

[Cloud SQL](https://cloud.google.com/sql/) (<https://cloud.google.com/sql/>)

[Documentation](https://cloud.google.com/sql/docs/) (<https://cloud.google.com/sql/docs/>)

[SQL Server](https://cloud.google.com/sql/docs/sqlserver/) (<https://cloud.google.com/sql/docs/sqlserver/>) [Guides](#)

Quickstart for Cloud SQL for SQL Server

[MySQL](https://cloud.google.com/sql/docs/mysql/quickstart) (<https://cloud.google.com/sql/docs/mysql/quickstart>) | [PostgreSQL](https://cloud.google.com/sql/docs/postgres/quickstart) (<https://cloud.google.com/sql/docs/postgres/quickstart>) | **SQL Server**

Beta

This feature is in a pre-release state and might change or have limited support. For more information, see the [product launch stages](https://cloud.google.com/products/#product-launch-stages) (<https://cloud.google.com/products/#product-launch-stages>).

This page shows you how to create and connect to a SQL Server instance and perform basic SQL operations using the Google Cloud Console and a client.

Before you begin

1. [Sign in](https://accounts.google.com/Login) (<https://accounts.google.com/Login>) to your Google Account.

If you don't already have one, [sign up for a new account](https://accounts.google.com/SignUp) (<https://accounts.google.com/SignUp>).

2. In the Cloud Console, on the project selector page, select or create a Google Cloud project.

★ **Note:** If you don't plan to keep the resources that you create in this procedure, create a project instead of selecting an existing project. After you finish these steps, you can delete the project, removing all resources associated with the project.

[GO TO THE PROJECT SELECTOR PAGE](https://console.cloud.google.com/projectselector) ([HTTPS://CONSOLE.CLOUD.GOOGLE.COM/PROJECTSELECT](https://console.cloud.google.com/projectselector))

3. Make sure that billing is enabled for your Google Cloud project. [Learn how to confirm billing is enabled for your project](https://cloud.google.com/billing/docs/how-to/modify-project) (<https://cloud.google.com/billing/docs/how-to/modify-project>).

★ **Important:** You should be aware that some resource identifiers (such as project IDs) might be retained beyond the life of your project. For this reason, avoid storing sensitive information in resource

identifiers.

[...see naming guidelines](#)

Create an instance

1. Go to the Cloud SQL Instances page in the Google Cloud Console.

GO TO THE CLOUD SQL INSTANCES PAGE ([HTTPS://CONSOLE.CLOUD.GOOGLE.COM/SQL/INSTANCES](https://console.cloud.google.com/sql/instances))

2. Select your project and click **Continue**.
3. Click **Create Instance**.
4. Click **Choose SQL Server**.
5. Enter `myinstance` for **Instance ID**.
6. Enter a password for the `sqlserver` user.
7. Use the default values for the other fields.
8. Click **Create**.

You are returned to the instances list; you can click into the new instance right away to see the details, but it won't be available until it initializes and starts.

Connect to your instance using SQL Server Management Studio

Note: SQL Server Management Studio (SSMS) is a Windows-based, integrated environment. Please review the [SSMS documentation](https://docs.microsoft.com/en-us/sql/ssms/sql-server-management-studio-ssms?view=sql-server-2017) (<https://docs.microsoft.com/en-us/sql/ssms/sql-server-management-studio-ssms?view=sql-server-2017>) as needed, including for [Connecting to a SQL Server instance](https://docs.microsoft.com/en-us/sql/ssms/tutorials/connect-query-sql-server?view=sql-server-2017) (<https://docs.microsoft.com/en-us/sql/ssms/tutorials/connect-query-sql-server?view=sql-server-2017>). Alternatively, you can use other database administration tools.

1. Install the [Cloud SDK](https://cloud.google.com/sdk/docs/) (<https://cloud.google.com/sdk/docs/>). The Cloud SDK provides the `gcloud` tool to interact with Cloud SQL and other Google Cloud services. The `gcloud` tool uses the API to access Cloud SQL, so you must [Enable the API](#)

(https://cloud.google.com/sql/docs/sqlserver/admin-api/#enabling_the_api) before using the `gcloud` tool to access Cloud SQL.

