



DIVISION OF  
DIGITAL CONTENTS  
DONGSEO UNIVERSITY

# Database **Work with SSMS**

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April 21, 2019

# Create Database

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SQLQuery1.sql - DESKTOP-M0Q9EGC\SQLEXPRESS.master (sa (52))\* - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

master Execute Debug

Object Explorer

- DESKTOP-M0Q9EGC\SQLEXPRESS (SQL Server)
- Databases
- Security
- Server Objects
- Replication
- Management
- XEvent Profiler

SQLQuery1.sql - DESKTOP-M0Q9EGC\SQLEXPRESS.master (sa (52))\*

```
create database Customer
```

146 %

Messages

Commands completed successfully.

146 %

Query executed successfully. | DESKTOP-M0Q9EGC\SQLEXPRESS ... | sa (52) | master | 00:00:00 | 0 rows

Properties

Current connection parameters

Aggregate Status

Connection failure:	
Elapsed time	00:00:00.353
Finish time	4/12/2019 10:30:25 P
Name	DESKTOP-M0Q9EGC
Rows returned	0
Start time	4/12/2019 10:30:24 P
State	Open

Connection

Connection name	DESKTOP-M0Q9EGC
-----------------	-----------------

Connection Details

Azure Active Direct	
Connection elapsed	00:00:00.353
Connection encrypt	Not encrypted
Connection finish t	4/12/2019 10:30:25 P
Connection rows re	0
Connection start ti	4/12/2019 10:30:24 P
Connection state	Open

Name

The name of the connection.

Ready Ln 2 Col 1 Ch 1 INS

SQLQuery1.sql - DESKTOP-M0Q9EGC\SQLEXPRESS.master (sa (52))\* - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

Object Explorer

- Connect
- DESKTOP-M0Q9EGC
- msdb
- tempdb
- System Databases
- Customer**
- Security
- Server Objects
- Replication
- Management
- XEvent Profiler

SQLQuery1.sql - DESKTOP-M0Q9EGC\SQLEXPRESS.master (sa (52))\*

```
create database Customer
```

146 %

Messages

Commands completed successfully.

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Query executed successfully. | DESKTOP-M0Q9EGC\SQLEXPRESS ... | sa (52) | master | 00:00:00 | 0 rows

Properties

Current connection parameters

**Aggregate Status**

Connection failure:	
Elapsed time	00:00:00.353
Finish time	4/12/2019 10:30:25 P
Name	DESKTOP-M0Q9EGC
Rows returned	0
Start time	4/12/2019 10:30:24 P
State	Open

**Connection**

Connection name	DESKTOP-M0Q9EGC
-----------------	-----------------

**Connection Details**

Azure Active Direct	
Connection elapsed	00:00:00.353
Connection encrypt	Not encrypted
Connection finish t	4/12/2019 10:30:25 P
Connection rows re	0
Connection start ti	4/12/2019 10:30:24 P
Connection state	Open

**Name**

The name of the connection.

# Create Table with Sql

---

MyCustomer - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

Customer Execute Debug

Object Explorer

- DESKTOP-M0Q9EGC\SQLEXPRESS (SQL Server 12.0)
- Databases
  - System Databases
  - Customer
- Security
- Server Objects
- Replication
- Management
- XEvent Profiler

SQLQuery create ta....Customer (sa (53)) SQLQuery4.sql - DE....Customer (sa (52))

```
create table MyUser
(
    loginName varchar(40),
    nickName varchar(40),
    age int,
    creationDate datetime
)
```

Properties

Current connection parameters

Aggregate Status

Connection failure	
Elapsed time	
Finish time	
Name	DESKTOP-M0Q9EGC
Rows returned	0
Start time	
State	Open

Connection

Connection name	DESKTOP-M0Q9EGC
-----------------	-----------------

Connection Details

Azure Active Direct	
Connection elapse	
Connection encryp	Not encrypted
Connection finish	
Connection rows r	0
Connection start ti	
Connection state	Open

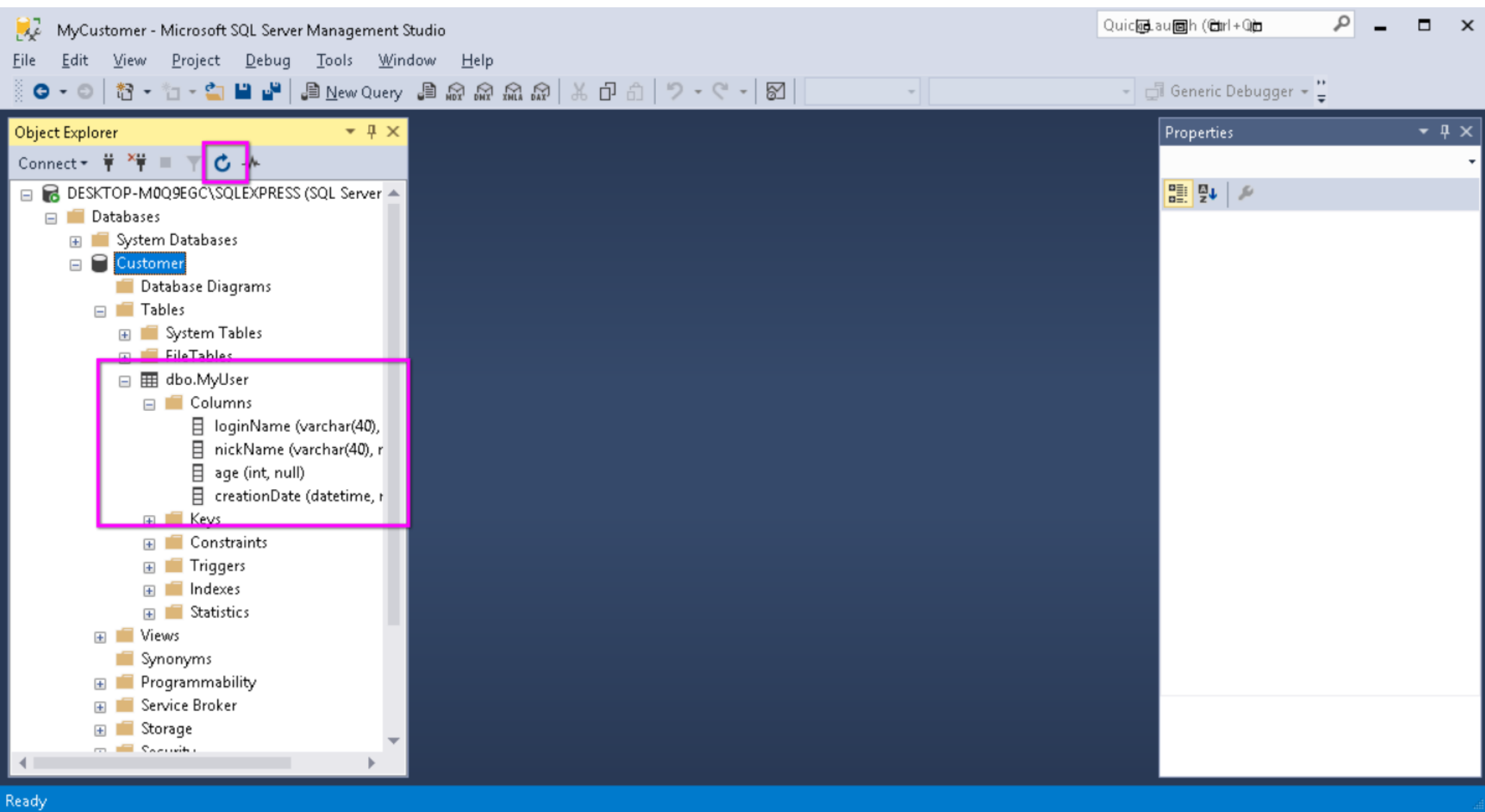
Name

The name of the connection.

