

Structured Query Language (SQL)

This lesson introduces users to SQL.

We'll cover the following

- What is SQL?
- A brief history of SQL
- Why SQL?
- SQL Commands

What is SQL?

SQL is Structured Query Language, which is a computer language for storing, manipulating and retrieving data in a relational database.

SQL is the standard language for a relational database system. All the Relational Database Management Systems (RDMS) like MySQL, MS Access, Oracle, and SQL Server use SQL as their standard database language.

A brief history of SQL

SQL was initially developed by IBM in the early 1970s. The initial version, called SEQUEL (Structured English Query Language), was designed to manipulate and retrieve data stored in IBM's quasi-relational database management system, System R. Then, in the late 1970s, Relational Software Inc., which is now Oracle Corporation, introduced the first commercially available implementation of SQL, Oracle V2 for VAX computers.

Why SQL?

SQL is widely popular because it can

- Create the database and table structures.

- Perform basic data management chores (add, delete and modify).
- Perform complex queries to transform raw data into useful information.

SQL Commands

The standard SQL commands to interact with relational databases are **CREATE**, **SELECT**, **INSERT**, **UPDATE**, **DELETE**, and **DROP**. These commands can be classified into the following groups based on their nature:

DDL - Data Definition Language

Command	Description
CREATE	Creates a new table, a view of a table, or other objects in the database.
ALTER	Modifies an existing database object, such as a table.
DROP	Deletes an entire table, a view of a table or other objects in the database.

DML - Data Manipulation Language

Command	Description
SELECT	Retrieves certain records from one or more tables.
INSERT	Creates a record.
UPDATE	Modifies records.

DELETE	Deletes records.
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In the next lesson, we will highlight some important data types and operations in SQL.