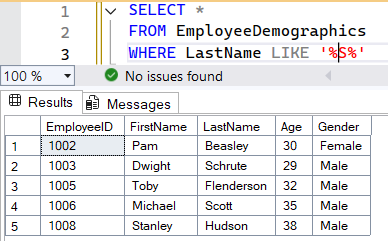
Using AND statement means both of the condition Using OR statement means any of the 2 condition

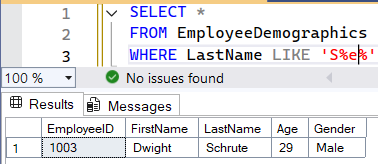
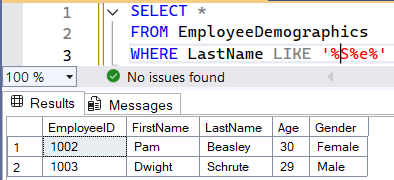
Using LIKE –mostly for text info

Like can search for a specific text using WILDCARD %

This search LastName that starts with ‘S’ This means search LastName that HAS ‘S’ in it

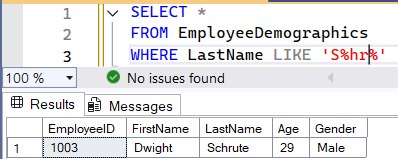
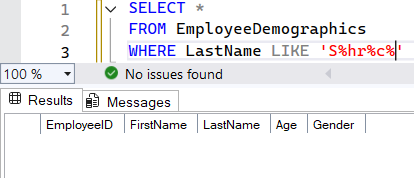
 

This means LastNames that starts with ‘s’ THEN HAS ‘e’ This means LastNames that HAS ‘s’ THEN ‘e’

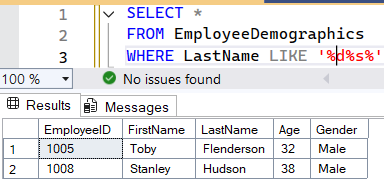
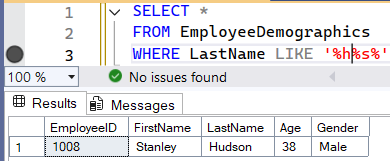
Remember that BOTH FORMAT follows an order. This doesn’t return result because there is no

last name that starts with ‘S’ THEN ‘hr’ THEN ‘c’

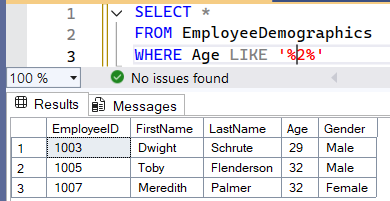
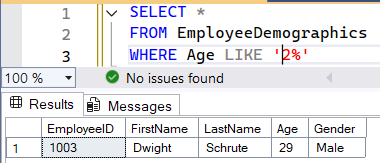
 

This also follows and order. This means

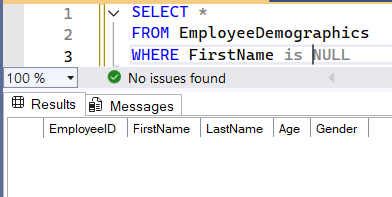
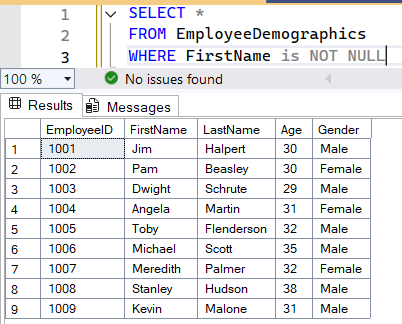
LastNames that HAS ‘d’ THEN ‘s’ This means LastNames that HAS ‘h’ THEN ‘s’

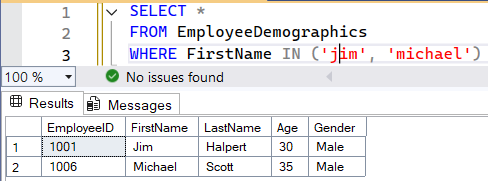
Age that HAS 2 Age that STARTS WITH 2

NULL means no data NOT NULL means there is data

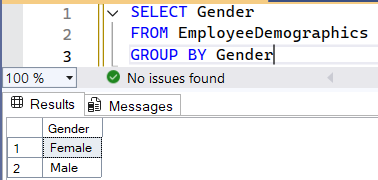
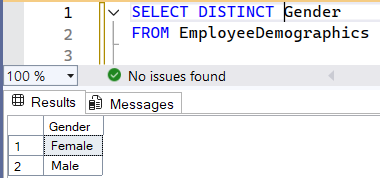
 

