

1. Difference b/w Hbase and RDBMS ?

1. Hbase = column oriented database
2. scalable with respect to processing and storage
3. nosql
4. supports partitioning

RDBMS = row oriented

Has scalability but limited in storage capacity

Sql type type

No built in functions for that

2. When should we use hbase ?

when we need to work with billions of rows and millions of columns, hbase is the best.

3. difference b/w hbase and hdfs ?

HDFS is a distributed file system for storing and managing large data across clusters. HBase is built on top of HDFS and provides fast record lookups (and updates) for large tables.

4. why to use Hbase?

High capacity storage system.

Distributed design to cater large tables.

Column-Oriented Stores.

Horizontally Scalable.

High performance & Availability.

supports random real time CRUD operations.

5. Mention how many operational commands in Hbase?

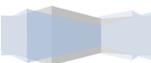
Operational command in Hbases is about five types

Get

Put

Delete

Scan



Increment

6) In Hbase what is column families?

Column families comprise the basic unit of physical storage in Hbase to which features like compressions are applied.

7) What is the use of row key ?

The use of row key is to have logical grouping of cells which ensures all cells with the same rowkey are co-located on the same server.

8) Explain deletion in Hbase? Mention what are the three types of tombstone markers in Hbase?

When you delete the cell in Hbase, the data is not actually deleted but a tombstone marker is set, making the deleted cells invisible. Hbase deleted cells are actually removed during compactions.

Three types of tombstone markers are there:

Version delete marker: For deletion, it marks a single version of a column

Column delete marker: For deletion, it marks all the versions of a column

Family delete marker: For deletion, it marks of all column for a column family

9) Explain how does Hbase actually delete a row?

In Hbase, whatever you write will be stored from RAM to disk, these disk writes are immutable barring compaction. During deletion process in Hbase, major compaction process delete marker while minor compactions don't.

10) Explain what happens if you alter the block size of a column family on an already occupied database?

When you alter the block size of the column family, the new data occupies the new block size while the old data remains within the old block size. During data compaction, old data will take the new block size. New files as they are flushed, have a new block size whereas existing data will continue to be read correctly. All data should be transformed to the new block size, after the next major compaction.

