**Practical no 1- Create a SQL database.**

This module requires a sandbox to complete. You have used 3 of 10 sandboxes for today. More sandboxes will be available tomorrow.

Activate sandbox

Tailwind Traders has chosen Azure SQL Database for part of its migration. You've been tasked with creating the database.

In this exercise, you'll create a SQL database in Azure and then query the data in that database.

## Task 1: Create the database

In this task, you'll create a SQL database based on the AdventureWorksLT sample database.

1. Sign in to the [Azure portal](https://portal.azure.com/learn.docs.microsoft.com).
2. Select **Create a resource** > **Databases** > **SQL database**. The **Create SQL Database** pane appears.
3. Enter the following values for each setting.

| **Setting** | **Value** |
| --- | --- |
| **Project details** |  |
| Subscription | Concierge Subscription |
| Resource group | [Sandbox resource group] |
| **Database details** |  |
| Database name | db1 |
| Server | Select **Create new** |

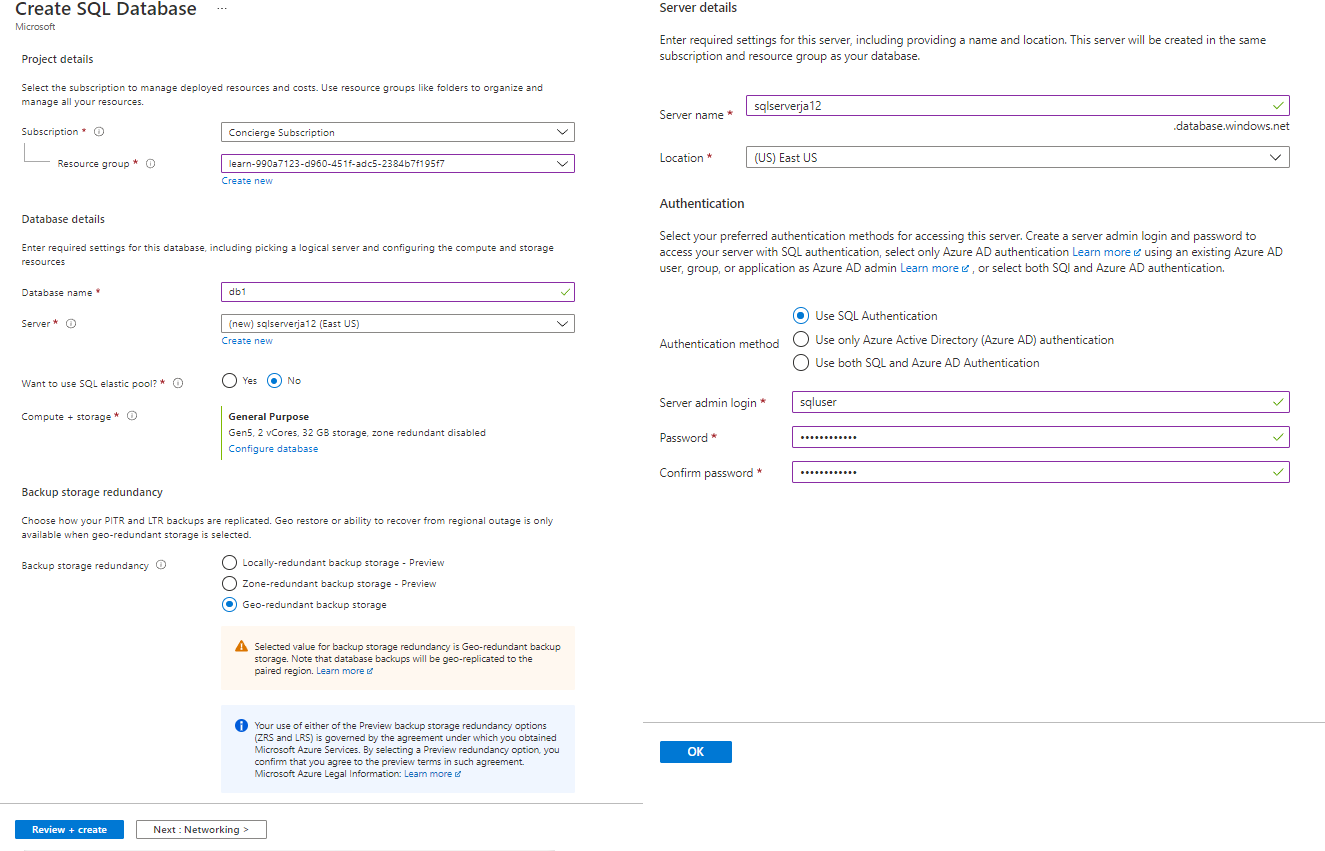
The **Create SQL Database Server** pane appears.