146 %

Connected. (1/1) | DESKTOP-M0Q9EGC\SQLEXPRESS ... | sa (53) | Customer | 00:00:00 | 0 rows

Ready Ln 7 Col 2 Ch 2 INS



MyCustomer - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

Customer Execute Debug

Object Explorer

- DESKTOP-M0Q9EGC\SQLEXPRESS (SQL Server)
  - Databases
    - System Databases
    - Customer
      - Database Diagrams
      - Tables
        - System Tables
        - FileTables
        - dbo.MyUser
          - Columns
            - loginName (varchar(40),
            - nickName (varchar(40), r
            - age (int, null)
            - creationDate (datetime, r
          - Keys
          - Constraints
          - Triggers
          - Indexes
          - Statistics
        - Views
        - Synonyms
        - Programmability
        - Service Broker

SQLQuery: insert into Customer (sa (52))

```
insert into
    MyUser(loginName,nickName,age,creationDate)
values
    ('jintaeks','jintaeksNick',50,getdate())
```

146 %

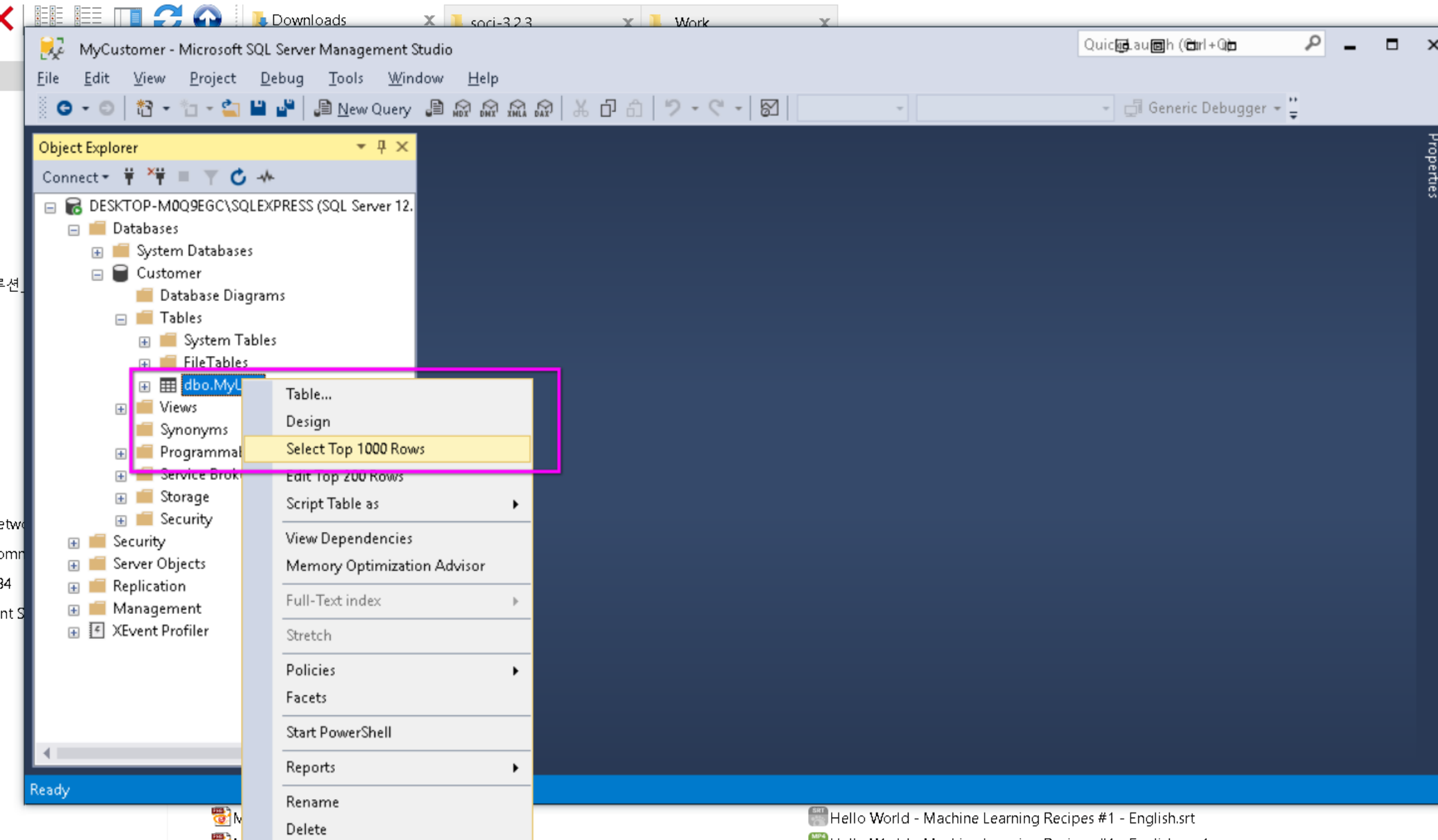
Connected. (1/1)

DESKTOP-M0Q9EGC\SQLEXPRESS ... | sa (52) | Customer | 00:00:00 | 0 rows

Matches: )

Ln 2 Col 5 Ch 2 INS





MyCustomer - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

Customer Execute Debug

Object Explorer

- DESKTOP-M0Q9EGC\SQLEXPRESS (SQL Server 12.0)
- Databases
  - System Databases
  - Customer
    - Database Diagrams
    - Tables
      - System Tables
      - FileTables
      - dbo.MyUser
    - Views
    - Synonyms
    - Programmability
    - Service Broker
    - Storage
    - Security
  - Security
  - Server Objects
  - Replication
  - Management
  - XEvent Profiler

SQLQuery7.sql - DE...Customer (sa (52))

```
/*Script for SelectTopNRows command from SSMS */  
SELECT TOP (1000) [loginName]  
                ,[nickName]  
                ,[age]  
                ,[creationDate]  
FROM [Customer].[dbo].[MyUser]
```