2. In a bash shell command prompt or in Windows PowerShell, run the following command to initialize the `gcloud` tool:

```
gcloud init
```



3. Run the following command to authenticate the `gcloud` tool:

```
gcloud auth login
```



4. Download and install the Google Cloud SQL Proxy (see [Installing the Cloud SQL Proxy](#) (<https://cloud.google.com/sql/docs/sqlserver/sql-proxy#install>)). Note the location of the Cloud SQL Proxy because you will run the proxy in next step.
5. Run the Cloud SQL Proxy using a bash shell command prompt (or using Windows PowerShell). Specifically, run the following command, replacing `Instance-connection-name` with the corresponding value from the Cloud Console's Overview tab (for your instance):

```
./cloud_sql_proxy -instances=[Instance-connection-name]=tcp:1433
```

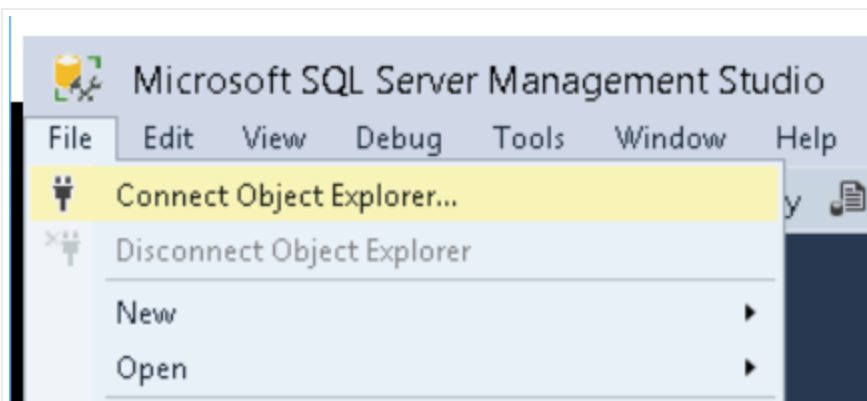


For more information about installing and using the proxy, see [About the Cloud SQL Proxy](#) (<https://cloud.google.com/sql/docs/sqlserver/sql-proxy>).

As described in the next section, now you can connect to your SQL Server instance using SSMS and the localhost IP address.

Connect using the SSMS Object Explorer

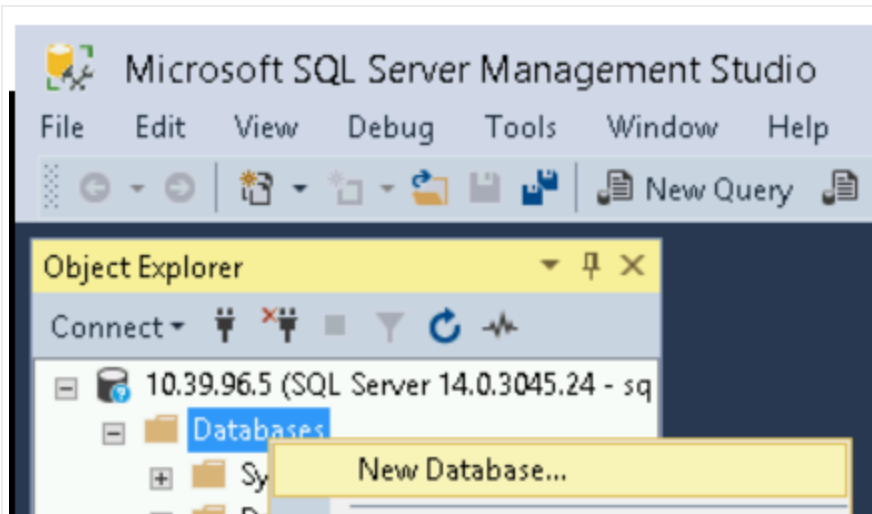
1. In SSMS, select **Connect Object Explorer** from the **File** menu.



