

First of all, download- Microsoft SQL Server Management Studio

[Download SQL Server Management Studio \(SSMS\) - SQL Server Management Studio \(SSMS\) | Microsoft Learn](#)

## Download SSMS

↓ [Free Download for SQL Server Management Studio \(SSMS\) 19.1](#) ↗

SSMS 19.1 is the latest general availability (GA) version. If you have a *preview* version of SSMS 19 installed, you should uninstall it before installing SSMS 19.1. If you have SSMS 19.x installed, installing SSMS 19.1 upgrades it to 19.1.

- Release number: 19.1
- Build number: 19.1.56.0
- Release date: May 24, 2023

By using SQL Server Management Studio, you agree to its [license terms](#) and

And, SQL Server Express (Just for practice, Express for small database)

[SQL Server Downloads | Microsoft](#)

Or, download a free specialized edition



### Developer

SQL Server 2022 Developer is a full-featured free edition, licensed for use as a development and test database in a non-production environment.

[Download now](#)

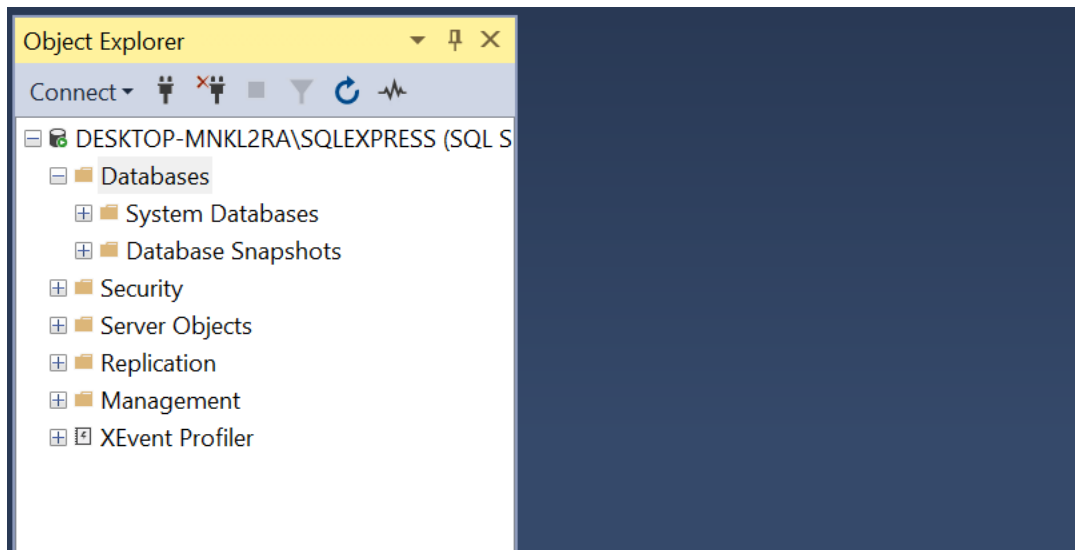


### Express

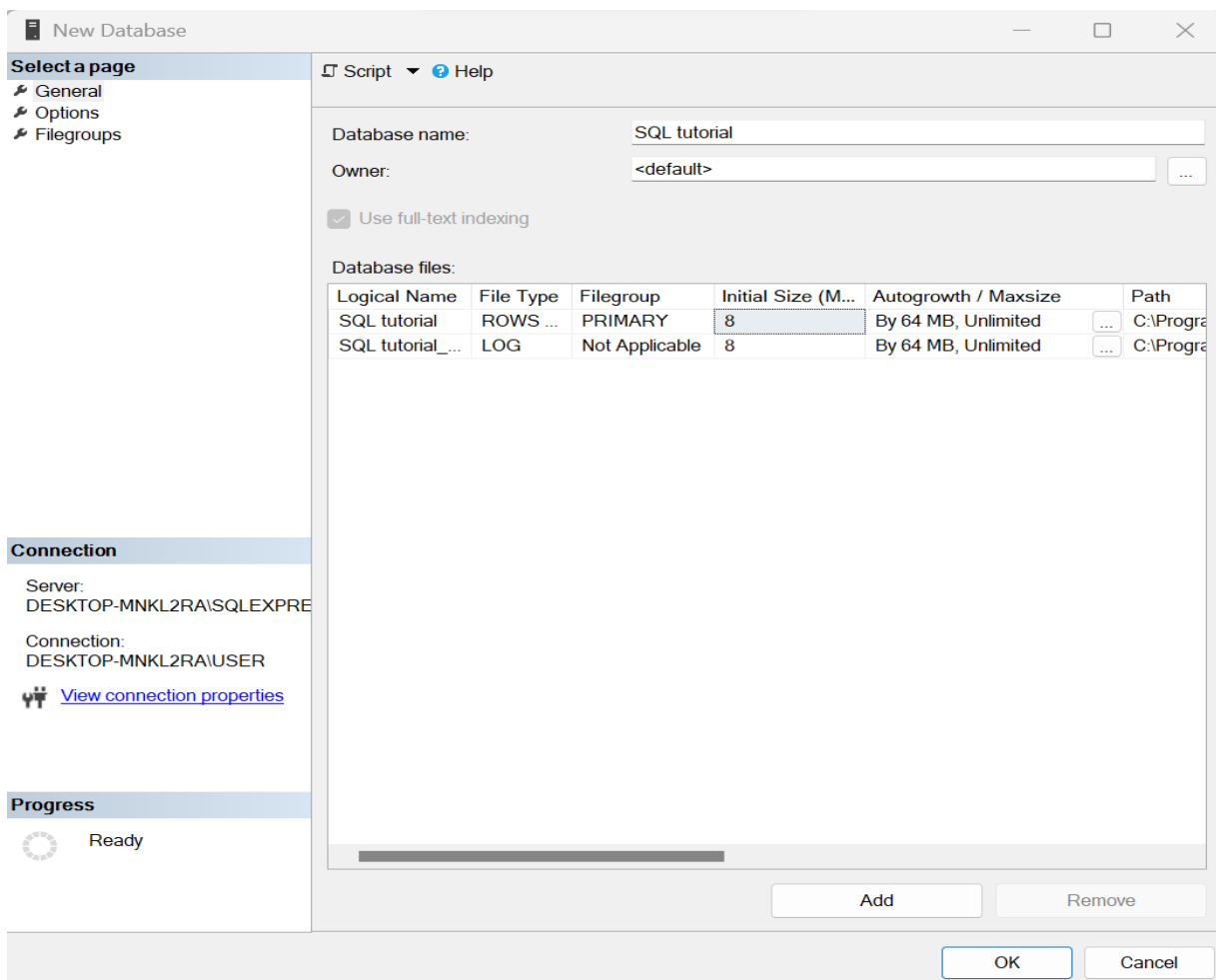
SQL Server 2022 Express is a free edition of SQL Server, ideal for development and production for desktop, web, and small server applications.

