MA512 Data Structures and Algorithms Lab

Jan - May 2021

Assignment 2

---

1. Implement in C/C++ the Divide and Conquer Algorithm for counting the number of inversions of an array.

   (a) First check whether your program counts 0 inversions for a sorted array and $\dfrac{n(n-1)}{2}$ for a reverse sorted array;

   (b) Test your program correctness with "tstcase1.txt";

   (c) Find the number of inversions for the integers in the file "tstcase2.txt". This file contains numbers between 1 and 100000 in some order with no repetition.