1. Enter the following values for each setting.

| **Setting** | **Value** |
| --- | --- |
| **Server details** |  |
| Server name | sqlservernnnn (replace **nnnn** with letters and digits for a globally unique name) |
| Location | (US) East US |
| **Authentication** |  |
| Authentication method | Use SQL Authentication |
| Server admin login | Sqluser |
| Password | Pa$$w0rd1234 |

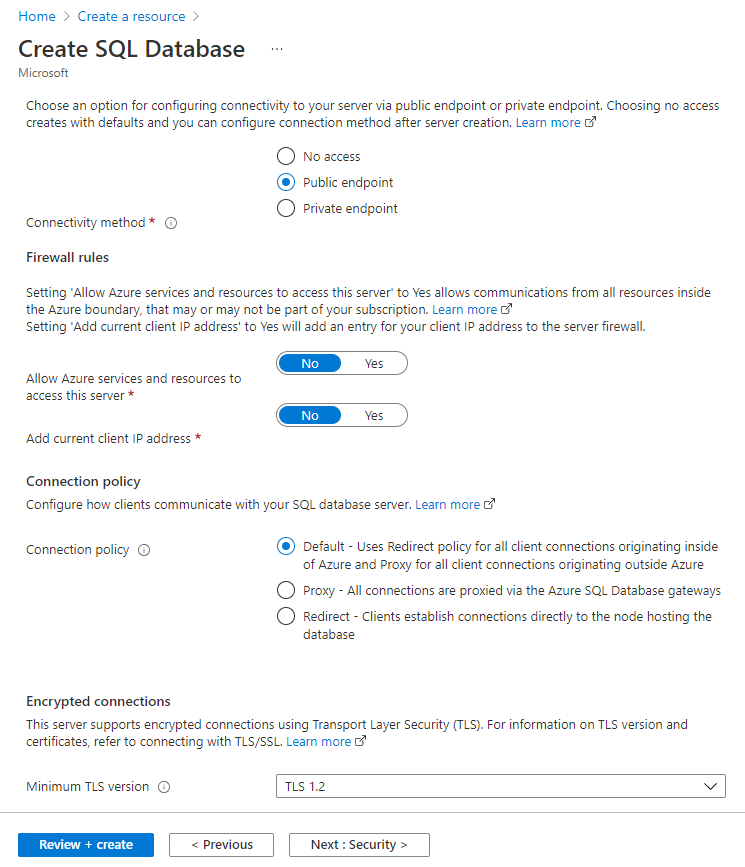
1. Select **OK**.
2. Complete the remaining fields for **Create SQL Database** using the following values.

| **Setting** | **Value** |
| --- | --- |
| Want to use SQL elastic pool? | No (default) |
| Compute + storage | General Purpose (default) |
| **Backup storage redundancy** |  |
| Backup storage redundancy | Geo-redundant backup storage |