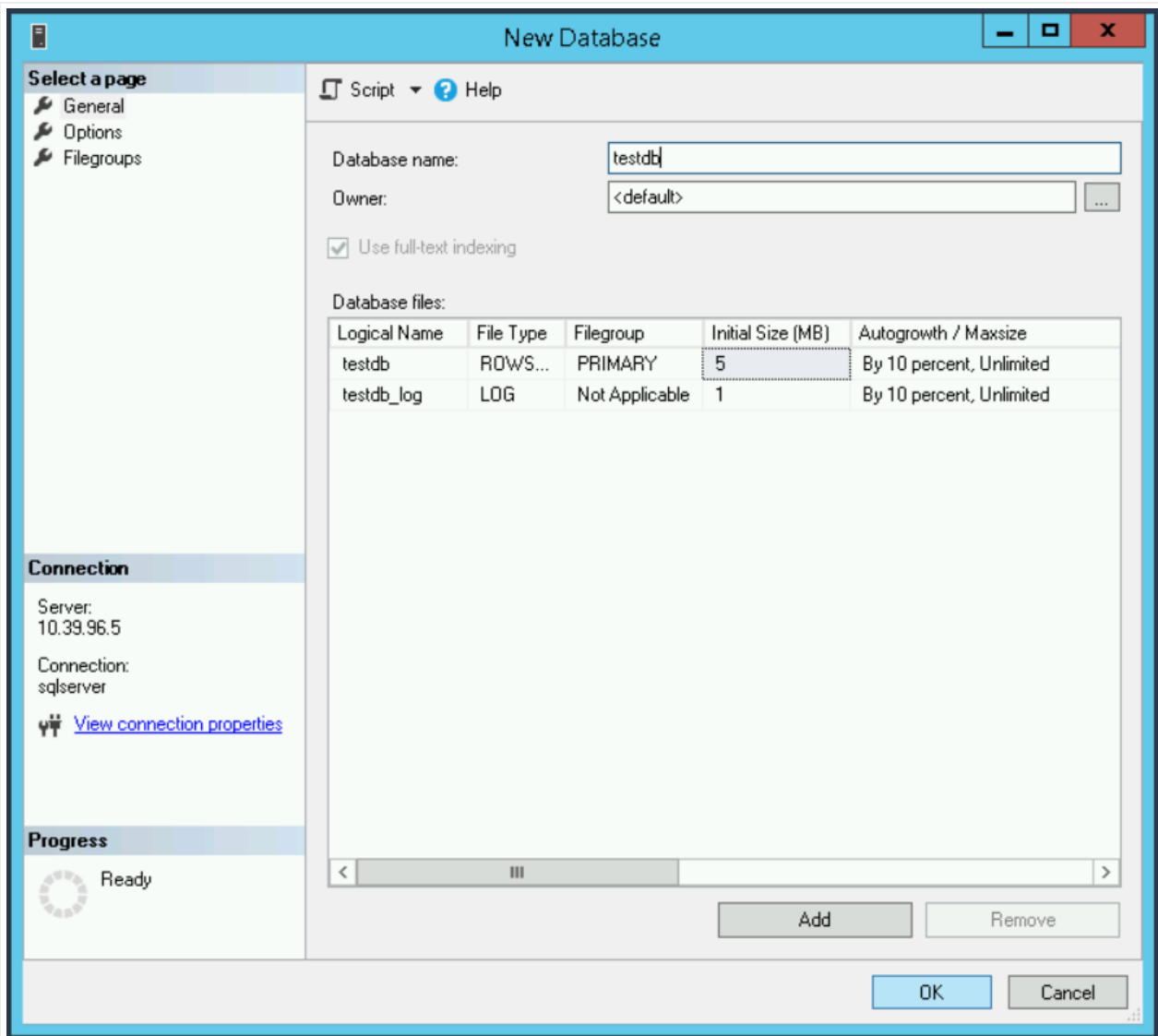
2. Enter the following values in the **Connection** dialog:
 - a. For Server Type, enter **Database Engine**.
 - b. For Server Name, enter 127.0.0.1 as the IP address of your SQL Server instance.
 - c. For Authentication, enter **SQL Server Authentication**.
 - d. For Login, enter **sqlserver**.
 - e. For Password, enter the password used when the instance was created.
3. Click the **Connect** button.

