are as follows:

(1) Input phase: Here we have Record Reader that translates each Record in i/p file and sends the parsed data to the mapper in the form of key-value pairs

(2) Map- Map is user defined function, which take a series key value pair and processes each one of them to generate zero or more key value pairs

(3) Intermediate key: The key value pairs generated by the mapper are known as intermediate keys

(4) Combiner: Combiner is a type of local reducer that groups similar data from the map phase into identifiable sets It takes the intermediate keys from the mapper as i/p and applies a user-defined code to aggregate the values in a small scope of one mapper

(5) Shuffle and sort: The reducer task starts with the Shuffle and sort step. It downloads the grouped key-values pairs onto the local machine, where the reducer is running

(6) Reducer: The reducer takes the grouped key-values paired data as input and runs a reducer function on each one of them. Here, the data can be aggregated, filtered, and combined in a number of ways, and it requires a wide range of processing once