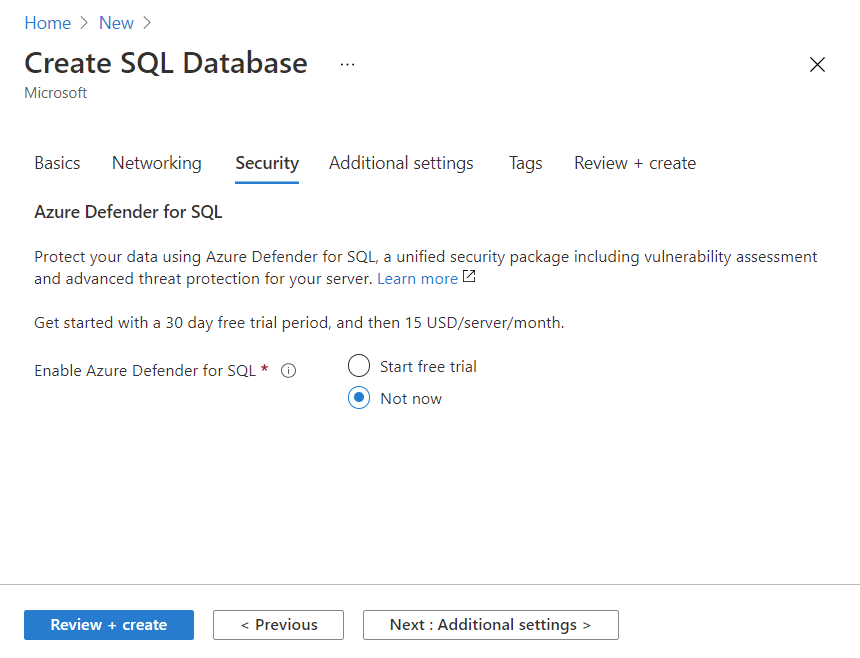
[](https://docs.microsoft.com/en-us/learn/azure-fundamentals/azure-database-fundamentals/media/server-pane-df80b536.png#lightbox)

1. Select **Next : Networking**, and configure the following settings (accept defaults for fields not specified).

| **Setting** | **Value** |
| --- | --- |
| **Network connectivity** |  |
| Connectivity method | Public endpoint |

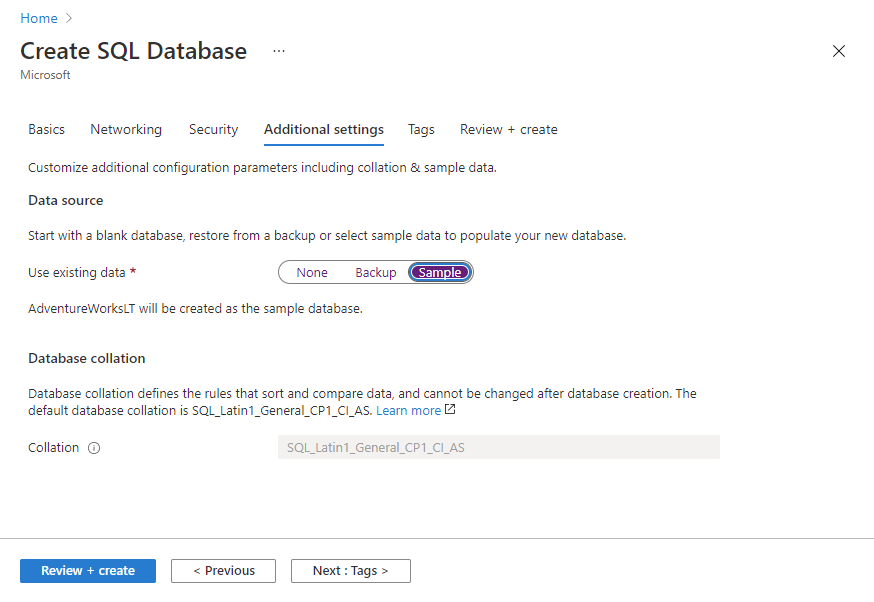


1. Select **Next : Security**, and for **Enable Azure Defender for SQL**, choose **Not now**. Leave the remaining settings as default (not configured).



