SQL



Vs

MongoDB







SQL (Structured Query Language) is a traditional Relational database management system (RDBMS).

MongoDB is a document-oriented NoSQL database.





SQL uses a fixed schema, where the structure of the tables must be defined before data can be inserted.

MongoDB uses a dynamic schema, where documents can have different fields.

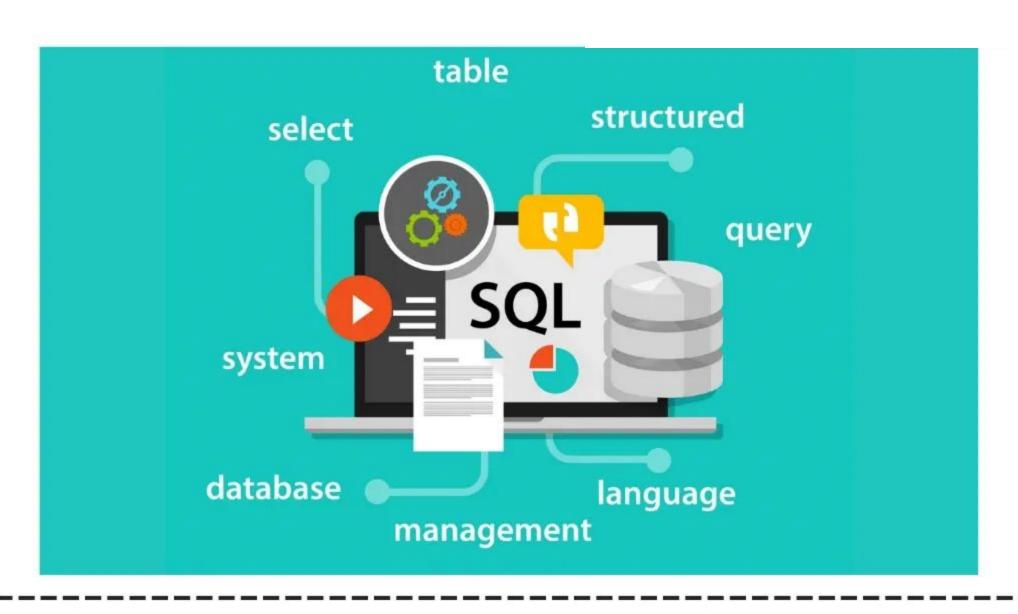




In SQL, data is stored in tables with rows and columns.

In MongoDB, data is stored in collections of JSON-like documents.









SQL uses a declarative query language.

MongoDB uses a more expressive query language based on JSON.





SQL supports a rich set of data types.

MongoDB has a limited set of data types.





SQL databases follow ACID properties (Atomicity, Consistency, Isolation and Durability).

NoSQL database follows the Brewers CAP theorem (Consistency, Availability and Partition tolerance).





SQL is optimized for complex joins and transactions.

MongoDB is optimized for scalability and high performance.

