What is SQL?

* SQL stands for Structured Query Language
* SQL lets you access and manipulate databases
* SQL became a standard of the American National Standards Institute (ANSI) in 1986, and of the International Organization for Standardization (ISO) in 1987

What Can SQL do?

* SQL can execute queries against a database
* SQL can retrieve data from a database
* SQL can insert records in a database
* SQL can update records in a database
* SQL can delete records from a database
* SQL can create new databases
* SQL can create new tables in a database
* SQL can create stored procedures in a database
* SQL can create views in a database
* SQL can set permissions on tables, procedures, and views

**What is a NoSQL database?**

**NoSQL, also referred to as “not only SQL”, “non-SQL”, is an approach to database design that enables the storage and querying of data outside the traditional structures found in relational databases. While it can still store data found within relational database management systems (RDBMS), it just stores it differently compared to an RDBMS. The decision to use a relational database versus a non-relational database is largely contextual, and it varies depending on the use case.**

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## Comparison of SQL vs NoSQL

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| **SQL** | N**OSQL** |
| Stands for Structured Query Language | Stands for Not Only SQL |
| Relational database management system (RDBMS) | Non-relational database management system |
| Suitable for structured data with predefined schema | Suitable for unstructured and semi-structured data |
| Data is stored in tables with columns and rows | Data is stored in collections or documents |
| Supports JOIN and complex queries | Does not support JOIN and complex queries |
| Uses normalized data structure | Uses denormalized data structure |
| Requires vertical scaling to handle large volumes of data | Horizontal scaling is possible to handle large volumes of data |