

⊛ Compare SQL and NoSQL Databases.

SQL

- It stores data in structured tables with rows and columns.
- It requires a fixed schema defined before inserting data.
- perfect for structured data like finance, HR.
- It follows ACID rules for strong consistency and safe-transactions.
- It's Vertically scalable, you upgrade server hardware to improve performance.
- It uses SQL Language for complex queries, filters and joins.
- example: MySQL, SQLite, Oracle.

No SQL

- It stores data in Key-Value pairs, documents or graphs.
- It uses a flexible or dynamic schema, no need to define fields.
- Ideal for real-time apps or big data like social media.
- It follows BASE model offering speed with consistency.
- It Horizontally scalable you add more servers to handle more data.
- It uses different methods like JSON queries based on data types.
- example: MongoDB, Cassandra, Redis.