Results

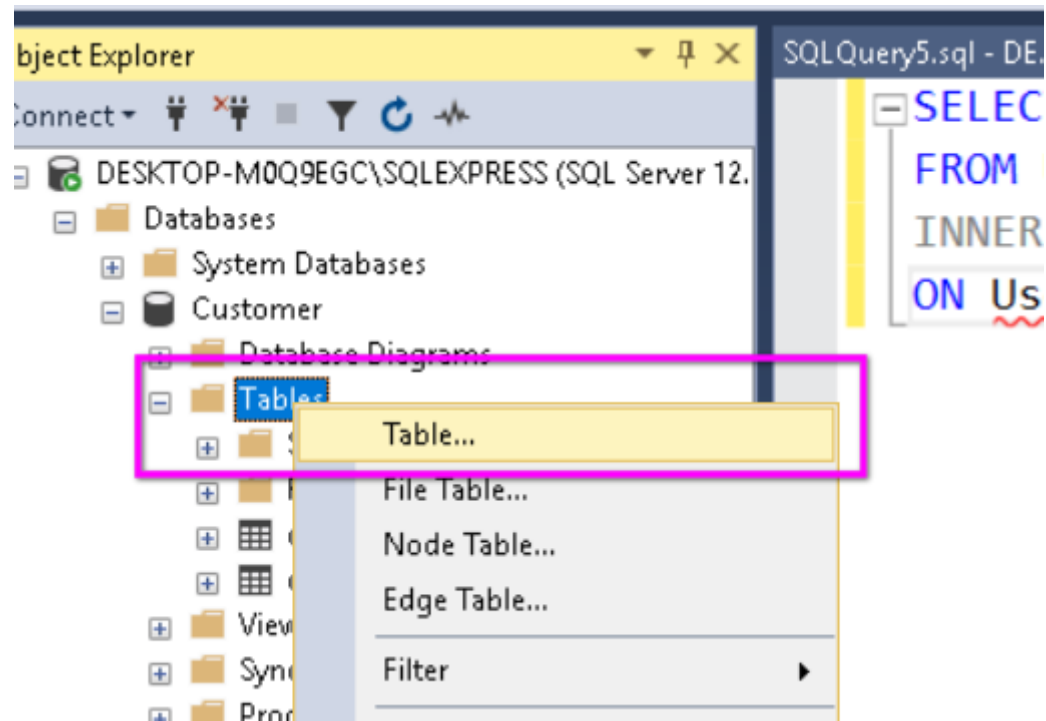
	loginName	nickName	age	creationDate
1	jintaeks	jintaeksNick	50	2019-04-12 22:45:39,863

Query executed successfully. | DESKTOP-M0Q9EGC\SQLEXPRESS ... | sa (52) | Customer | 00:00:00 | 1 rows

Ready Ln 1 Col 1 Ch 1 INS

# Create Table with IDE

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DESKTOP-M0Q9EGC\SQLEXPRESS.Customer - dbo.Table\_1\* - Microsoft SQL Server Management Studio

File Edit View Project Debug Table Designer Tools Window Help

Object Explorer

Connect

DESKTOP-M0Q9EGC\SQLEXPRESS (SQL Server 12.0)

- Databases
  - System Databases
  - Customer
    - Database Diagrams
    - Tables
      - System Tables
      - FileTables
      - dbo.Character
      - dbo.MyUser
    - Views
    - Synonyms
    - Programmability
    - Service Broker
    - Storage
    - Security
  - Security
  - Server Objects
  - Replication
  - Management
  - XEvent Profiler

DESKTOP-M0Q9EGC\...er - dbo.Table\_1\* SQLQuery5.sql - DE...Customer (sa (56))\*

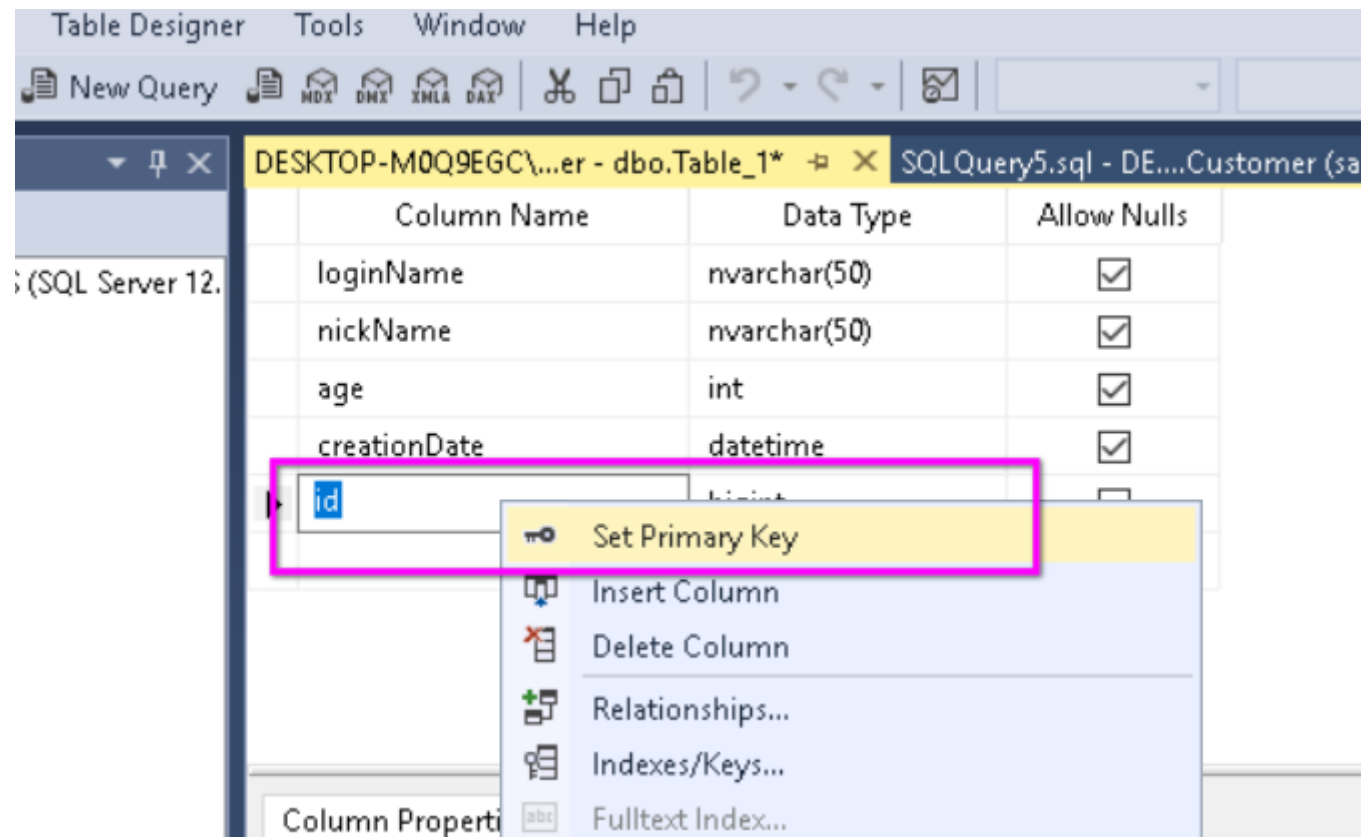
Column Name	Data Type	Allow Nulls
loginName	nvarchar(50)	<input checked="" type="checkbox"/>
nickName	nvarchar(50)	<input checked="" type="checkbox"/>
age	int	<input checked="" type="checkbox"/>
creationDate	datetime	<input checked="" type="checkbox"/>
id	bigint	<input type="checkbox"/>