1. Select **Next : Additional settings**, and configure the following settings.

| **Setting** | **Value** |
| --- | --- |
| **Data source** |  |
| Use existing data | Sample |
| **Database collation** |  |
| Collation | SQL\_Latin1\_General\_CP1\_CI\_AS (default) |

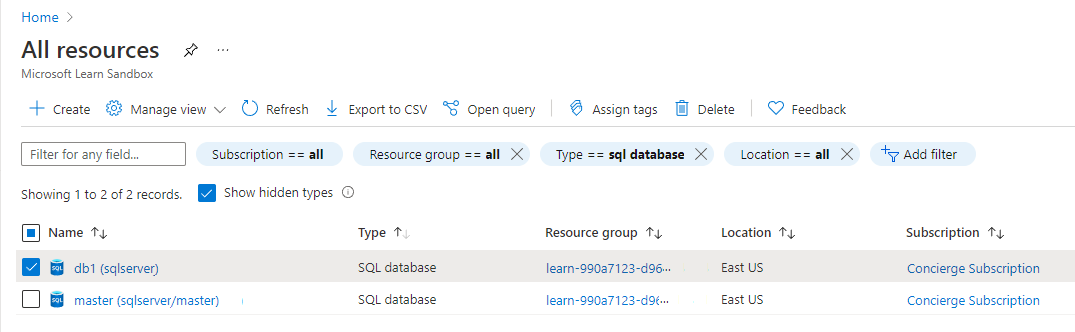


1. Select **Review + create** to validate configuration entries.
2. Select **Create** to deploy the server and database. It can take approximately two to five minutes to create the server and deploy the sample database. The deployment pane shows the status, with updates for each resource that is created.
3. When deployment is complete, select **Go to resource**. The db1 SQL database Overview pane shows the essentials of the newly deployed database
4. In the command bar, select **Set server firewall**. The **Firewall settings** page appears.
5. Check the box next to **Allow Azure services and resources to access this server** at the bottom of the page, leaving other settings as default.
6. Select **Save** to update firewall settings, then close the Firewall settings pane.