Create a database and upload data

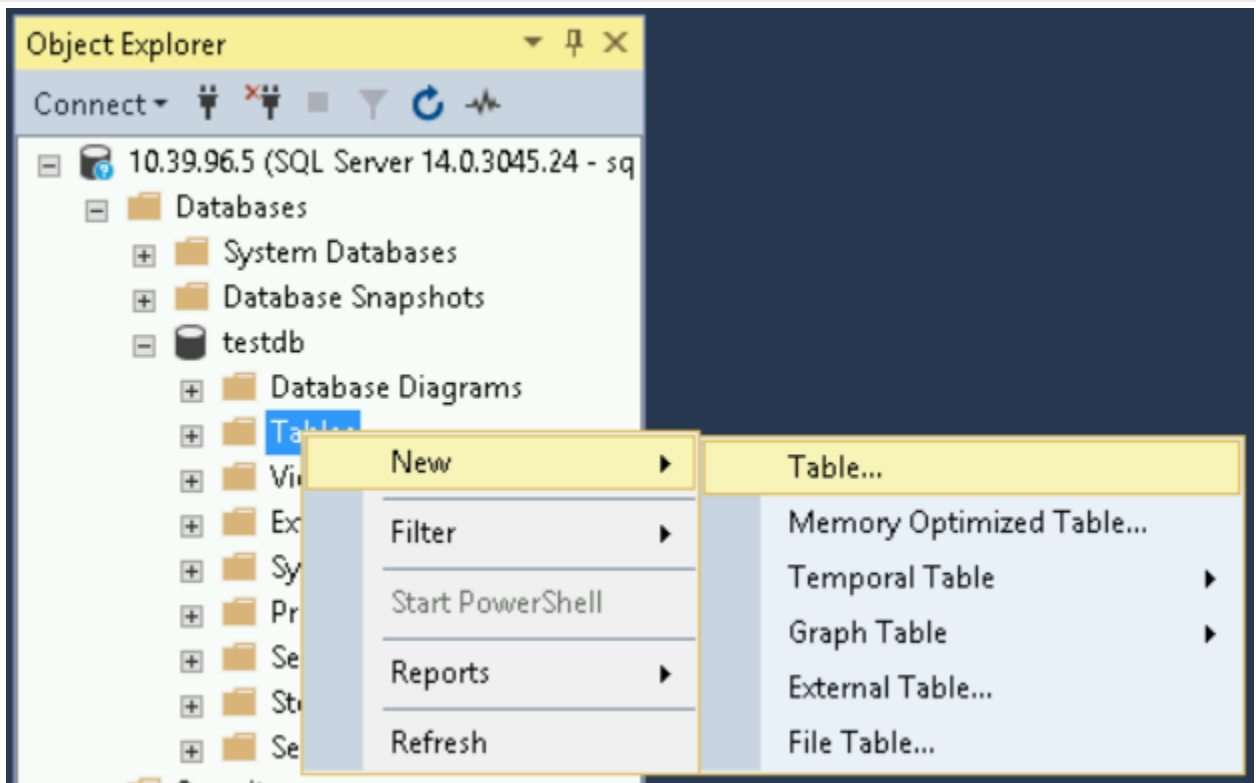
1. In the SSMS Object Explorer window, right-click the **Databases** node under your instance and select **New Database**.



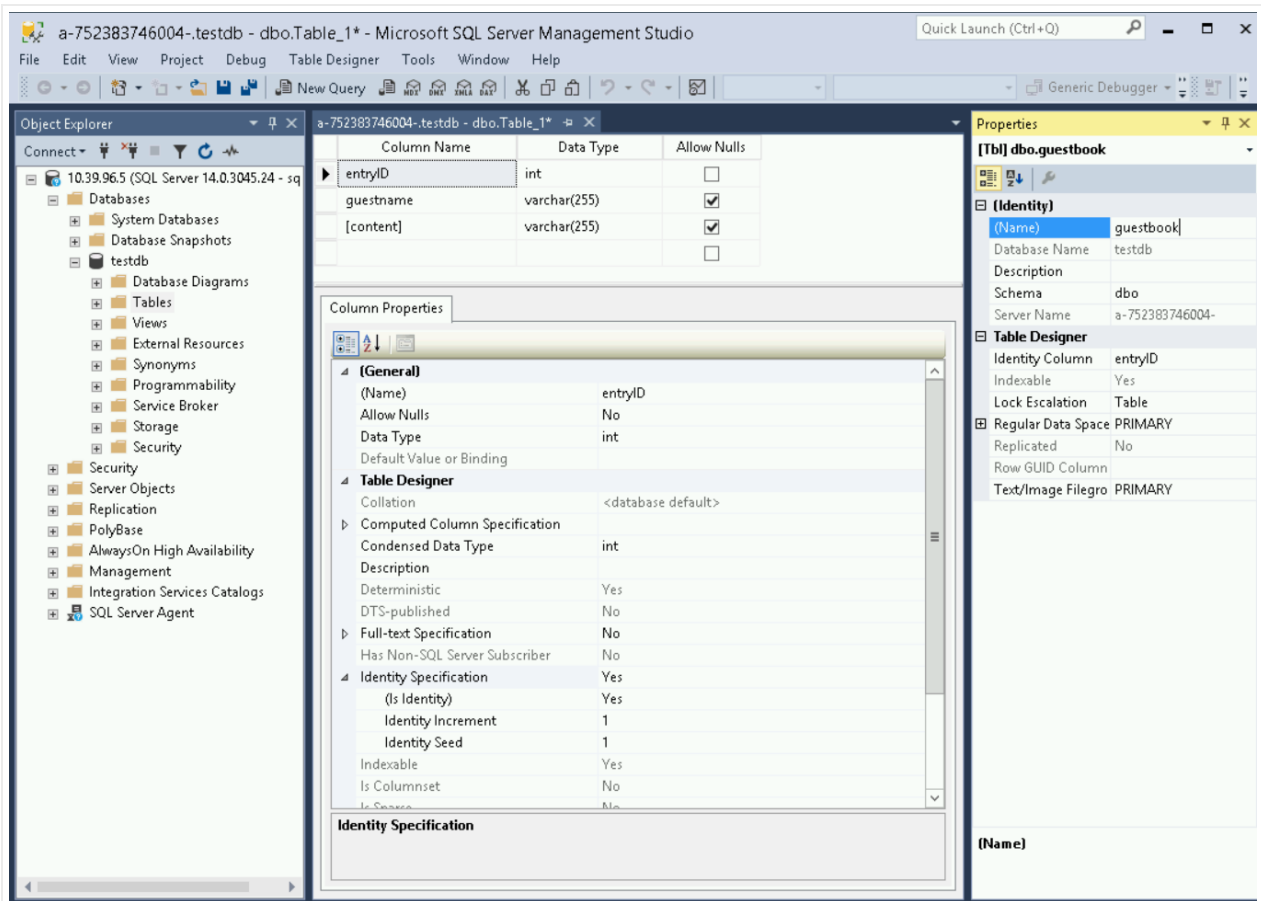
2. Enter **testdb** for the **Database name** and click the **OK** button.