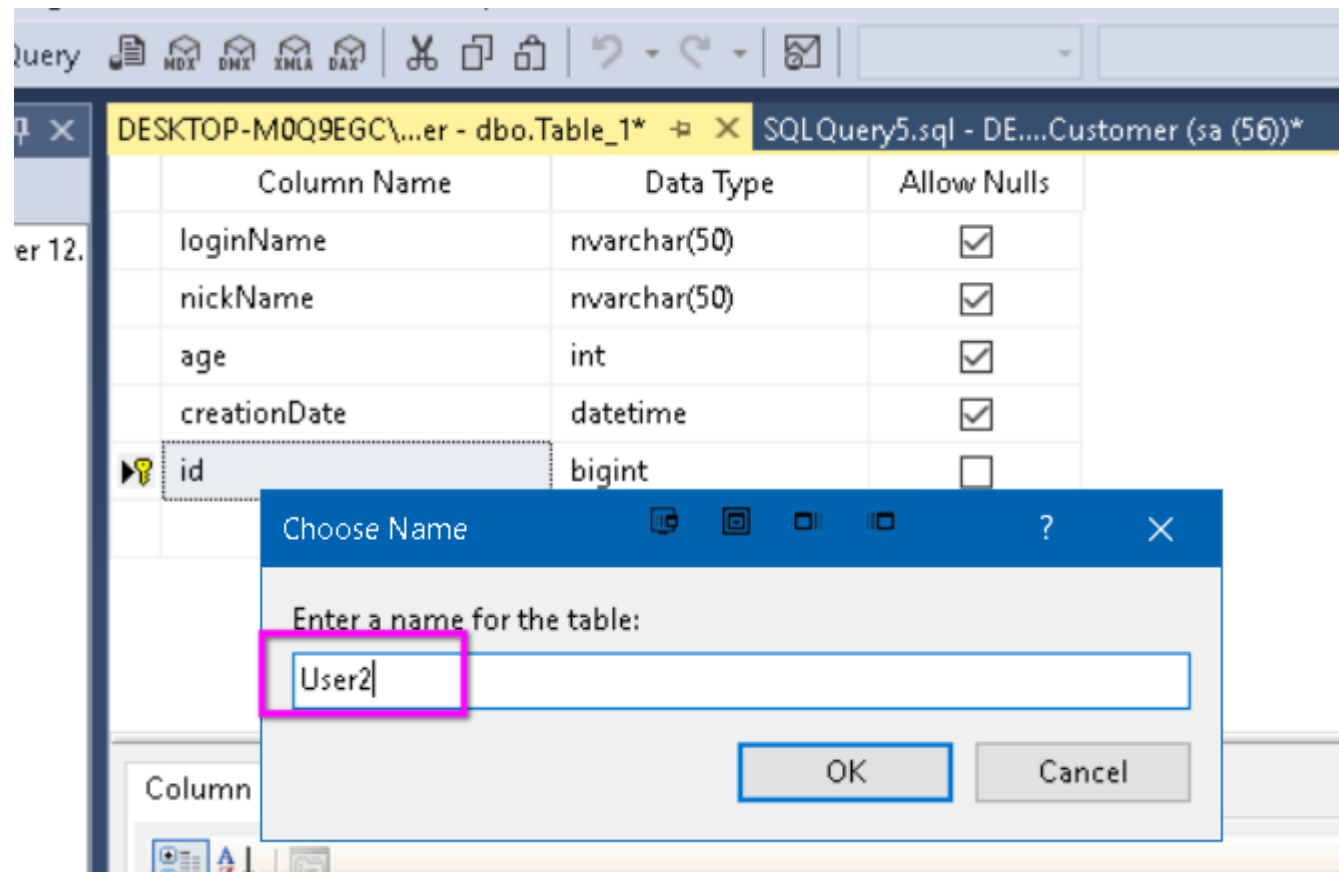
Column Properties

Identity Specification	Yes
(Is Identity)	Yes
Identity Increment	1
Identity Seed	1
Indexable	Yes
Is Columnset	No

(Is Identity)

Ready





DESKTOP-M0Q9EGC\SQLEXPRESS.Customer - dbo.Character\* - Microsoft SQL Server Management Studio

File Edit View Project Debug Table Designer Tools Window Help

Object Explorer

Connect

DESKTOP-M0Q9EGC\SQLEXPRESS (SQL Server 12.0)

- Databases
  - System Databases
  - Customer
    - Database Diagrams
    - Tables
      - System Tables
      - FileTables
      - dbo.Character**
      - dbo.MyUser
      - dbo.User2
    - Views
    - Synonyms
    - Programmability
    - Service Broker
    - Storage
    - Security
  - Security
  - Server Objects
  - Replication
  - Management
  - XEvent Profiler

DESKTOP-M0Q9EGC\SQLEXPRESS - dbo.Character\* | DESKTOP-M0Q9EGC\SQLEXPRESS - dbo.User2

Column Name	Data Type	Allow Nulls
characterType	int	<input checked="" type="checkbox"/>
userId	bigint	<input type="checkbox"/>
		<input type="checkbox"/>

Column Properties

(General)

