

SQL vs. MySQL: Similarities and Differences

Both Structured Query Language (SQL) and MySQL are both database management, but fundamentally different concepts in database management system.

SQL is a programming language we can use and store and process information in relational database. It has specific syntax that are some formats which allow us to retrieve, insert, update, and delete data using commands such as `SELECT`, `INSERT`, `UPDATE`, and `DELETE`. Certain Organizations such as ANSI and ISO maintained SQL standards, making it a universal language across multiple database platforms (MySQL, Oracle, PostgreSQL, SQL Server) (W3Schools, n.d.).

On the other hand MySQL is the most widely accepted a relational database management system (RDBMS) that has SQL as a primary language to manage and manipulate data. Both SQL and MySQL technology work together and MySQL is the underlying technology that provides the infrastructure for storing data in tables, defining relationships, enforcing constraints, managing users, and ensuring data security. Due to its performance, scalability, and open-source availability it is widely used in web applications and enterprise systems (Oracle, n.d.).

SQL and MySQL are similar only in name and both are used in relational database systems. As mentioned earlier MySQL depends on SQL to process user queries. Most standard SQL commands work in MySQL, which makes SQL skills transferable when working with this database system. Both support relational database concepts such as tables, keys, indexes, and joins.

However, they differ in their roles. SQL is not a platform or software, and it cannot be used independently, whereas MySQL is a full-fledged database platform. Additionally, MySQL on top of the Structured Query Language it has database-specific features, extensions, and storage engines which are not part of standard SQL (Oracle, n.d.). In Conclusion, SQL is the programming language used to query databases, while MySQL is a database system that implements SQL to manage and store data efficiently.

References

Oracle. (n.d.). MySQL overview. 

W3Schools. (n.d.). SQL tutorial. 