IN is like equal statement but MULTIPLE equal statement

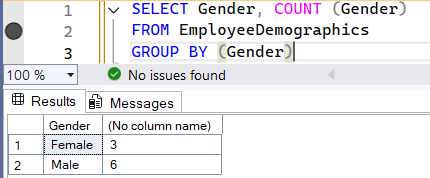


**QUERYING USING GROUP BY, ORDER BY**

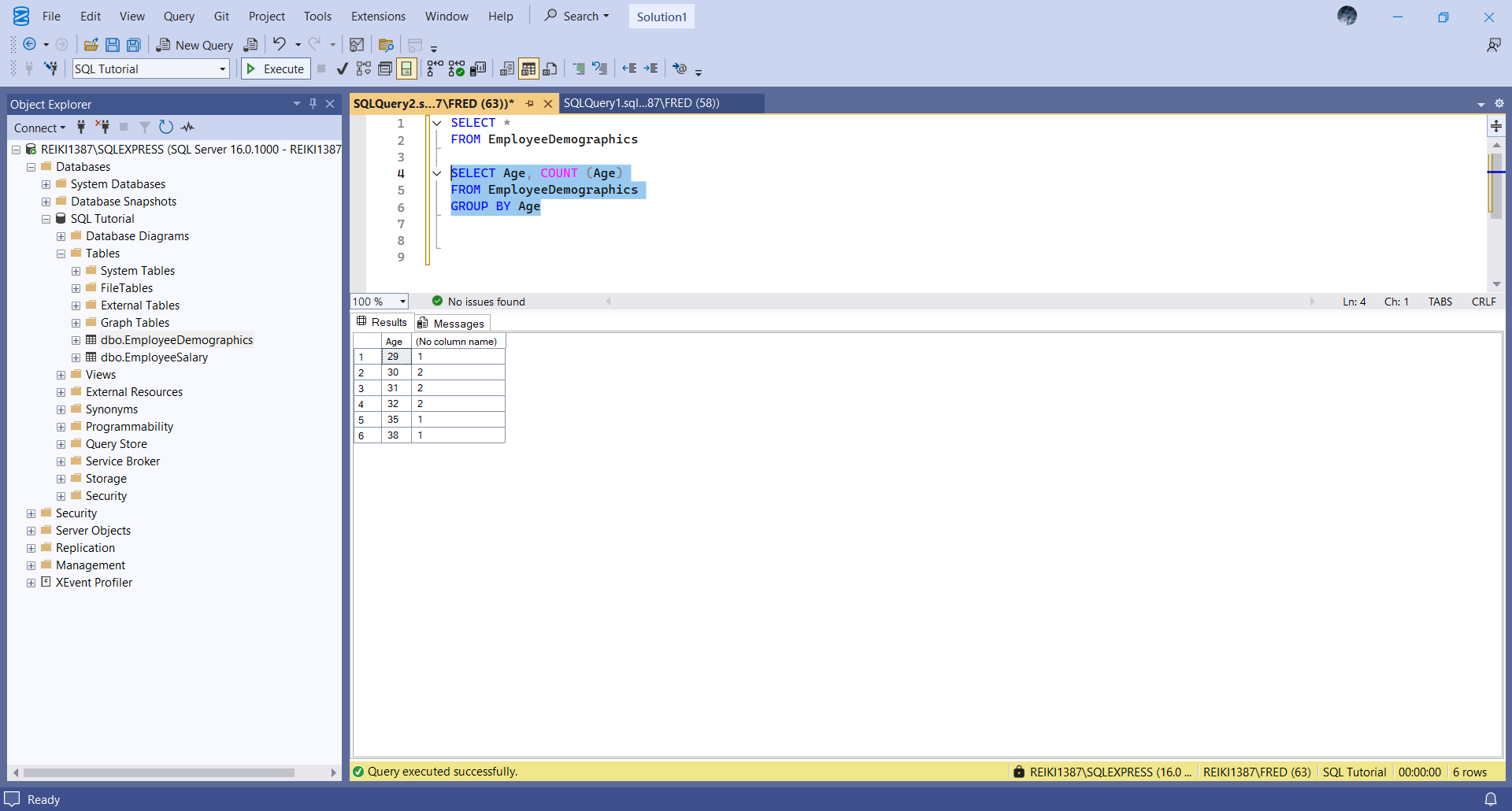
Below the result is almost similar with using DISTINCT

But GROUP BY is summing up all the common ones in the particular column. By using COUNT, we can see the count of the certain data. We can see there are 3 females and 6 males