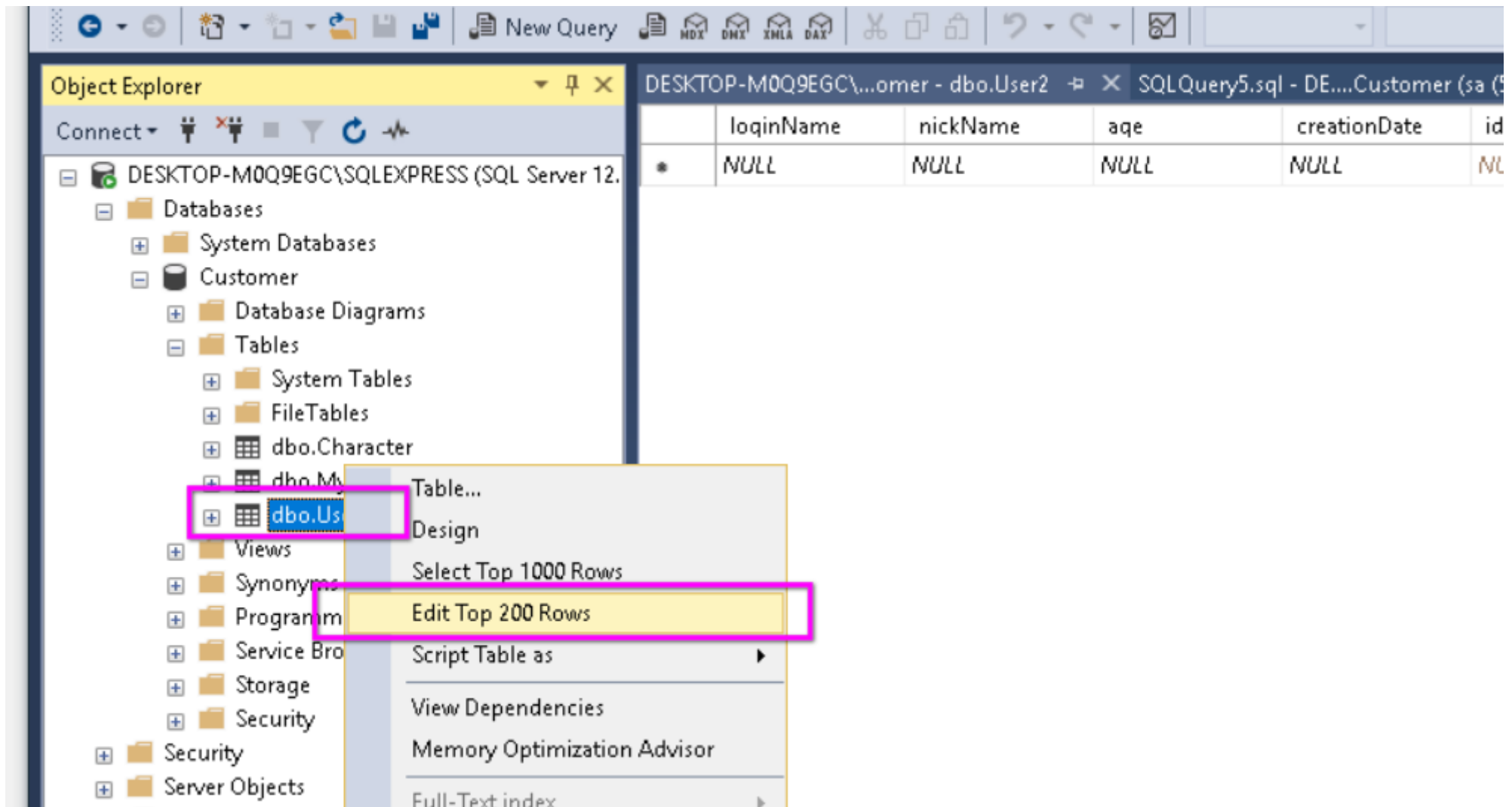
(Name)	userId
Allow Nulls	No
Data Type	bigint
Default Value or Binding	

Table Designer

(General)

Item(s) Saved





DESKTOP-M0Q9EGC\SQLEXPRESS.Customer - dbo.User2 - Microsoft SQL Server Management Studio

File Edit View Project Debug Query Designer Tools Window Help

Object Explorer

Connect

DESKTOP-M0Q9EGC\SQLEXPRESS (SQL Server 12.0)

- Databases
  - System Databases
  - Customer
    - Database Diagrams
    - Tables
      - System Tables
      - FileTables
      - dbo.Character
      - dbo.MyUser
      - dbo.User2
    - Views
    - Synonyms
    - Programmability
    - Service Broker
    - Storage
    - Security
  - Security
  - Server Objects
  - Replication
  - Management
  - XEvent Profiler

SQL Query Editor - DESKTOP-M0Q9EGC\SQLEXPRESS.Customer (dbo.User2)

	loginName	nickName	age	creationDate	id
	jintaeks	jintaeksNick	50	2019-04-21 00:00:00	1
	jintaeks2	jintaeks2Nick	50	2019-04-21 00:00:00	2
▶▶	NULL	NULL	NULL	NULL	NULL

3 of 3

Ready

DESKTOP-M0Q9EGC\SQLEXPRESS.Customer - dbo.Character - Microsoft SQL Server Management Studio

File Edit View Project Debug Query Designer Tools Window Help

Object Explorer

Connect

DESKTOP-M0Q9EGC\SQLEXPRESS (SQL Server 12)

- Databases
  - System Databases
  - Customer
    - Database Diagrams
    - Tables
      - System Tables
      - FileTables
      - dbo.Character**
      - dbo.MyUser
      - dbo.User2
    - Views
    - Synonyms
    - Programmability
    - Service Broker
    - Storage
    - Security
  - Security
  - Server Objects
  - Replication
  - Management
  - XEvent Profiler

DESKTOP-M0Q9EGC\...r - dbo.Character

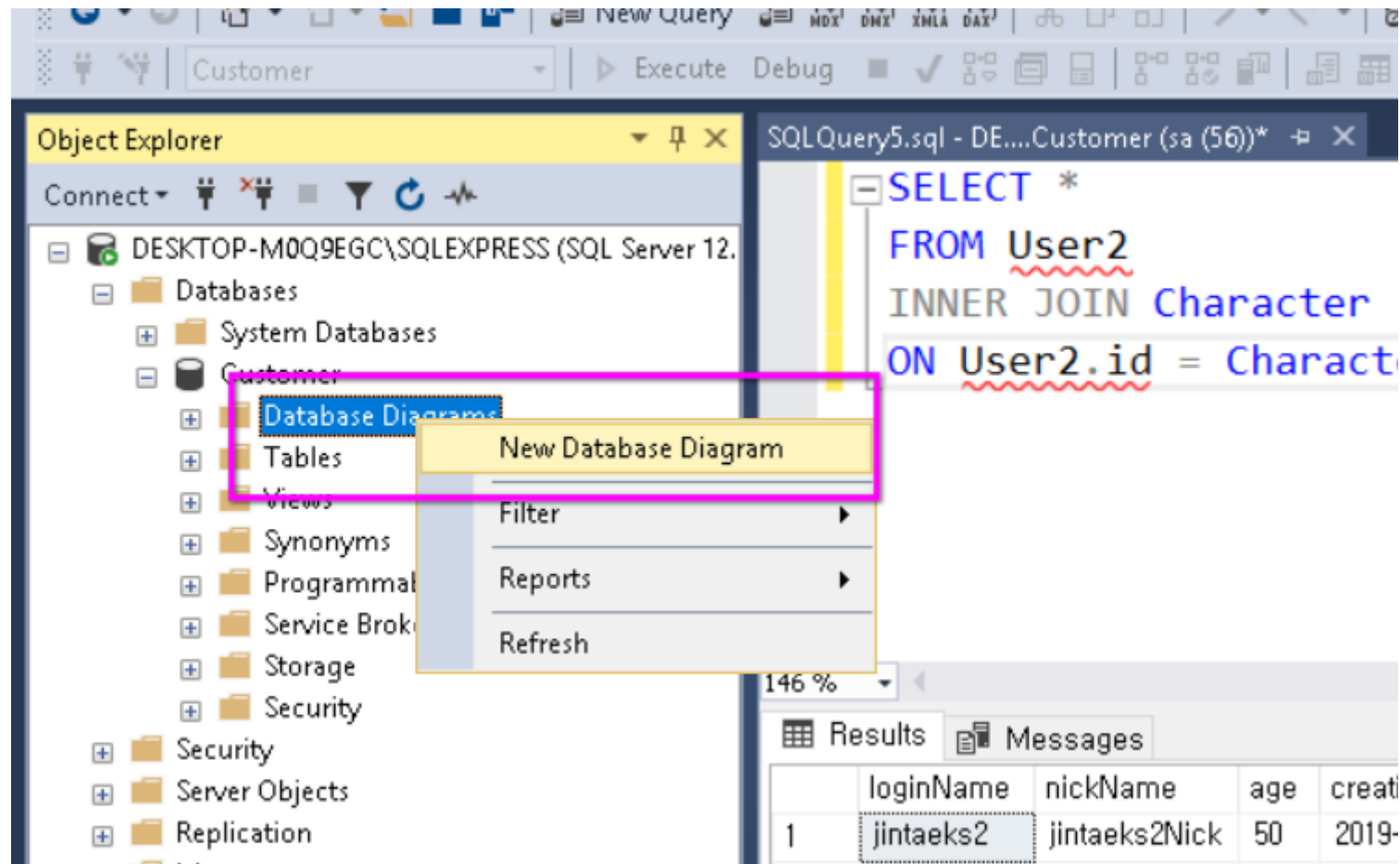
	characterType	userId
▶	1	2
	2	2
	1	1
*	NULL	NULL

