

## **EXHIBIT 1014**

***A Brief History of SQL and its Usefulness***  
**– *Coginiti*, accessed at [https://](https://www.coginiti.co/tutorials/introduction/what-is-sql/)  
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## SQL Tutorial

Data Modeling and  
Architecture Terminology  
Guide

A Brief History of SQL and  
its Usefulness

What are Different Types of  
Databases?

Writing SQL in Coginiti

### Beginner

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# A Brief History of SQL and its Usefulness

SQL (Structured Query Language) is a programming language for storing, managing, manipulating, and processing data in relational databases. SQL has been around since the 1970s, and was standardized by the American National Standards Institute (ANSI) in 1986. Since then, SQL has become the most widely used language for managing relational databases and has undergone several revisions to keep pace with the evolving needs of the database industry.

*SQL is pronounced "sequel" or sometimes "ess-cue-ell."*

#### What is SQL used for?

SQL is an essential part of the technology stack for many organizations and is widely used in business, government, and scientific applications across many roles including: Data Analysts, Business Intelligence Analysts, Data Scientists, Database Developers, and Data Engineers. SQL is used by organizations to interact with databases, which store and manage data in a structured and efficient way.

The following are common tasks that people use SQL for:

- Creating, modifying, and deleting database tables and records

### Free SQL IDE

Download a free trial of Coginiti Pro, the data workspace trusted by thousands of data professionals at organizations of all sizes.



Windows



MacOS

Next

Inserting, updating, and deleting data in a database

Retrieving data from a database with SELECT statements

Grouping and aggregating data

Joining data from multiple tables

Creating views and stored procedures

Performing data analysis and data mining

Managing the security and permissions of a database

Monitoring and optimizing database performance

Backing up and restoring databases

### Statements, Functions, and Clauses

If you are learning SQL, you'll see different components, and it's important to understand what they are used for:

Statements: Used to carry out tasks in the database

Examples: SELECT, INSERT, UPDATE, DELETE, ALTER, DROP, CREATE, GRANT, REVOKE

Clauses: Components of SQL statements that specify specific conditions, restrictions or operations to be performed

Examples: SELECT, FROM, WHERE, GROUP BY, HAVING, ORDER BY, LIMIT, OFFSET, JOIN, UNION, WITH

Expressions: Combinations of values, operators, and functions that produce a single value

Examples: mathematical operations, concatenation, Functions, CASE, Subquery

Predicates: Conditions that evaluate to either true, false or unknown in SQL. They are used in the WHERE clause of SQL to specify a subset of rows to be returned from a database table

Examples: Equality, inequality, Comparison, BETWEEN, LIKE, NULL, AND, OR, NOT

Operators: Symbols or keywords used to perform operations and comparisons in SQL expressions

Examples: Arithmetic, Comparison, Logical, IN, LIKE, BETWEEN, IS NULL

Functions: Built-in or user-defined operations that perform specific calculations or manipulations on data. Examples: Aggregates, Date & Time, String, Conversion, Mathematical

Data types: Specify and define the type of data that a column in a table can hold. Examples: Numeric, Characters and Strings, Date & Time, Binary, Boolean

Keywords: Special reserved words used in SQL that have a specific meaning and cannot be used as identifiers (such as table or column names) without being quoted

Examples: SELECT, FROM, WHERE, AND, OR.

You can always write detailed queries using SQL for your desired use case. But if you want to explore making it a little easier on yourself, Coginiti has features to help you analyze your data if you forgot to write the SQL or you're simply still learning. As an example, Coginiti has an advanced grid to quickly filter, sort, pivot, and aggregate your data.

You can download Coginiti Pro for free to [practice your first queries.](#)



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