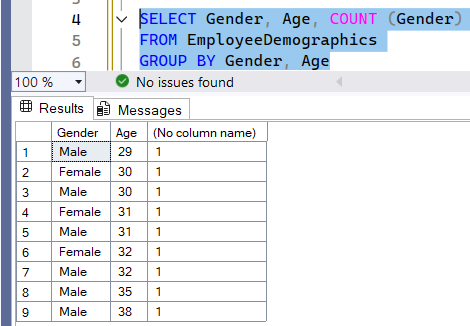


SELECTING AND EXECUTING ONLY SPECIFIC CODE LINES is possible. Lines 1 &2 are not executed

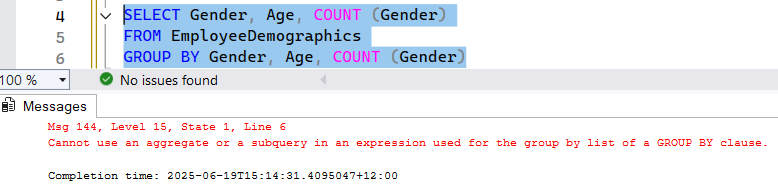


At what age has the many same gender? So you will need to COUNT and GROUPBY the gender

Remember that GROUPBY needs to use all what is SELECTED.



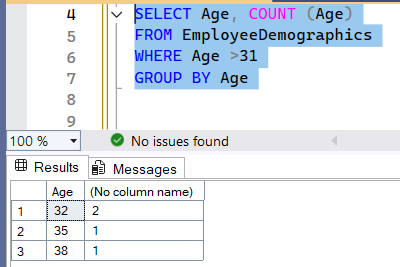
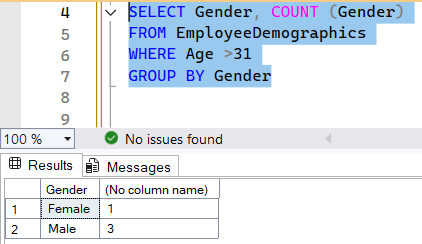
SELECTING MULTIPLE COUMNS IS POSSIBLE AS LONG AS YOU USE IT DOWN. But COUNT here is different because it is a derived field/column. It is derived base of the gender column. In GROUP BY, COUNT is not included because only the actual field or actual column is being used by the GROUP BY statement



GROUP BY and WHERE.

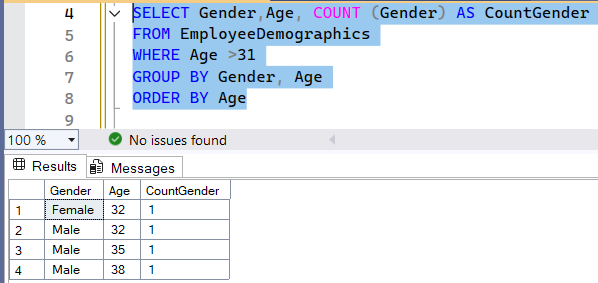
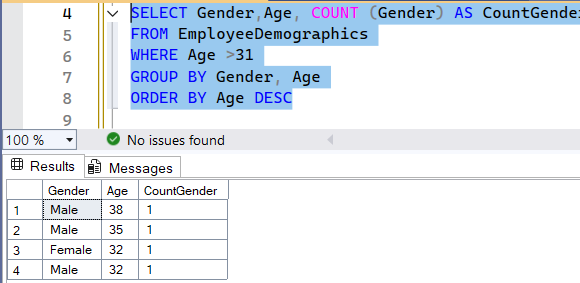
Group by age. Two data with the same age Group by Gender.

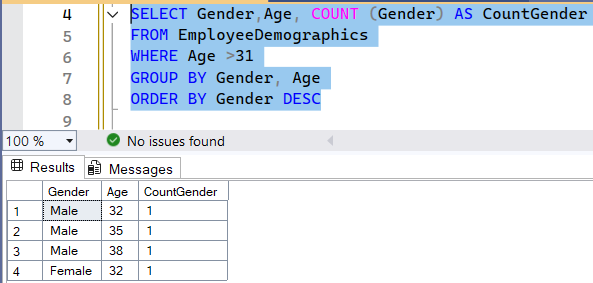
that is above 31

ORDER BY has a default ASC (Ascending) order. If you use DESC it will be from highest to lowest

