1.What is NoSQL data base?

No SQL database is a type of database which does not uses SQL and is a not a relational and normalized database. This is also schema less database. They can also store unstructured data. They also have good performance, scalability and flexibility which is needed by high data intensive applications.

E.g. HBase, Cassandra

2.How does data get stored in NoSQl database?

In No SQL database, the data is stored based on the row key and value pairs. Every row is identified with a unique row key and the data is stored accordingly with the row key to the column name with the data value.

3.What is a column family in HBase?

Column family

This is the logical grouping of the columns of table. Every column is grouped under a column family.

Row key	Name		Age
	First name	Last name	Age
1	Abc	Xyz	30

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

There is no limit in the maximum number of columns. This is used in commodity hardware. Hence, data capacity depends in hardware memory.

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

HBase is a schema less database and the column is defined at the time of data insertion since, it is easier for storing huge data and also improve speed and agility. If the column is defined at the time of table creation, then adding column will need the table alteration which is complex for such a huge data.

6.How does data get managed in HBase?

Data in HBase is stored as unstructured data and is managed in multiple nodes when the data is increased. It stores data in key value pairs in columnar model, which are together known as column families.

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

The following 4 operations are done while inserting data into the HBase:
➢ Writng logs: when it receives user input command, it is logged into log for the fault tolerance.
➢ The data received in user input is written into Memstore (RAM) of the data node.
➢ The data is then stored in HFile into HDFS.
➢ After successful writing of file, it sent the acknowledgement to user.