Programming Assignment 2 [4%]

- **Implement a Multithreaded Sorting Application using Pthreads API of Linux**
  - Input: the set of integers (the number of integers is assumed not to exceed **1000**)
  - Output: the sorted list of input integers

```
> thrd-sort                                  // Execute your program
7 12 19 3 18 4 2 6 15 8                      // Insert any random sequence of integers to be sorted
2 3 4 6 7 8 12 15 18 19                      // Print numbers in the sorted order
>                                            // Exit your program
```

  - You can start with the source code in Figure 4.9 (Pthreads example of summing over 1 to n) of the textbook
  - How to compile your source code in Linux (or probably other Unix as well):
    - gcc -pthread -o thrd-sort thrd-sort.c

- **Submission**
  - Due date: **April 12, 2019, 23:59**
  - Upload your **source file** and **0.5 page description** (could be another .txt file) to the I-Class website
    - The description should include a very short explanation of your implementation (< 5 sentences), and any assumptions you made to run your program.

Programming Assignment 2 (Cont.)

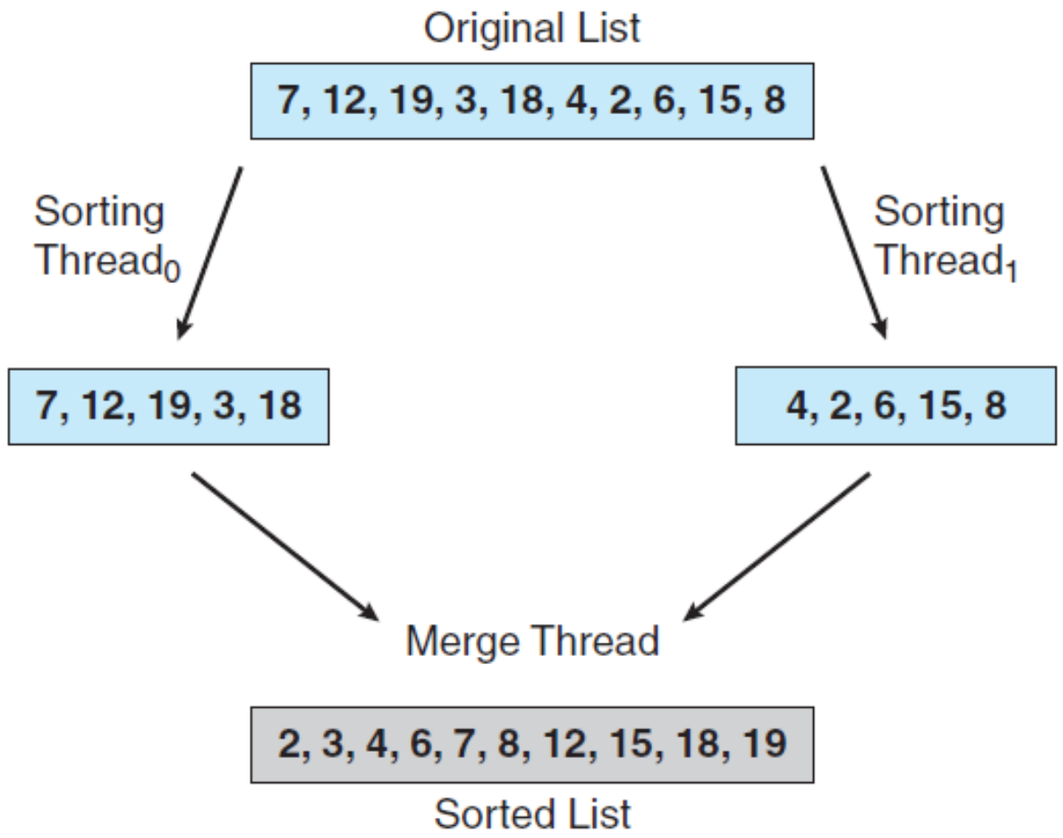

Figure 4.20 Multithreaded sorting.