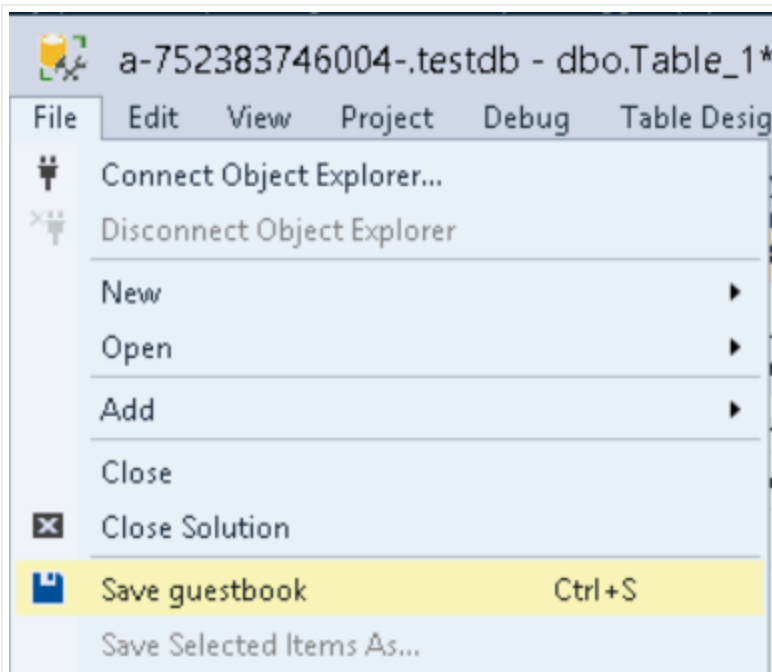
3. Under the newly created **testdb** database, right-click the **Tables** node and select **New > Table**.



