**SQL**

**Sql :-** Structured Query Language

* It is designed for managing data in a relational database management system(RDMS)
* It is prounced as Sql or sometimes see-Qwell.
* Sql is based on relational algebra and tuple relational calculus.
* All **DBMS** like MySql, Oracle, MS Access, and SQL sever etc. use Sql as Standard database language.
* SQL is query language; it is not a database. To perform SQL queries, we need to install any database.

**Uses of SQL:**

1. To create new databases, tables and views
2. To insert records in a database
3. To update records in a database
4. To delete records from a database
5. To retrieve records from a database

* With SQL, we can query our database in several ways
* With SQL, a user can access data from a RDMS
* It allows the user to set permission on tables, procedures and views

**NOSQL**

The term NOSQL was used by Carlo Strozzi in 1998 to name his lightweight Strozzi NOSQL.

Johan Oskarsson, then a developer at last.fm,reintrouded the term NoSQL in early 2009

* A NoSQL database provides a mechanism for storage and retrieval of data that is modeled in means other than the tabular relations used in relational databases.
* The name “NoSQL” was only coined in the early 21st century
* NoSQL systems are also sometimes called “Not only SQL” to emphasize that they may support SQL- like query languages or sit alongside SQL databases in polyglot-persistent architectures.
* NoSQL databases are also viewed as “more flexible” than relational database tables.
* You can add fields as you go.

**Uses of NoSQL:**

1. Wide column
2. Document
3. Key-value
4. Graph

**Differences between SQL and NoSQL**

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| **SQL** | **NoSQL** |
| Sql databases are relational | NoSql are non-relational |
| It uses Structed query language and have a predefined schemas | NoSql databases have dynamic schemas foe unstructed data |
| It is vertically scalable | It is horizontally scalable |
| It is table based | It is docuument,key-value,graph or wide-column stores |
| It is better for multi-row transactions | It better for unstructed data like documents or JSON |