LAB ASSIGNMENT # 2 (Algorithms & Operating Systems)

Deadline: October 31, 2013 (23:59 PM)

[Concurrent Mergesort]

Write a program for mergesort that works as follows.

- The given set of integers is stored in shared memory.
- If the number of integers is less than 20, then the process sorts the integers using bubble-sort.
- Otherwise, it recursively creates one child process for sorting the left half and another child process for sorting the right half.
- After both children terminate, the parent merges the left and right halves.
- Note that the child processes should in turn follow the same procedure and create children of their own if needed.

Your program should read a list of integers (and nothing else). The first integer in the list will indicate the number of integers to be read.

Submit your only C program file: concurrentmergesort_rollno.c online in the course portal on or before October 31, 2013 (23:59 PM). No extension date of lab assignment will be allowed.