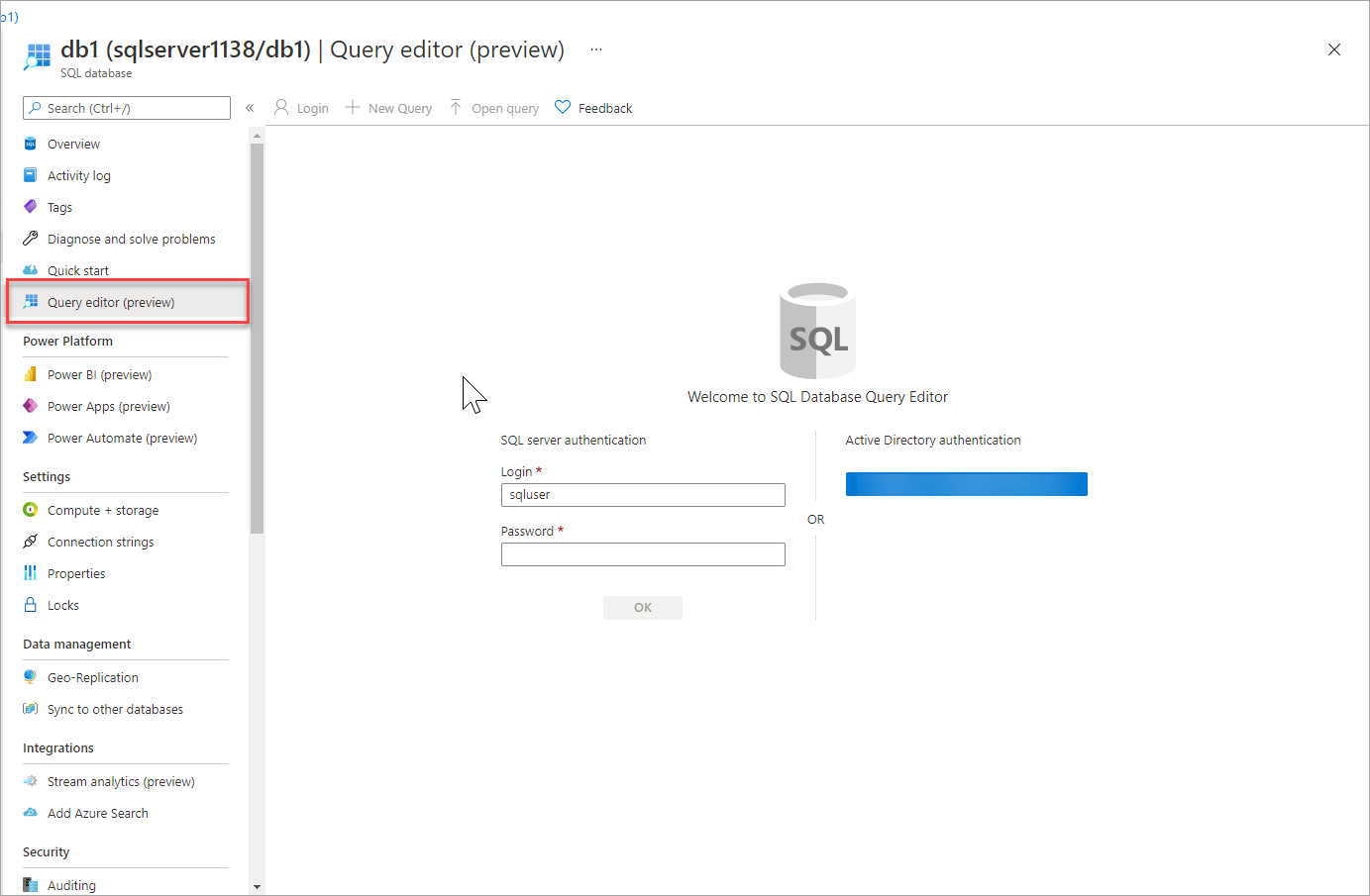
## Task 2: Test the database

In this task, you'll configure the server and run a SQL query.

1. In Azure resources menu, select **All resources**. Search for and select the **SQL database** resource Type, and ensure that your new database was created. You might need to refresh the page.

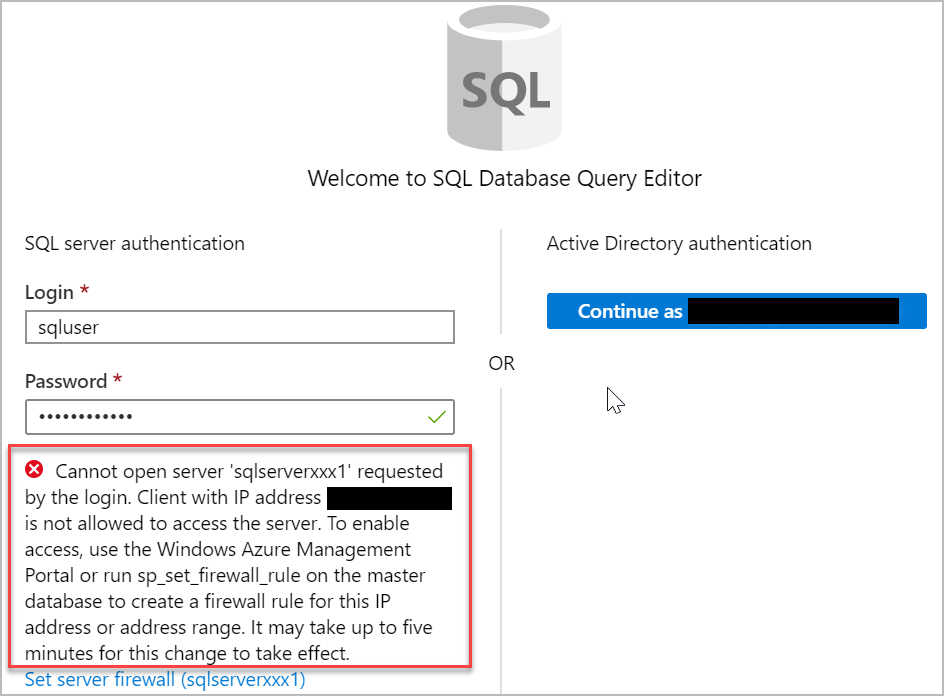


1. Select **db1**, the SQL database you created.
2. In the SQL database menu, select **Query editor (preview)**. The **Query editor (preview)** pane appears.