[Download now](#)

Now, Create Database (Right click in database for new database)

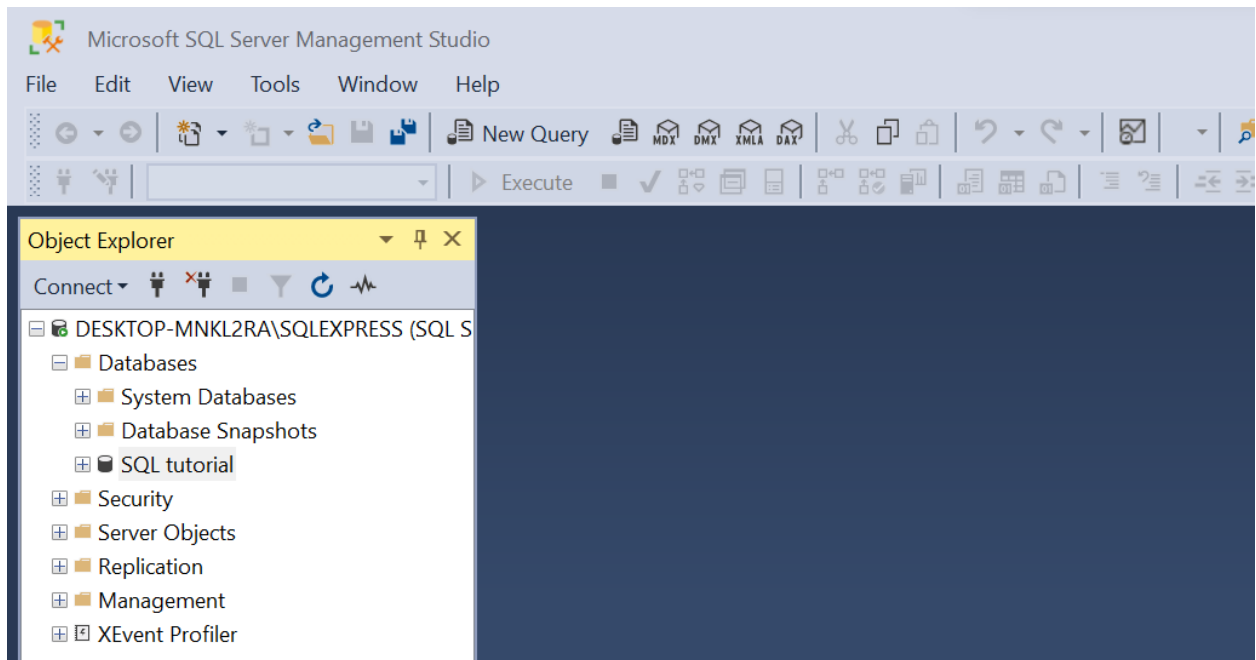


I kept name: SQL tutorial:



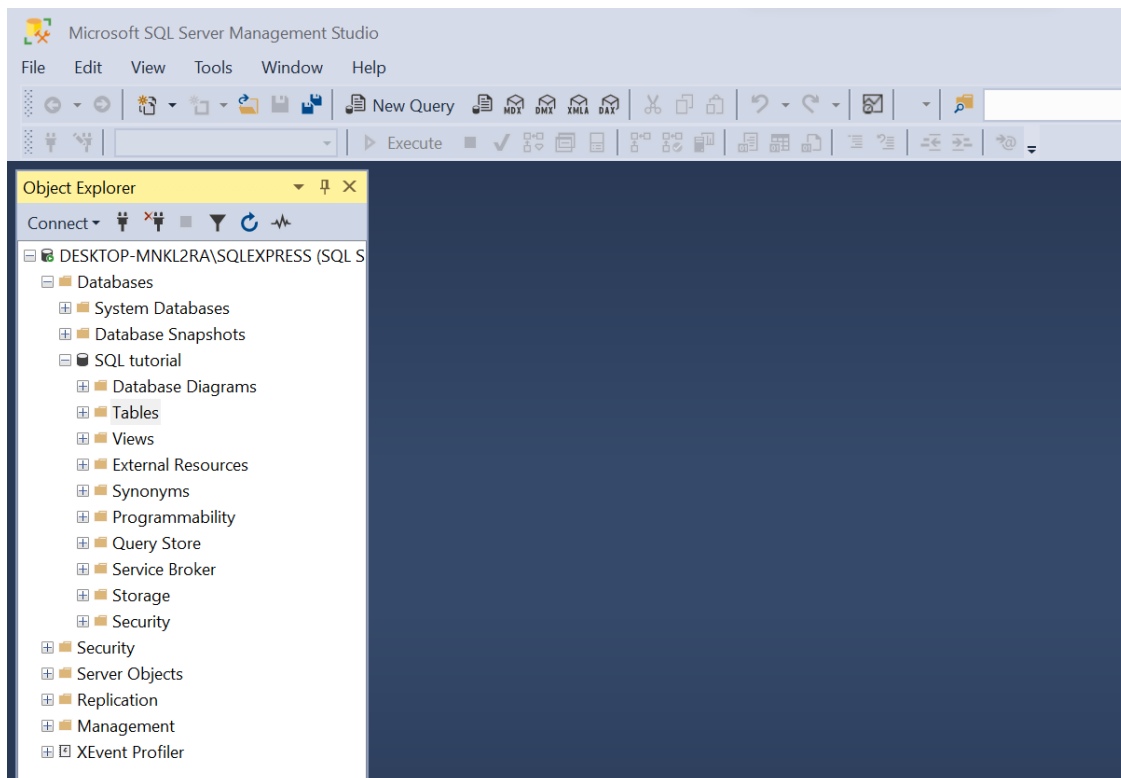
Click ok.

Now we can see our database:



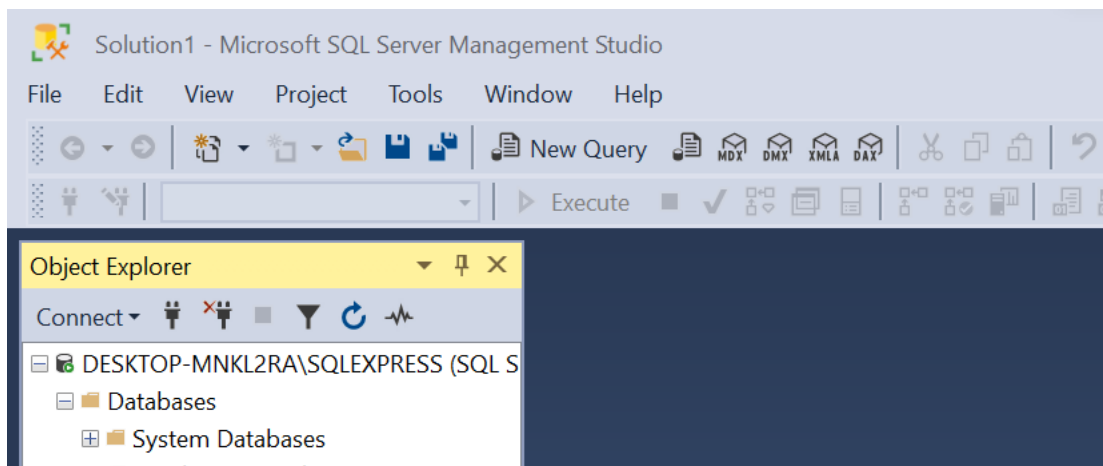
Now let's create table with query:

Expand created database and we can see table, we can right click it, to create new table:

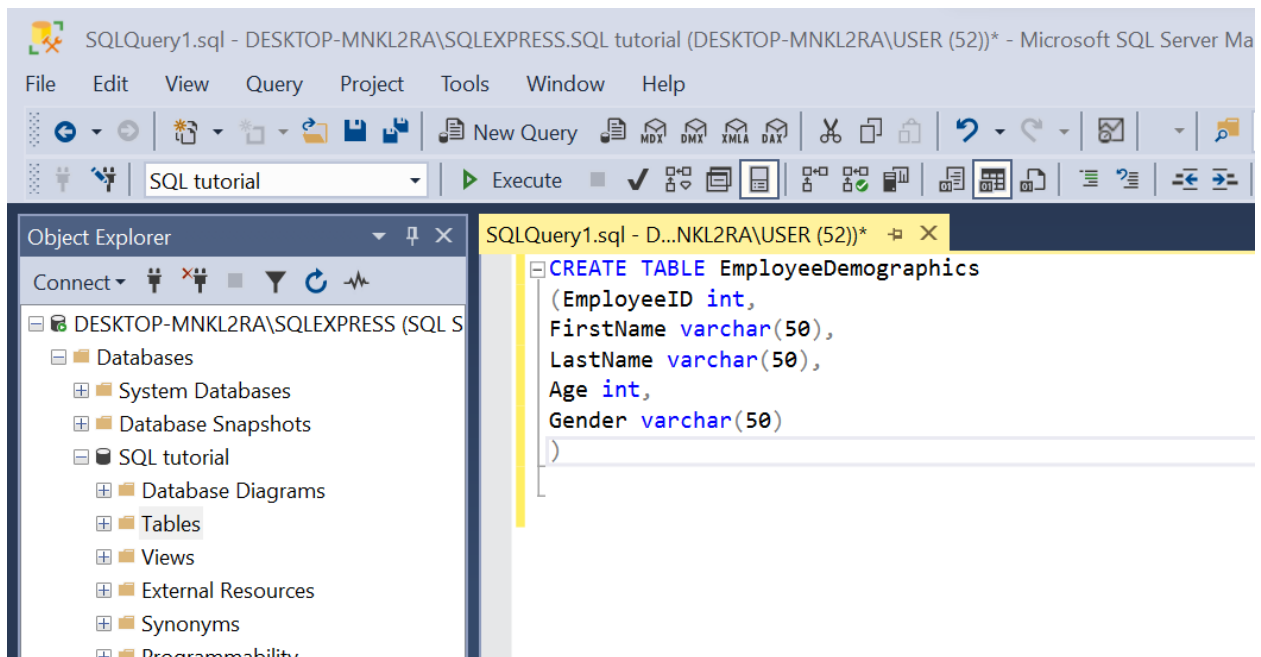


But, instead of that, lets use **query** too get stronger on SQL.

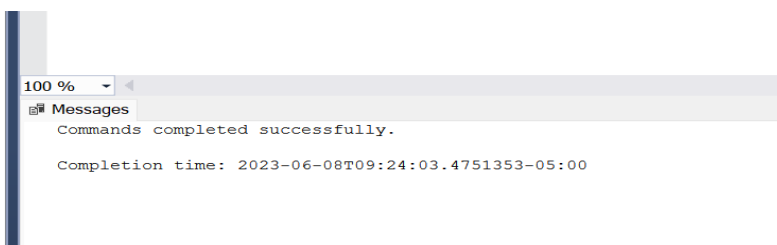
Click on new query:



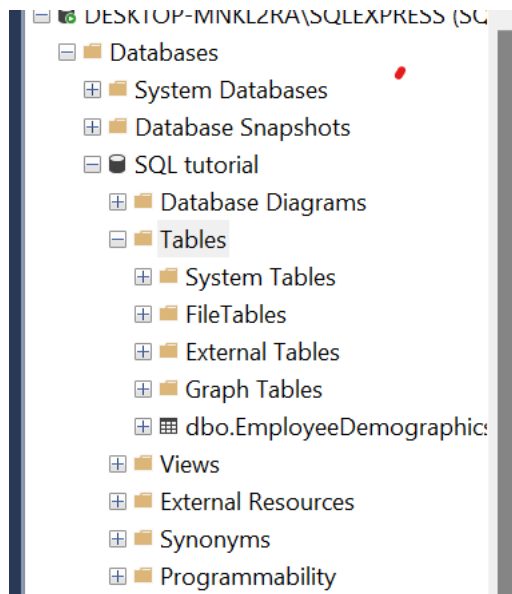
We write query for our first table, now let's run that by executing:



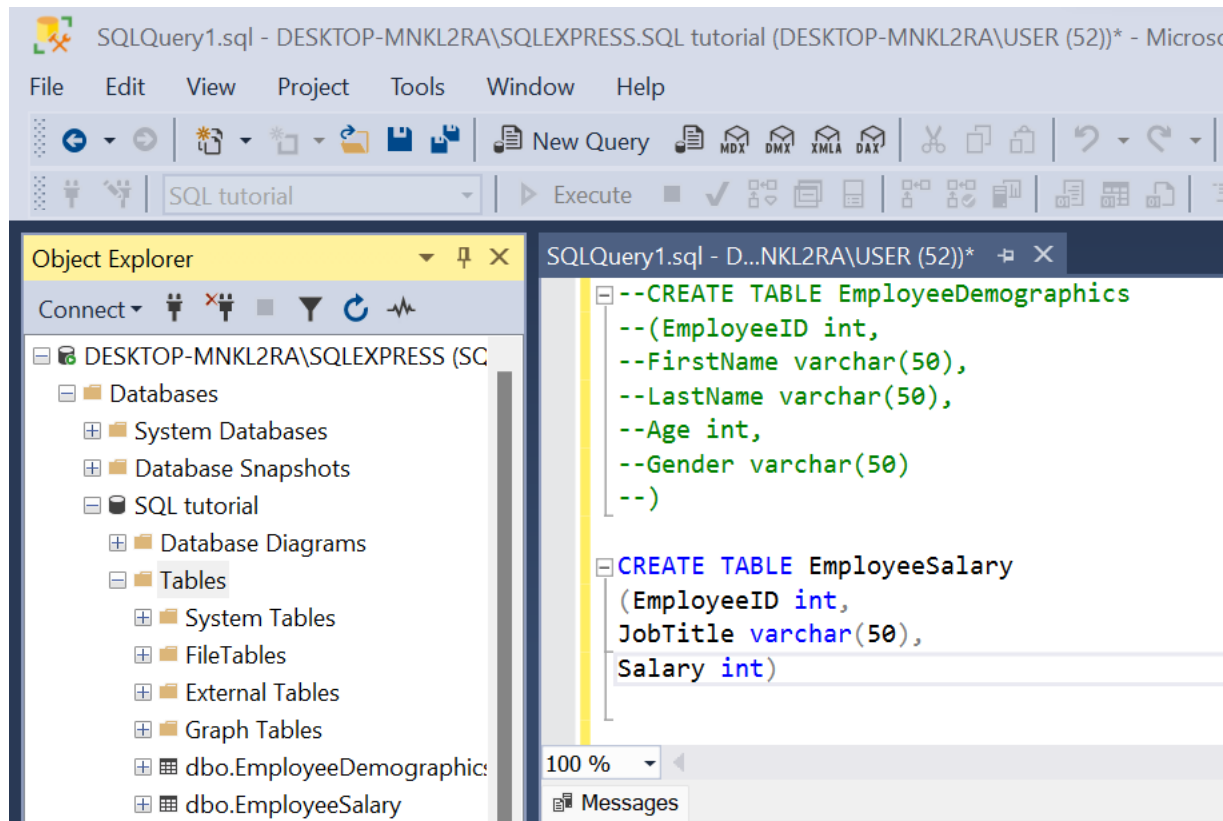
After clicking execute, we get this pop-up message:



Now, if want to check whether table has been created or not, click on + on right side on table, we can see table, if not, right click on table and click refresh:



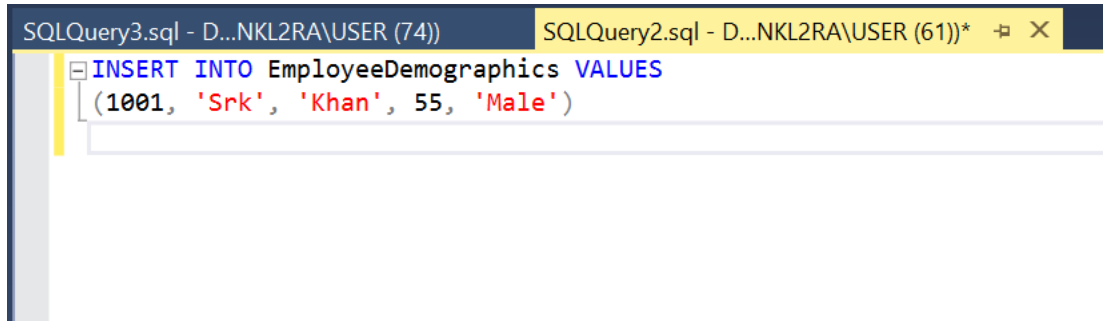
Now let's create next table, in same page, you can comment that section (previous table for now):



Now, let's insert data in table:

New Query:

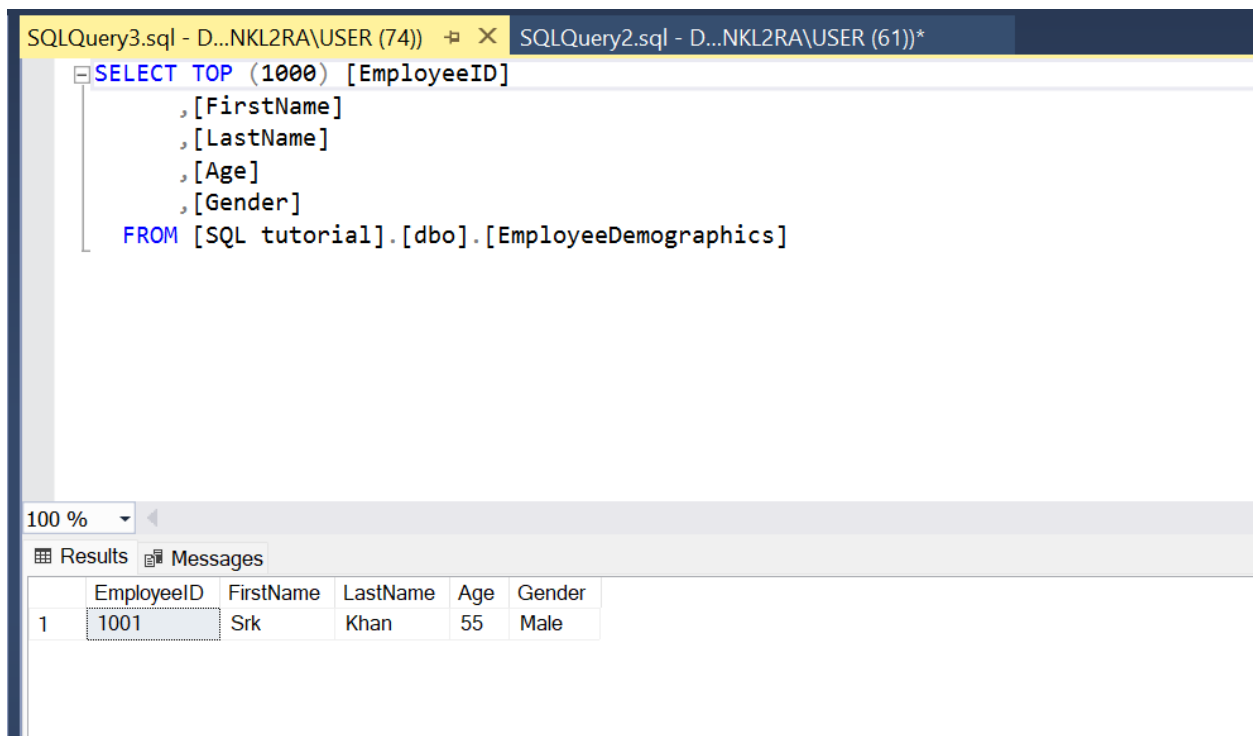
Let's just execute by adding one values (Just to confirm its working)