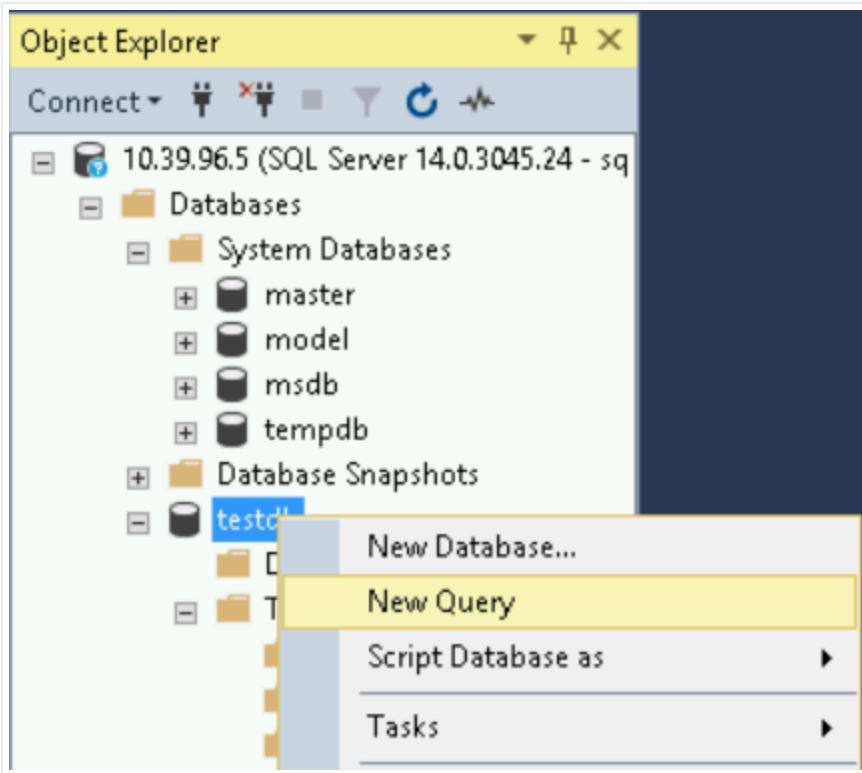
4. Enter the following values in the **Create table** dialog:
 - a. In the **Properties** window, for **Identity > Name**, enter **guestbook**.
 - b. For the first **Column Name**, enter **entryID**, set its Data Type to **int**, and uncheck the **Allow Nulls** checkbox.
 - i. In the **Column Properties** window, expand the **Identity Specification** item and set (**Is Identity**) to **Yes**.
 - c. For the second **Column Name**, enter **guestname** and set its Data Type to **varchar(255)**.
 - d. For the third **Column Name**, enter **content** and set its Data Type to **varchar(255)**.



