## Big Data (CS 522)

### Knowledge is Structured in Consciousness

#### Lesson 2

### **MapReduce Basics**

Spontaneous fulfillment of desires

The input to a MapReduce job starts as data stored on the underlying distributed file system. Output key-value pairs from each reducer are written persistently back onto the distributed file system (whereas intermediate key-value pairs are transient and not preserved). The output ends up in r files on the distributed file system, where r is the number of reducers. For the most part, there is no need to consolidate reducer output, since the r files often serve as input to yet another MapReduce job.

TM is a simple, effortless mental technique that can be used by anyone, no matter what their lifestyle is. It promotes non-procedural (spontaneous) fulfillment of desires, by bringing the desires of the individual into accord with Natural Law, without the individual having to know the underlying mechanism.

#### **MAIN POINTS**

- 1. The mapper is applied to every input key-value pair (split across an arbitrary number of files) to generate an arbitrary number of intermediate key-value pairs. The purpose of the map method is to organize the essential data for future computation by weeding out the irrelevant information. *Nature is capable of harmoniously organizing the entire universe from an unmanifest level.*
- 2. The reducer is applied to all values associated with the same intermediate key to generate output key-value pairs. Implicit between the map and reduce phases is a distributed "group by" operation on intermediate keys. Intermediate data arrive at each reducer in order, sorted by the key. However, no ordering relationship is guaranteed for keys across different reducers. Sometimes it is necessary to step back from the points to see the wholeness. *TM promotes the ability to see the wholeness as well as the point value, the larger picture as well as the details.*

# CONNECTING THE PARTS OF KNOWLEDGE

#### WITH THE WHOLENESS OF KNOWLEDGE

- 1. MapReduce is a simple but elegant programming paradigm.
- 2. MapReduce paradigm can be used to solve a wide variety of problems.
- 3. **Transcendental consciousness** is a silent field of all possibilities, the basis of any desired outcome.
- 4. Impulses within the Transcendental Field: Transcendental consciousness has infinite energy, infinite creativity, and infinite intelligence, which allows the impulses within the transcendental field to create anything, giving it the qualities of infinite flexibility and infinite power.
- 5. Wholeness moving within itself: In unity consciousness, any desire is projected
  - from the field of pure consciousness and therefore is fulfilled immediately.