The screenshot shows a SQL Server Enterprise Manager interface. At the top, there are two tabs: 'SQLQuery3.sql - D...NKL2RA\USER (74))' and 'SQLQuery2.sql - D...NKL2RA\USER (61))\*'. The active window displays the following SQL statement:

```
INSERT INTO EmployeeDemographics VALUES  
(1001, 'SrK', 'Khan', 55, 'Male')
```

Let's see in table too, select right click table, show 1000 rows



The screenshot shows the same SQL Server Enterprise Manager interface. The active window now displays the following SQL statement:

```
SELECT TOP (1000) [EmployeeID]  
      ,[FirstName]  
      ,[LastName]  
      ,[Age]  
      ,[Gender]  
FROM [SQL tutorial].[dbo].[EmployeeDemographics]
```

Below the query window, there is a 'Results' tab. The 'Results' grid shows the following data:

	EmployeeID	FirstName	LastName	Age	Gender
1	1001	Srk	Khan	55	Male

Now, we know, how to INSERT value, I will delete it and insert other values.

```
SQLQuery3.sql - D...NKL2RA\USER (74))  SQLQuery2.sql - D...NKL2RA\USER (61))* + X
INSERT INTO EmployeeDemographics VALUES
(1001, 'Jim', 'Halpert', 30, 'Male'),
(1002, 'Pam', 'Beasley', 30, 'Female'),
(1003, 'Dwight', 'Schrute', 29, 'Male'),
(1004, 'Angela', 'Martin', 31, 'Female'),
(1005, 'Toby', 'Flenderson', 32, 'Male'),
(1006, 'Michael', 'Scott', 35, 'Male'),
(1007, 'Meredith', 'Palmer', 32, 'Female'),
(1008, 'Stanley', 'Hudson', 38, 'Male'),
(1009, 'Kevin', 'Malone', 31, 'Male')

100 %
Messages

(9 rows affected)

Completion time: 2023-06-08T15:49:21.1189908-05:00
```

---

## SQL SELECT

Let's practice select today:

Selecting everything in the table:

SQLQuery2.sql - D...NKL2RA\USER (55))\* X SQLQuery1.sql - D...NKL2RA\USER (54))

```
SELECT * FROM EmployeeSalary
```

100 %

Results Messages

	EmployeeID	JobTitle	Salary
1	1001	Salesman	45000
2	1002	Receptionist	36000
3	1003	Salesman	63000
4	1004	Accountant	47000
5	1005	HR	50000
6	1006	Regional Manager	65000
7	1007	Supplier Relations	41000
8	1008	Salesman	48000
9	1009	Accountant	42000

Selecting only EmployeeID:

SQLQuery2.sql - D...NKL2RA\USER (55))\* X SQLC

```
SELECT EmployeeID  
FROM EmployeeSalary
```

100 %

Results Messages

	EmployeeID
1	1001
2	1002
3	1003
4	1004
5	1005
6	1006
7	1007
8	1008
9	1009



SQLQuery2.sql - D...NKL2RA\USER (55))\* X SQLQuery1.sql - D...NKL2RA\USER (54))

```
SELECT * FROM EmployeeDemographics
```

100 %

Results Messages

	EmployeeID	FirstName	LastName	Age	Gender
1	1001	Jim	Halpert	30	Male
2	1002	Pam	Beasley	30	Female
3	1003	Dwight	Schrute	29	Male
4	1004	Angela	Martin	31	Female
5	1005	Toby	Flenderson	32	Male
6	1006	Michael	Scott	35	Male
7	1007	Meredith	Palmer	32	Female
8	1008	Stanley	Hudson	38	Male
9	1009	Kevin	Malone	31	Male

Now, if we want first name and second name only showing with separate like comma:

SQLQuery2.sql - D...NKL2RA\USER (55))\* X SQLQuery1.sql - D...NKL2RA\USER (54))

