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| 1. uses of NoSQL Databases and the current NoSQL databases which are available. |
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| The traditional RDMS is not optimised for horizontal scaling out. |
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| It supports only structured data.As nowadays majority of the data comes in a semi-structured or unstructured format. |
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| It lacks in high velocity because it’s designed for only steady data. |
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| It requires high licensing cost. |
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| The above limitations of RDMS are overcame in NOSQL |
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| It has a generic data model with Heterogeneous containers, including sets, maps, and arrays. |
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| NoSQL analytics systems support runtime type identification and conversion so that custom business logic can be used to dictate analytic treatment of variation. |
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| Data is stored in single tables as compared to joining multiple tables. |
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| Adding more of the economical servers allows NoSQL databases to scale to handle more data. |
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| Distributed databases can store and process a set of information on more than one device. |
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| Current NoSQL databases: |
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| MongoDB |
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| Redis |
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| Cassandra |
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| CouchDB |
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| HBase |
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| Accumulo |
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| Vertica |
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| 2. Differences between Hive and HBase |
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| Hive is a query based language like SQL through which we can query the data that is stored on top of hdfs using HQL(Hive query language). |
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| Hive queries are internally converted to mapreduce operations by the execution engine. |
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| It doesnot provide row level update and delete , It only runs batch process on hadoop. |
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| While, HBase is actually a database(NoSQL) in hadoop that provide row level update and delete. |
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| We cannot perform the SQL queries on Hbase data instead we use HBase shell command to perform operations. |
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It is partitioned to tables, and tables are further split into column families.