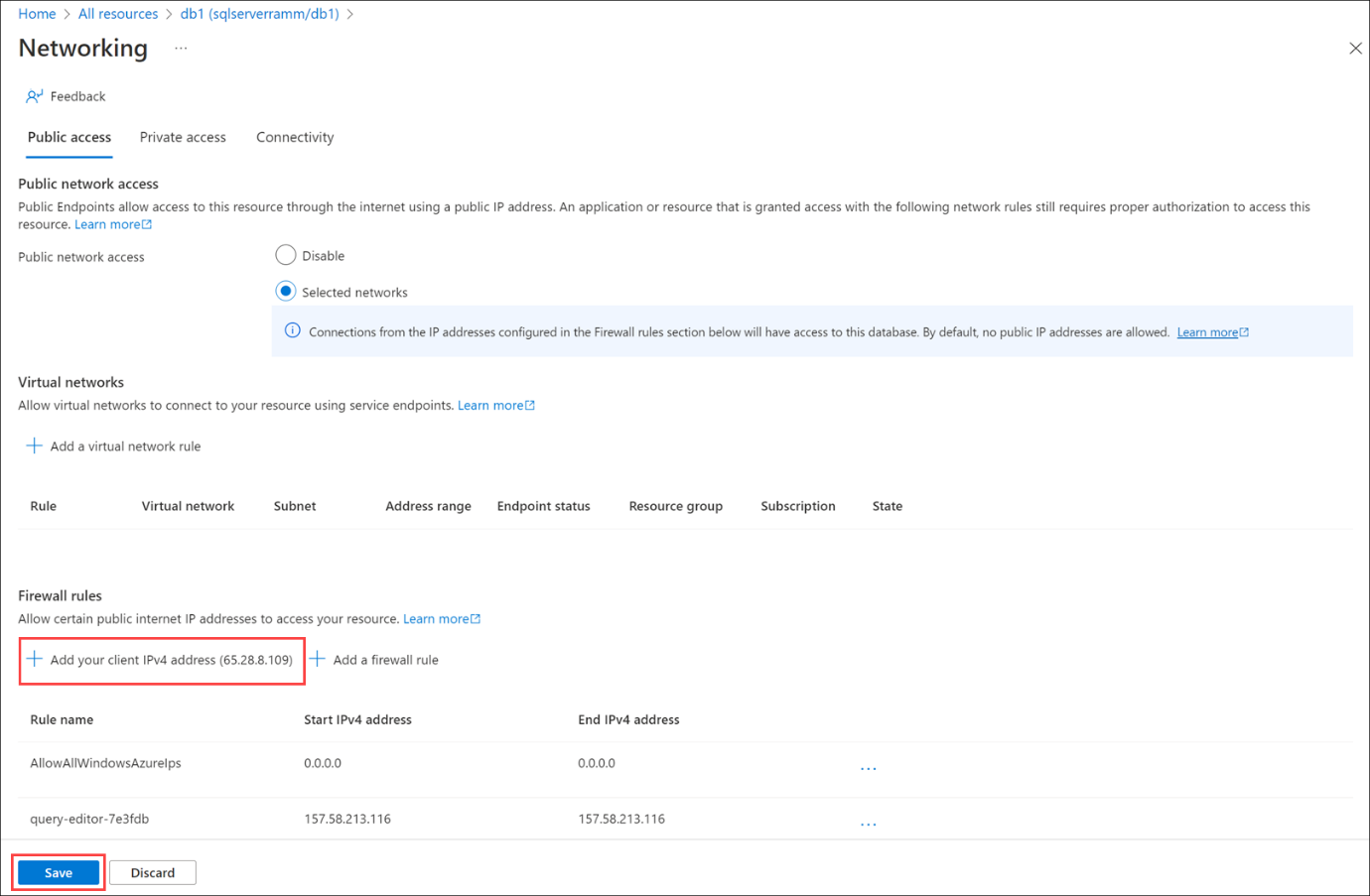


1. Sign in as **sqluser**, with the password **Pa$$w0rd1234**.

You will not be able to sign in because your IP address needs to be enabled in a firewall rule.