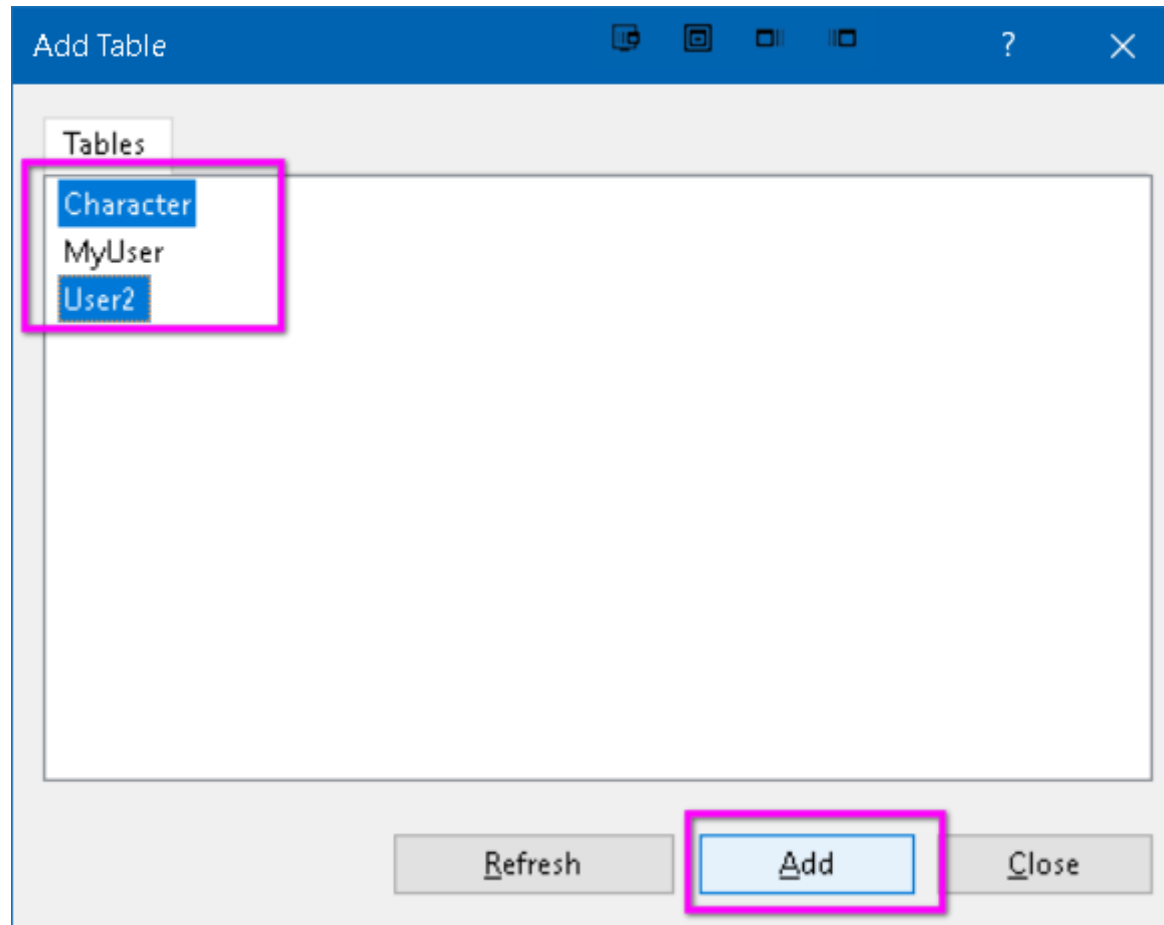
SQLQuery5.sql - DE....Customer (sa (56))\*

