

SQL Guide

What is SQL?

- SQL stands for Structured Query Language
- SQL lets you access and manipulate databases

Throughout this guide, remember that SQL keywords are **not** case sensitive: select is the same as SELECT.

Tables

- Every table is broken up into smaller entities called fields. A field is a column in a table that is designed to maintain specific information about every record in the table.
- A record, also called a row, is each individual entry that exists in a table. A record is a horizontal entity in a table.
- A column is a vertical entity in a table that contains all information associated with a specific field in a table.

SQL Statements

- Most of the actions you need to perform on a database are done with SQL statements.
- SQL statements consist of keywords that are easy to understand.

Important SQL Commands

Command	Purpose	Command	Purpose
SELECT	Extracts data from a database	CREATE DATABASE	Creates a new database
UPDATE	Updates data in a database	ALTER DATABASE	Modifies a database
DELETE	Deletes data in a database	CREATE TABLE	Creates a new table
INSERT INTO	Inserts new data into a database	ALTER TABLE	Modifies a table

CREATE INDEX	Creates an index (search key)	DROP TABLE	Deletes a table
DROP INDEX	Deletes an index		

Select

The SELECT statement is used to select data from a database.

For example, the following SQL statement returns data from the Books table:

```
SELECT BookName, Library FROM Books;
```

If you want to return all columns, without specifying every column name, you can use the SELECT * syntax.

For example, the following statement returns all the columns from the Books table:

```
SELECT * FROM Books;
```