* SQL databases have predefined schema whereas NoSQL databases have dynamic schema for unstructured data.
* SQL databases are vertically scalable whereas the NoSQL databases are horizontally scalable. SQL databases are scaled by increasing the horse-power of the hardware. NoSQL databases are scaled by increasing the databases servers in the pool of resources to reduce the load.
* SQL databases uses SQL (structured query language) for defining and manipulating the data, which is very powerful. In NoSQL database, queries are focused on collection of documents. Sometimes it is also called as UnQL (Unstructured Query Language). The syntax of using UnQL varies from database to database.
* For the type of data to be stored: SQL databases are not best fit for hierarchical data storage. But, NoSQL database fits better for the hierarchical data storage as it follows the key-value pair way of storing data similar to JSON data. NoSQL database are highly preferred for large data set (i.e for big data).
* For high transactional based application: SQL databases are best fit for heavy duty transactional type applications, as it is more stable and promises the atomicity as well as integrity of the data. While you can use NoSQL for transactions purpose, it is still not comparable and sable enough in high load and for complex transactional applications.
* For properties: SQL databases emphasizes on ACID properties (Atomicity, Consistency, Isolation and Durability) whereas the NoSQL database follows the Brewers CAP theorem ( Consistency, Availability and Partition tolerance )