**Answer1:**

Memstore stores the recent updates made to a table data. Data present in memstore is not persisted.

Hfile contains the data once it flushes from memstore. Data present in hfile is persisted.

**Answer2:**

Compaction is the process of merging several small Hfiles into few big Hfiles. There are two types of compaction :

1. Major Compaction
2. Minor Compaction

**Answer 3:**

* Tables
* Rows
* Column Families/Columns
* Versions/Timestamp
* Cells

**Answer4:**

It will not be possible to access data stored in Hbase.

**Answer5:**

* KeyOnlyFilter:

This filter does not take any arguments. It returns only the key component of each key-value.

* FirstKeyOnlyFilter:

This filter doesntt take any arguments. It returns only the first key-value from each row.

* Prefixfilter:

This filter takes one argument  a prefix of a row key. It returns only those key-values present in a row that starts with the specified row prefix.

* ColumnPrefixFilter:

This filter takes one argument  a column prefix. It returns only those key-values present in a column that starts with the specified column prefix. The column prefix must be of the form qualifier.

* MultipleColumnPrefixFilter:

This filter takes a list of column prefixes. It returns key-values that are present in a column that starts with any of the specified column prefixes. Each of the column prefixes must be of the form qualifier

* ColumnCountGetFilter:

This filter takes one argument  a limit. It returns the first limit number of columns in the table.

* PageFilter:

This filter takes one argument  a page size. It returns page size number of rows from the table.

* InclusiveStopFilter:

This filter takes one argument  a row key on which to stop scanning. It returns all key-values present in rows up to and including the specified row.

* Family Filter(Qualifier Filter)

This filter takes a compare operator and a comparator. It compares each qualifier name with the comparator using the compare operator and if the comparison returns true, it returns all the key-values in that column.

* **ValueFilter**

This filter takes a compare operator and a comparator. It compares each value with the comparator using the compare operator and if the comparison returns true, it returns that key-value.

* SingleColumnValueFilter

This filter takes a column family, a qualifier, a compare operator and a comparator. If the specified column is not found – all the columns of that row will be emitted. If the column is found and the comparison with the comparator returns true, all the columns of the row will be emitted. If the condition fails, the row will not be emitted.

**Answer 6:**

The four primary data model operations are Get, Put, Scan, and Delete.

**Answer7:**

Hbase can be act as source or sink for map reduce job.

**Answer8:**

Region servers are responsible for all read and write requests for all regions they serve,

and also split regions that have exceeded the configured region size thresholds. Clients

communicate can directly with them to handle all data-related operations.