5. Click the **File** menu and select **Save guestbook**.



6. Right-click the **testdb** table under **Databases** and select **New Query**.

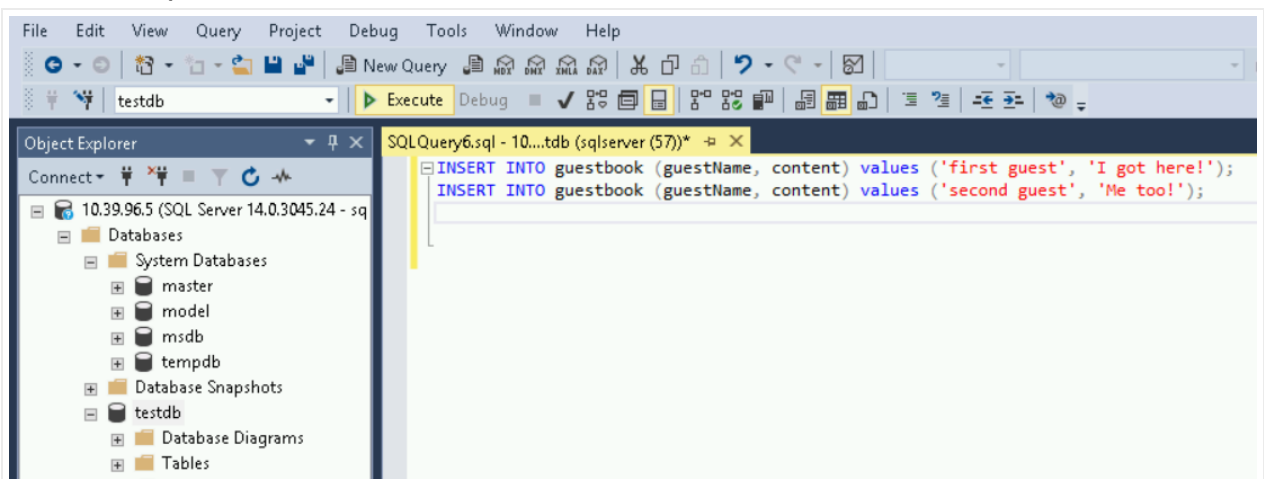


7. Enter the following two INSERT statements into the **SQL query** text window and click the **Execute** button.

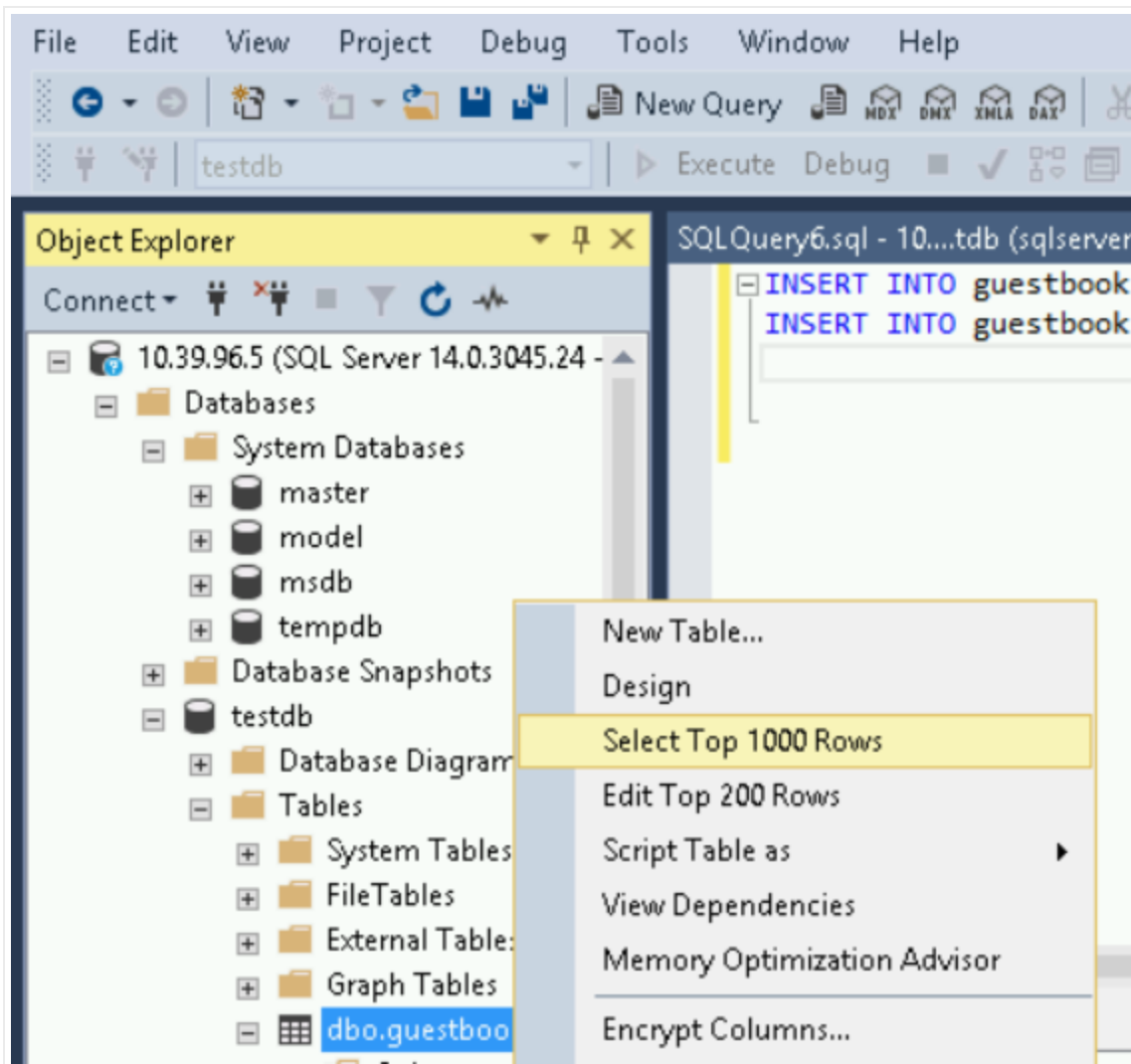
```
INSERT INTO guestbook (guestName, content) values ('first guest', 'I got here!');
```

```
INSERT INTO guestbook (guestName, content) values ('second guest', 'Me too!');
```