1. In the Query editor menu, select **Overview** (your edits will be lost), and in the command bar, select **Set server firewall**. The **Firewall settings** page appears.
2. In the **Client IP address** section, your IP will be shown (verify that it is the same client IP address from the error you received in the previous step).
3. In the command bar select **Add your client IPv4 address**. This will add a **Rule name** that contains your IP address in both the **Start IP** and **End IP** fields.
4. Select **Save** to save this firewall rule.



1. Select your db1 database in the breadcrumb at the top of the page to return to your SQL database, and then select **Query editor (preview)** from the menu.
2. Sign in again as **sqluser**, with the password **Pa$$w0rd1234**. This time you should succeed. It might take a couple of minutes for the new firewall rule to be deployed. If you still get an error, verify the client IP address in the error, and return to **Firewall settings** to add the correct client IP address.
3. After you sign in successfully, the query pane appears. Enter the following SQL query into the editor pane.

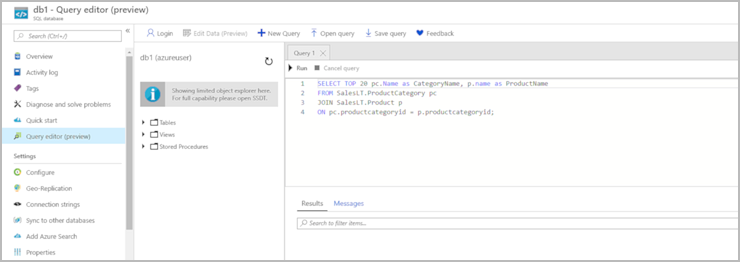
SQL

SELECT TOP 20 pc.Name as CategoryName, p.name as ProductName

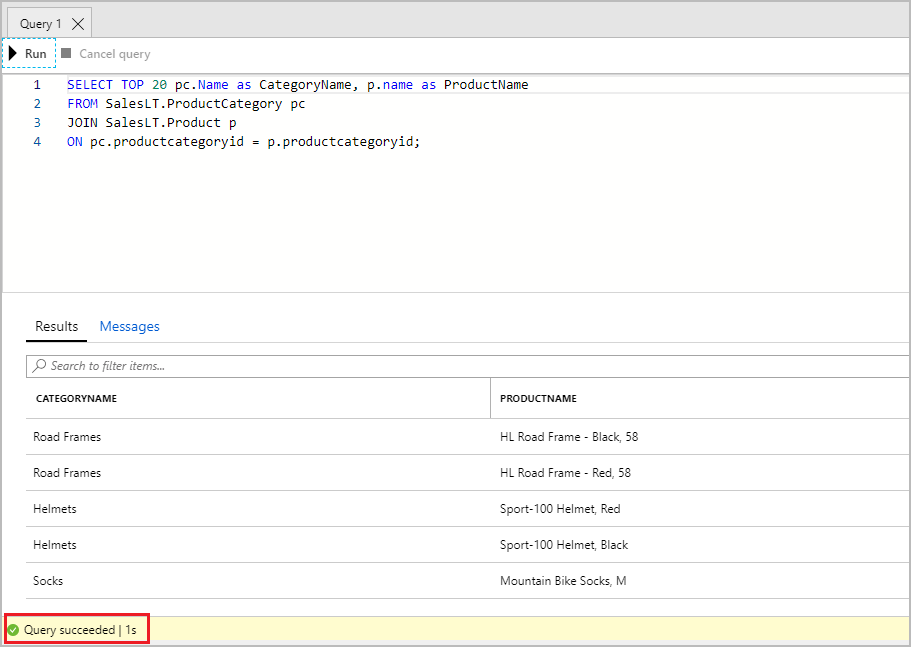
FROM SalesLT.ProductCategory pc

JOIN SalesLT.Product p

ON pc.productcategoryid = p.productcategoryid;



1. Select **Run**, and then review the query results in the **Results** pane. The query should run successfully.



Congratulations! You've created a SQL database in Azure and successfully queried the data in that database.