NOTE: Remember this sequence. ORDERBY cannot go before GROUP BY

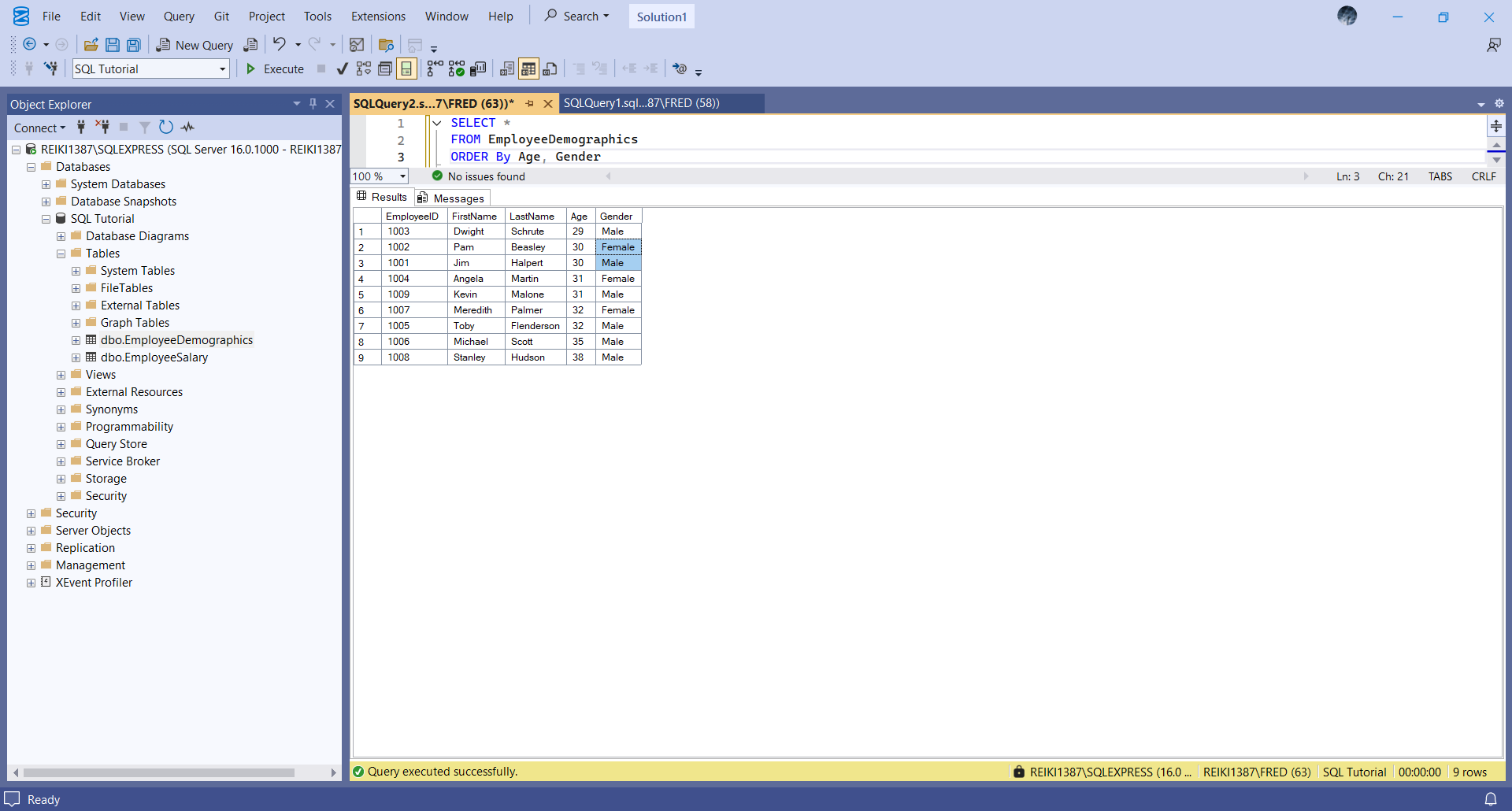
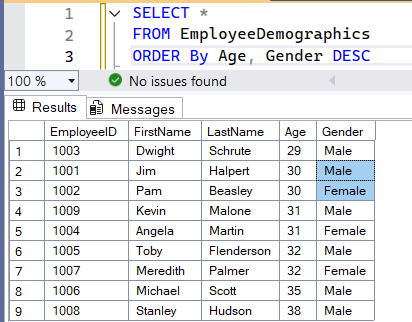
 



ORDER BY can be used together with other columns. ASC or DESC on either columns

Age is arranged by ASC order and when there are Here the gender is in descending order

the same age it is arranged by Gender ASC alphabetical order while Age is in default ASC order

Columns can be represent by DEFAULT numbers Column 1= EmployeeID, Column 2= FirstName…..

This is the same as ORDER BY Age, Gender DESC GROUP BY Age DESC, Gender

