1.What is NoSQL data base?

NoSQL is a term used to describe high-performance, non-relational databases. NoSQL databases utilize a variety of data models, including document, graph, key-value, and columnar. NoSQL databases are widely recognized for ease of development, scalable performance, high availability, and resilience. Below are several resources to help you get started using NoSQL databases.

Hbase

Cassandra

MongoDB…etc.

2. How does data get stored in NoSQl database?

There are various NoSQL Databases. Each one uses a different method to store data. Some might use column store, some document, some graph, etc., Each database has its own unique characteristics.

3. What is a column family in HBase?

A **HBase** table is comprised of one or more **column families**, each of which is stored in a separate set of region files sharing a common key. To express it in terms of an RDBMS, a **column family** is roughly analogous to a RDBMS table with the row key as a clustered primary key index.

4.How many maximum number of columns can be added to HBase table?

We can’t add directly columns to hbase table instead Hbase has column families .column family is a collection of columns and there is no limit in adding columns to column family.

Unless the columns are storing very large data themselves, a few hundred columns in a single column family are unlikely to have performance issues.

5. Why columns are not defined at the time of table creation in HBase?

The column qualifiers (columns) do not have to be defined at schema definition time and they can be added on the fly while the database is up and running.

6. How does data get managed in HBase?

HBase stores data in a form of a distributed sorted multidimensional persistence maps called Tables. HBase is designed to manage tables with billions of rows and millions of columns.

HBase data model consists of tables containing rows. Data is organized into column families grouping columns in each row.

Hbase stores data as key value pairs.

7. What happens internally when new data gets inserted into HBase table?

If we insert new data into Hbase ,first data stored into WAL after inserted into MemStore.

After reaching memstore storage threshold data will be flush to files called Hfiles. And WAL entries are discarded up to the last unflushed modification.