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| Day 0 –  Megha Moon  SQL vs NoSQL  Parameter | SQL | NoSQL |
| Type | SQL databases are table based databases | NoSQL databases can be document based, key-value pairs, graph databases |
| Schema | SQL databases have a predefined schema | NoSQL databases use dynamic schema for unstructured data. |
| Ability to scale | SQL databases are vertically scalable | NoSQL databases are horizontally scalable |
| Examples | Oracle, Postgres, and MS-SQL. | [MongoDB](https://www.guru99.com/mongodb-tutorials.html), Redis, Neo4j, Cassandra, Hbase. |
| Hierarchical data storage | SQL databases are not suitable for hierarchical data storage. | More suitable for the hierarchical data store as it supports key-value pair method. |
| Consistency | It should be configured for strong consistency. | It depends on DBMS as some offers strong consistency like MongoDB, whereas others offer only offers eventual consistency, like [Cassandra](https://www.guru99.com/cassandra-tutorial.html). |
| Best Used for | RDBMS database is the right option for solving ACID problems. | NoSQL is a best used for solving data availability problems |
| Importance | It should be used when data validity is super important | Use when it's more important to have fast data than correct data |
| Best option | When you need to support dynamic queries | Use when you need to scale based on changing requirements |
| ACID vs. BASE Model | [ACID](https://www.guru99.com/dbms-transaction-management.html)( Atomicity, Consistency, Isolation, and Durability) is a standard for RDBMS | Base ( Basically Available, Soft state, Eventually Consistent) is a model of many NoSQL systems |