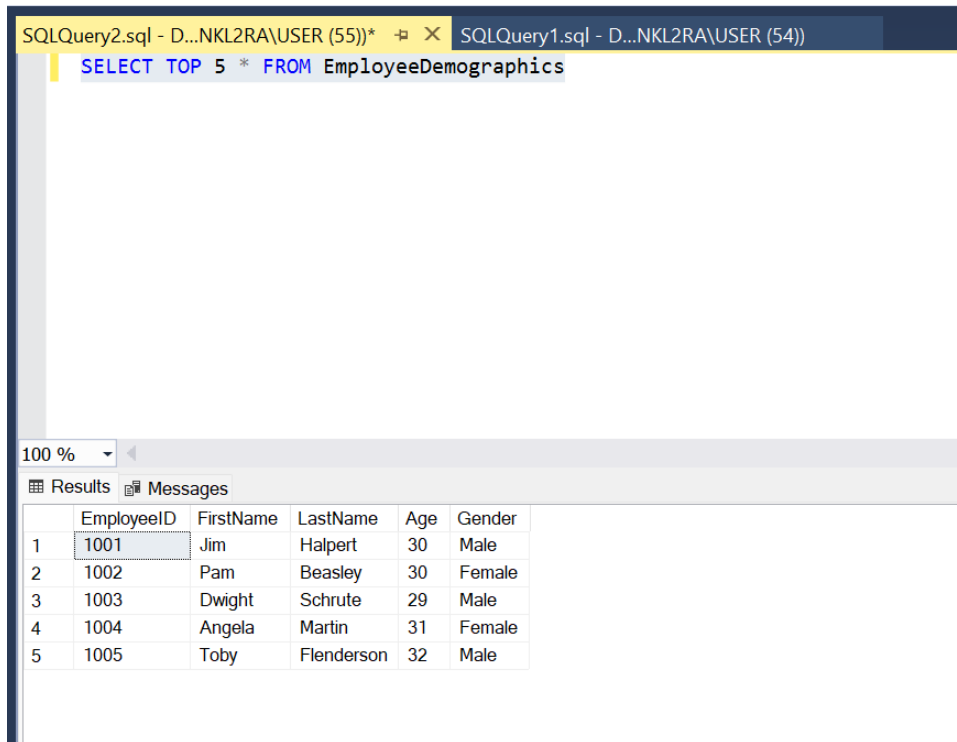
```
SELECT FirstName, LastName FROM EmployeeDemographics
```

100 %

Results Messages

	FirstName	LastName
1	Jim	Halpert
2	Pam	Beasley
3	Dwight	Schrute
4	Angela	Martin
5	Toby	Flenderson
6	Michael	Scott
7	Meredith	Palmer
8	Stanley	Hudson
9	Kevin	Malone

Now, suppose we only want top 5 rows with everything or first 5 rows:



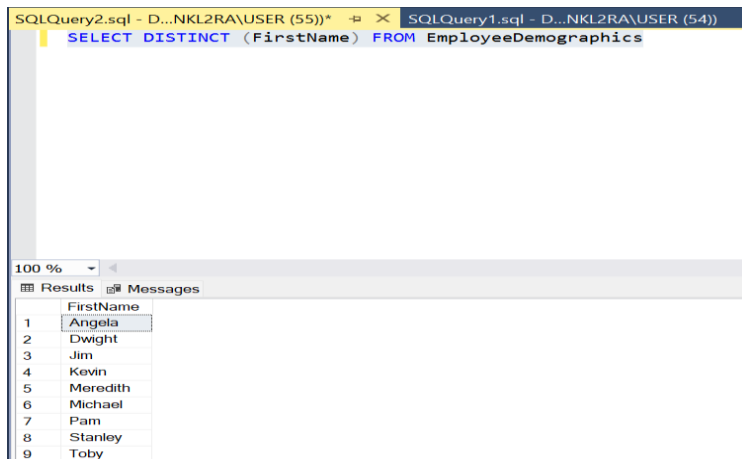
The screenshot shows a SQL Server Enterprise Manager interface. At the top, there are two tabs: 'SQLQuery2.sql - D...NKL2RA\USER (55))' and 'SQLQuery1.sql - D...NKL2RA\USER (54))'. The active tab is 'SQLQuery1.sql - D...NKL2RA\USER (54))', which contains the SQL statement: `SELECT TOP 5 * FROM EmployeeDemographics`. Below the query window, there is a 'Results' tab and a 'Messages' tab. The 'Results' tab is active, displaying a table with 5 rows and 6 columns: EmployeeID, FirstName, LastName, Age, Gender. The data is as follows:

	EmployeeID	FirstName	LastName	Age	Gender
1	1001	Jim	Halpert	30	Male
2	1002	Pam	Beasley	30	Female
3	1003	Dwight	Schrute	29	Male
4	1004	Angela	Martin	31	Female
5	1005	Toby	Flenderson	32	Male

Now, Distinct – DISTINCT will return unique value

Example:

Let's start with first name: It will return everything because all name is unique (no duplication) but, if we try with gender, will it return 9 values or with age?