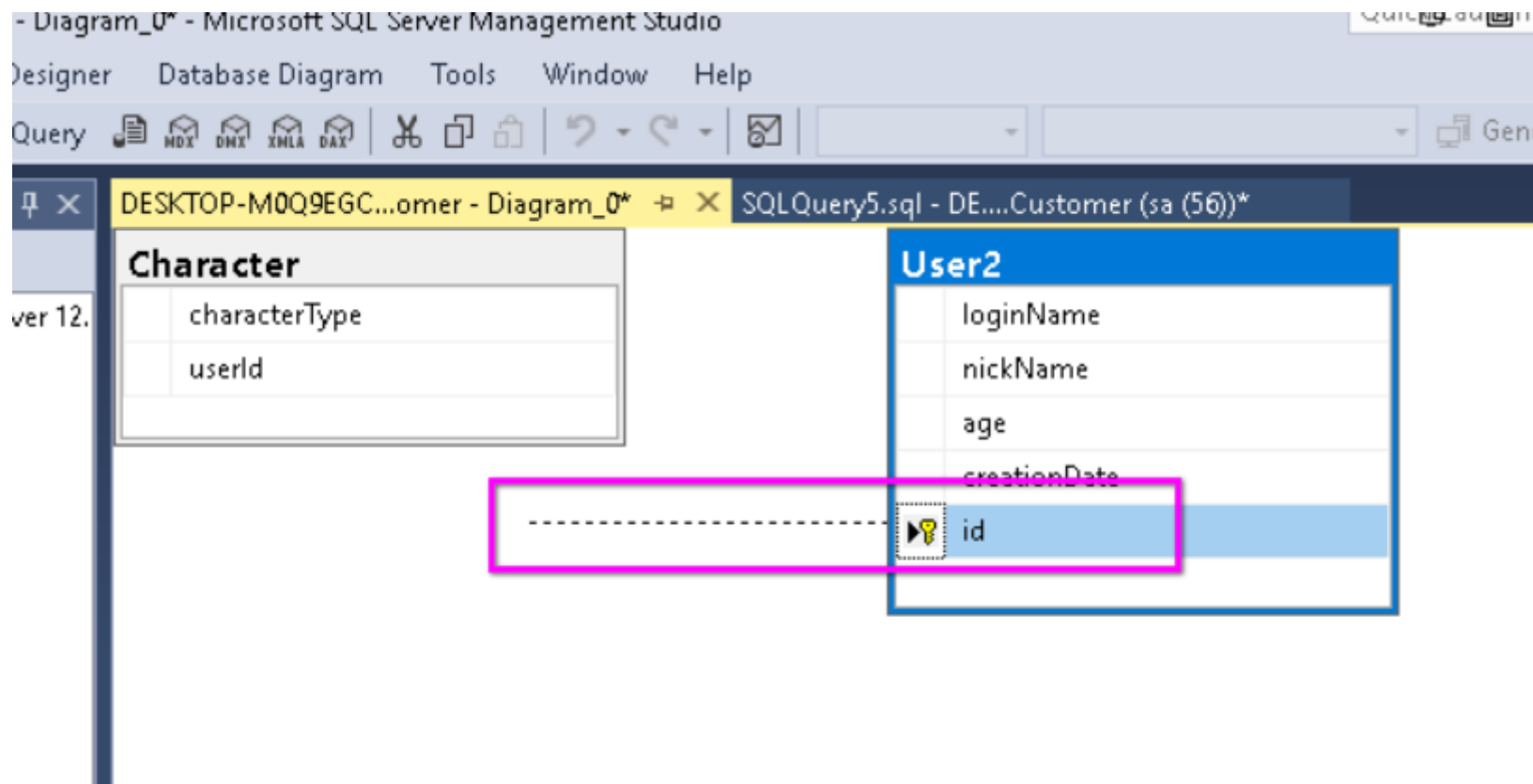
Ready

# Set Relationship

---







Tables and Columns

Relationship name:  
FK\_Character\_User21

Primary key table:  
User2  
id

Foreign key table:  
Character  
userId

OK Cancel



DESKTOP-M0Q9EGC...omer - Diagram\_0\* X SQLQuery5.sql - D

**Character \***

characterType
userId

Use

**Properties**

[Rel] FK\_Character\_User21

**General**

Check Existing Data On Creation On Yes

Tables And Columns Specification

**Database Designer**

Enforce For Replication Yes

Enforce Foreign Key Constraint Yes

**INSERT And UPDATE Specification**

Delete Rule	Cascade
Update Rule	No Action

**Identity**

(Name)	FK_Character_User21
Description	

DESKTOP-M0Q9EGC\SQLEXPRESS.Customer - Diagram\_0\* - Microsoft SQL Server Management Studio

File Edit View Project Debug Table Designer Database Diagram Tools Window Help

Object Explorer

Connect

DESKTOP-M0Q9EGC\SQLEXPRESS (SQL Server 12.0)

- Databases
  - System Databases
  - Customer
    - Database Diagrams
    - Tables
    - Views
    - Synonyms
    - Programmability
    - Service Broker
    - Storage
    - Security
  - Security
  - Server Objects
  - Replication
  - Management
  - XEvent Profiler

DESKTOP-M0Q9EGC...omer - Diagram\_0\* SQLQuery5.sql - DE....Customer (sa (56))\*

**Character \***

characterType
userId

**User2 \***

loginName
nickName
age
creationDate
id

Ready

# join test

---

SQLQuery5.sql - DESKTOP-M0Q9EGC\SQLEXPRESS.Customer (sa (56))\* - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

Customer Execute Debug

Object Explorer

Connect

DESKTOP-M0Q9EGC\SQLEXPRESS (SQL Server 12.0)

- Databases
  - System Databases
  - Customer
    - Database Diagrams
    - Tables
      - System Tables
      - FileTables
      - dbo.Character
      - dbo.MyUser
      - dbo.User2
    - Views
    - Synonyms
    - Programmability
    - Service Broker
    - Storage
    - Security
  - Security
  - Server Objects
  - Replication
  - Management
  - XEvent Profiler

```
SELECT *  
FROM User2  
INNER JOIN Character  
ON User2.id = Character.userId
```

146 %

Results Messages

	loginName	nickName	age	creationDate	id	characterType	userId
1	jintaeks2	jintaeks2Nick	50	2019-04-21 00:00:00,000	2	1	2
2	jintaeks2	jintaeks2Nick	50	2019-04-21 00:00:00,000	2	2	2
3	jintaeks	jintaeksNick	50	2019-04-21 00:00:00,000	1	1	1

Query executed successfully. | DESKTOP-M0Q9EGC\SQLEXPRESS ... | sa (56) | Customer | 00:00:00 | 3 rows

Ready Ln 4 Col 15 Ch 15 INS

# Create Stored Procedure

---

MyCustomer - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

Customer Execute Debug

Object Explorer

- DESKTOP-M0Q9EGC\SQLEXPRESS (SQL Server)
  - Databases
    - System Databases
    - Customer
      - Database Diagrams
      - Tables
      - Views
      - Synonyms
      - Programmability
        - Stored Procedures
          - System Stored Procedures
        - Functions
        - Database Triggers
        - Assemblies
        - Types
        - Rules
        - Defaults
        - Sequences
      - Service Broker
      - Storage
      - Security
    - Security
    - Server Objects

```
USE Customer;
GO
CREATE PROCEDURE dbo.spGetAllUser
AS
SET NOCOUNT ON;
SELECT [loginName]
      ,[nickName]
      ,[age]
      ,[creationDate]
FROM [Customer].[dbo].[MyUser]
GO
```

146 %

Messages

Commands completed successfully.

146 %

Query executed successfully. | DESKTOP-M0Q9EGC\SQLEXPRESS ... | sa (52) | Customer | 00:00:00 | 0 rows

Ready Ln 12 Col 1 Ch 1 INS

MyCustomer - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

Customer Execute Debug

Object Explorer

Connect

DESKTOP-M0Q9EGC\SQLEXPRESS (SQL Server)

Databases

System Databases

Customer

Database Diagrams

Tables

Views

Synonyms

Programmability

Stored Procedures

System

Functions

Database Triggers

Assemblies

Types

Rules

Defaults

Sequences

Service Broker

Storage

Security

Server Objects

SQLQuery7.sql - DE...Customer (sa (52))\*

```
USE Customer;
GO
CREATE PROCEDURE dbo.spGetAllUser
AS
SET NOCOUNT ON;
SELECT [loginName]
,[nickName]
,[age]
,[creationDate]
[Customer].[dbo].[MyUser]
```

Messages

Commands completed successfully.