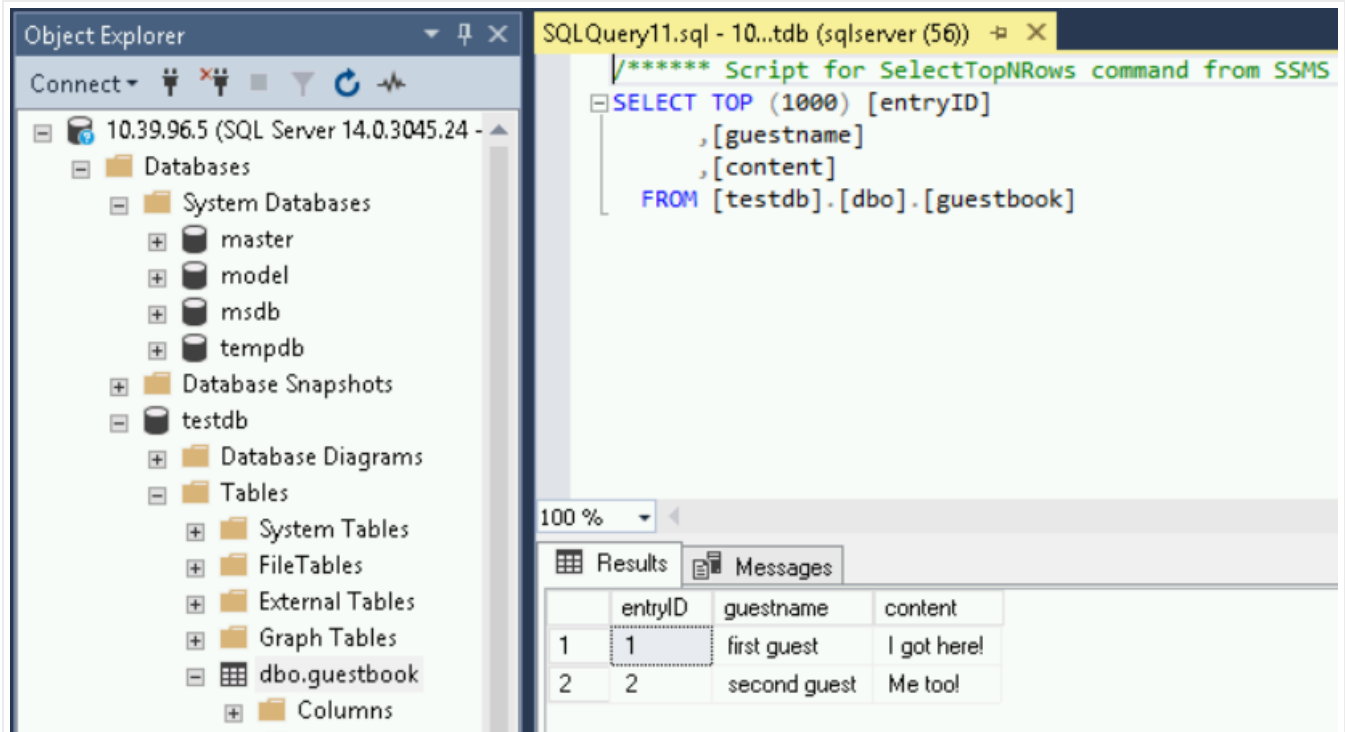
As an example:



8. Expand the **Tables** item under the **Databases > testdb** item in the **Object Explorer** window. Right-click the **dbo.guestbook** table and choose **Select Top 1000 Rows**.



The two records you inserted are displayed as **Results**, along with the SQL `SELECT` statement used to query the records.



Clean up

To avoid incurring charges to your Google Cloud account for the resources used in this quickstart, follow these steps.

1. Go to the Cloud SQL Instances page in the Google Cloud Console.

[GO TO THE CLOUD SQL INSTANCES PAGE \(HTTPS://CONSOLE.CLOUD.GOOGLE.COM/SQL/INSTANCES\)](https://console.cloud.google.com/sql/instances)

2. Select the `myinstance` instance to open the **Instance details** page.
3. In the icon bar at the top of the page, click **Delete**.
4. In the **Delete instance** window, type `myinstance`, then click **Delete** to delete the instance.

You cannot reuse an instance name for about 7 days after an instance is deleted.

What's next

Based on your needs, you can learn more about [creating Cloud SQL instances](https://cloud.google.com/sql/docs/sqlserver/create-instance) (<https://cloud.google.com/sql/docs/sqlserver/create-instance>).

You also can learn about creating [SQL Server users](https://cloud.google.com/sql/docs/sqlserver/create-manage-users)

(<https://cloud.google.com/sql/docs/sqlserver/create-manage-users>) and [databases](https://cloud.google.com/sql/docs/sqlserver/create-manage-databases)

(<https://cloud.google.com/sql/docs/sqlserver/create-manage-databases>) for your Cloud SQL instance.

Also see the [Cloud SQL pricing information](https://cloud.google.com/sql/docs/sqlserver/pricing) (<https://cloud.google.com/sql/docs/sqlserver/pricing>).

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