The screenshot shows a SQL Server Enterprise Manager interface. At the top, there are two tabs: 'SQLQuery2.sql - D...NKL2RA\USER (55))' and 'SQLQuery1.sql - D...NKL2RA\USER (54))'. The active tab is 'SQLQuery1.sql - D...NKL2RA\USER (54))', which contains the SQL statement: `SELECT DISTINCT (FirstName) FROM EmployeeDemographics`. Below the query window, there is a 'Results' tab and a 'Messages' tab. The 'Results' tab is active, displaying a table with 9 rows and 1 column: FirstName. The data is as follows:

	FirstName
1	Angela
2	Dwight
3	Jim
4	Kevin
5	Meredith
6	Michael
7	Pam
8	Stanley
9	Toby

Now, with Gender and age?

```
SELECT DISTINCT (Gender) FROM EmployeeDemographics
```

100 %

Results Messages

	Gender
1	Female
2	Male

SQLQuery2.sql - D...\NKL2RA\USER (55))\* X SQLQuery1.sql - D...\NKL2RA\USER (54))

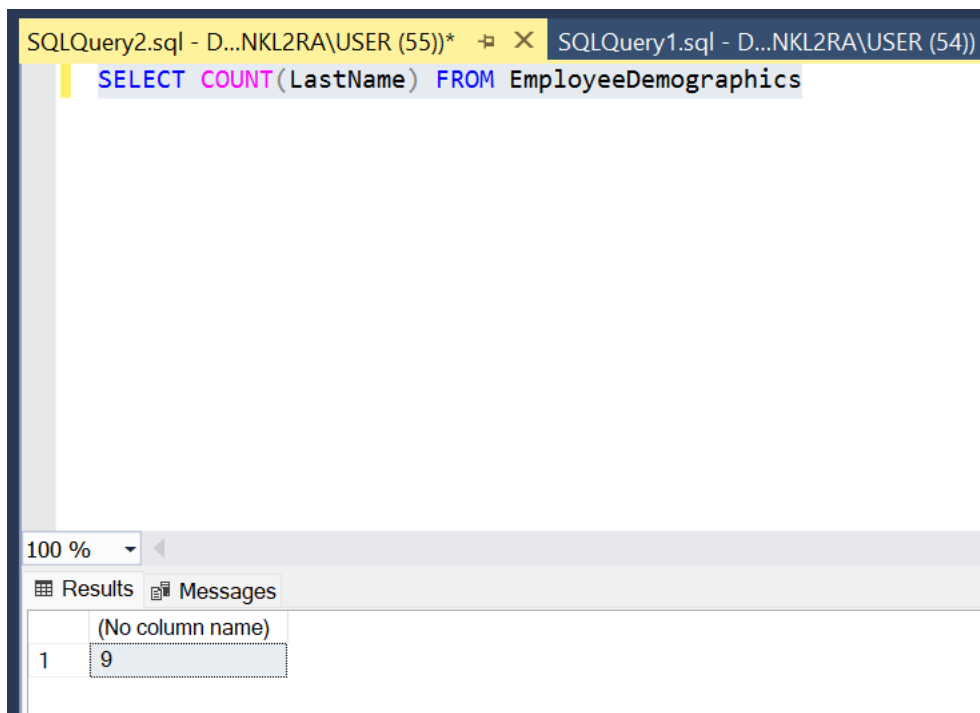
```
SELECT DISTINCT (Age) FROM EmployeeDemographics
```

100 %

Results Messages

	Age
1	29
2	30
3	31
4	32
5	35
6	38

COUNT: Count will return adding all non-null values



The screenshot shows a SQL Server Enterprise Manager window with two tabs: 'SQLQuery2.sql - D...NKL2RA\USER (55))\*' and 'SQLQuery1.sql - D...NKL2RA\USER (54))'. The active tab displays the following SQL query:

```
SELECT COUNT(LastName) FROM EmployeeDemographics
```

Below the query editor, the 'Results' tab is selected, showing a single row of data:

(No column name)
9

We can see there is no column name in count, if we want to have column name then we have to use AS.



The screenshot shows a SQL Server Enterprise Manager window with two tabs: 'SQLQuery2.sql - D...NKL2RA\USER (55))\*' and 'SQLQuery1.sql - D...NKL2RA\USER (54))'. The active tab displays the following SQL query:

```
SELECT COUNT(LastName) AS lastNameCount FROM EmployeeDemographics
```

Below the query editor, the 'Results' tab is selected, showing a single row of data with a column header:

lastNameCount
9

Now, let's look MAX, MIN, AVG

SQLQuery2.sql - D...NKL2RA\USER (55))\* X SQLQuery1.sql - D...Nk

```
SELECT MAX(Salary) FROM EmployeeSalary
```

100 %

Results Messages

	(No column name)
1	65000

SQLQuery2.sql - D...NKL2RA\USER (55))\* X SQLQuery1.sql

```
SELECT MIN(Salary) FROM EmployeeSalary
```

100 %

Results Messages

	(No column name)
1	36000

SQLQuery2.sql - D...NKL2RA\USER (55))\* X SQLQuery1.sql - D...NKL2RA\USER

```
SELECT AVG(Salary) FROM EmployeeSalary
```

100 %

Results Messages

	(No column name)
1	48555