146 %

Query executed successfully. | DESKTOP-M0Q9EGC\SQLEXPRESS ... | sa (52) | Customer | 00:00:00 | 0 rows

MyCustomer - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

Customer Execute Debug

Object Explorer

- DESKTOP-M0Q9EGC\SQLEXPRESS (SQL Server)
  - Databases
    - System Databases
    - Customer
      - Database Diagrams
      - Tables
      - Views
      - Synonyms
      - Programmability
        - Stored Procedures
          - System Stored Procedures
            - dbo.spGetAllUser
      - Functions
      - Database Triggers
      - Assemblies
      - Types
      - Rules
      - Defaults
      - Sequences
      - Service Broker
      - Storage
      - Security

SQLQuery create st...Customer (sa (52))

```
USE Customer;
GO
CREATE PROCEDURE dbo.spGetAllUser
AS
    SET NOCOUNT ON;
    SELECT [loginName]
        ,[nickName]
        ,[age]
        ,[creationDate]
    FROM [Customer].[dbo].[MyUser]
GO
```

146 %

Messages

Commands completed successfully.

146 %

Query executed successfully. | DESKTOP-M0Q9EGC\SQLEXPRESS ... | sa (52) | Customer | 00:00:00 | 0 rows

Ready Ln 12 Col 1 Ch 1 INS



MyCustomer - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

Customer Execute Debug

Object Explorer

- DESKTOP-M0Q9EGC\SQLEXPRESS (SQL Server)
  - Databases
    - System Databases
    - Customer
      - Database Diagrams
      - Tables
      - Views
      - Synonyms
      - Programmability
        - Stored Procedures
          - System Stored Procedures
          - dbo.spGetAllUser
          - dbo.spUpdateAge**
        - Functions
        - Database Triggers
        - Assemblies
        - Types
        - Rules
        - Defaults
        - Sequences
        - Service Broker
        - Storage
        - Security

SQL Query Editor

```
USE Customer;
GO
CREATE PROCEDURE dbo.spUpdateAge
    @loginName varchar(40),
    @age int
AS
    Update MyUser
    Set age = @age
    Where loginName = @loginName
GO
```

Messages

Commands completed successfully.

Query executed successfully. | DESKTOP-M0Q9EGC\SQLEXPRESS ... | sa (52) | Customer | 00:00:00 | 0 rows

Ready Ln 11 Col 1 Ch 1 INS

SQLQuery1.sql - JINTAEKS2-PC\SQLEXPRESS.Customer (sa (53)) - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

Customer Execute Debug

Object Explorer

Connect

JINTAEKS2-PC\SQLEXPRESS (SQL Server 12.0.2000 - sa)

- Databases
  - System Databases
  - Customer
    - Database Diagrams
    - Tables
    - Views
    - Synonyms
    - Programmability
      - Stored Procedures
        - System Stored Procedures
        - dbo.spEcho
        - dbo.spEcho2
        - dbo.spGetAllUser
        - dbo.spUpdateAge
      - Functions
      - Database Triggers
      - Assemblies
      - Types
      - Rules
      - Defaults
      - Sequences
    - Service Broker
    - Storage
    - Security
  - Security
    - Server Objects
    - Replication
    - Management
    - XEvent Profiler

SQLQuery1.sql - JIN...Customer (sa (53))

```

1 USE [Customer]
2 GO
3 /***** Object: StoredProcedure [dbo].[spEcho]    Script Date: 4/17/2019 7:25:
4 SET ANSI_NULLS ON
5 GO
6 SET QUOTED_IDENTIFIER ON
7 GO
8 ALTER PROCEDURE [dbo].[spEcho]
9     @param1 varchar(20) OUTPUT,
10    @param2 varchar(20)
11 AS
12     select @param1 = @param2
13
14

```

Properties

Current connection parameters

Aggregate Status

Connection failure:	
Elapsed time	
Finish time	
Name	JINTAEKS2-PC\SQLEXPRESS
Rows returned	0
Start time	
State	Open

Connection

Connection name	JINTAEKS2-PC\SQLEXPRESS
-----------------	-------------------------

Connection Details

Azure Active Direct	
Connection elapsed	
Connection encrypt	Not encrypted
Connection finish t	
Connection rows re	0
Connection start ti	
Connection state	Open
Display name	JINTAEKS2-PC\SQLEXPRESS
Login name	sa
Server name	JINTAEKS2-PC\SQLEXPRESS
Server version	12.0.2000
Session Tracing ID	
SPID	53

Name

The name of the connection.

100 %

Connected. (1/1) JINTAEKS2-PC\SQLEXPRESS (12... sa (53) Customer 00:00:00 0 rows

Ready Ln 1 Col 1 Ch 1 INS

SQLQuery2.sql - JINTAEKS2-PC\SQLEXPRESS.Customer (sa (55)) - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

Customer Execute Debug

Object Explorer

Connect

JINTAEKS2-PC\SQLEXPRESS (SQL Server 12.0.2000 - sa)

- Databases
  - System Databases
  - Customer
    - Database Diagrams
    - Tables
    - Views
    - Synonyms
    - Programmability
      - Stored Procedures
        - System Stored Procedures
        - dbo.spEcho
        - dbo.spEcho2**
        - dbo.spGetAllUser
        - dbo.spUpdateAge
      - Functions
      - Database Triggers
      - Assemblies
      - Types
      - Rules
      - Defaults
      - Sequences
    - Service Broker
    - Storage
    - Security
  - Server Objects
  - Replication
  - Management
  - XEvent Profiler

SQLQuery2.sql - JIN....Customer (sa (55)) SQLQuery1.sql - JIN....Customer (sa (53))

```

1 USE [Customer]
2 GO
3 /***** Object: StoredProcedure [dbo].[spEcho2]    Script Date: 4/17/2019 7:27
4 SET ANSI_NULLS ON
5 GO
6 SET QUOTED_IDENTIFIER ON
7 GO
8 ALTER PROCEDURE [dbo].[spEcho2]
9     @param1 varchar(20) OUTPUT
10 AS
11     UPDATE MyUser
12     SET age = age + 1
13     WHERE loginName = @param1
14

```

Properties

Current connection parameters

Aggregate Status

Connection failure:	
Elapsed time	
Finish time	
Name	JINTAEKS2-PC\SQLEXPRESS
Rows returned	0
Start time	
State	Open

Connection

Connection name JINTAEKS2-PC\SQLEXPRESS

Connection Details

Azure Active Direct	
Connection elapsed	
Connection encrypt	Not encrypted
Connection finish t	
Connection rows re	0
Connection start ti	
Connection state	Open
Display name	JINTAEKS2-PC\SQLEXPRESS
Login name	sa
Server name	JINTAEKS2-PC\SQLEXPRESS
Server version	12.0.2000
Session Tracing ID	
SPID	55

Name

The name of the connection.

100 %

Connected. (1/1) JINTAEKS2-PC\SQLEXPRESS (12... sa (55) Customer 00:00:00 0 rows

Ready Ln 1 Col 1 Ch 1 INS

# MY **BRIGHT** FUTURE

**DSU** Dongseo University  
동서대학교