MapReduce is a system that makes writing parallel code easier for programmers.

It takes four arguments:

The first argument is the mapper, a function that takes one key-value pair and outputs a list of intermediate key-value pairs. (A mapper is the kind of function used as an argument to map.)

Next is the reducer, which collects and combines values. It plays a vital role in turning intermediate key-value pairs into output. (A reducer is the kind of function used as an argument to accumulate, also known as reduce.)

Then comes the base case, which is usually the "identity" of the reducer function given to accumulate.

Finally, there's the vast body of data to be processed, encoded as a stream of key-value pairs.