# SQL Tutorial

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## 1 Queries

#### 1.1 The SELECT Statement

SQL databases are made up of tables. Each table has any number of named columns. The tables store the data for the database. For example, a database might have a Patient table with the columns Id, Name, DateOfBirth, etc.

To interact with the database, we use queries. A query is a SQL script that when run, queries the database and returns the results to you. To write a query, click the "New Query" button on the top left of SQL Server Management Studio. Then, add the following two lines to the top of the file:

```
USE Shelter GO
```

The "USE Selter" line tells SQL that this query is for the Shelter database. Next, we can start quering the database. A SELECT statement is used to pull data from the database. It's basic syntax is as follows:

```
SELECT
Column1,
Column2,
...
FROM TableName
```

The SELECT statement selects the columns provided in the column list from the table in the FROM clause. You can also use the character "\*" instead of the column list, which means select all columns. Additionally, you can tell the SELECT statement to only select a certain number of rows with the TOP clause.

```
SELECT TOP 10

*
FROM TableName
```

Open a new query and try selecting the first 100 rows of the Cat table.

#### 1.2 JOINing to Other Tables

### 1.3 Filtering a Query with the WHERE Clause