

You have an array on N size with random numbers. Write a multithreaded program that performs the following operations on this array:

Thread 1 sorts the even numbers

Thread 2 sorts the odd numbers

Thread 3 merge the results (even number in the top part of the array).

Example: Assume we have an array [2, 29, 3, 0, 11, 8, 32, 94, 9, 1, 7] of 11 elements.

Thread one results [0, 2, 8, 32, 94]

thread two results [1, 3, 7, 9, 11, 29]

thread three [0, 2, 8, 32, 94, 1, 3, 7, 9, 11, 29]