Code Explanation Way1

# way1Ser.c

## Implementation

The implementation of the serial method is the straight forward with regard to the pseudo code provided.

# way1Para.c

The parallel method is similar to the serial method, however, the task need to be scheduled into different threads.

The work station of the computer lab has a 4 core 8 threads, which means the maximum number of the threads we can use is 8.

To parallel this task, each thread will find its local maximum value and compare it with the global maximum value.

To ensure the data integrity, the maximum value and the row number is protected with mutex. After all the thread finished, the value stored in the global should be the row number with maximum value.

The number of the threads are determined by the length of the 1D array. Each thread should process at least 2 data. When the length larger than 16, the data will be distributed evenly into all the threads.