

Are You Smarter than a Fifth Grader

Time Limit – 3 sec

The Problem

The Problem is to find are you smarter than a fifth grader or not. You will be given some number between 0 to 9 inclusive. You have to find the maximum and minimum number can be generated with the numbers. Believe me or not the problem is taken from the math book of class six.

Input and Output

The input file contains several test cases. Each case contains a Number N ($0 \leq N \leq 5000$). Next line contains N digits between 0 to 9 inclusive separated by one or more spaces.

Print the maximum number and minimum number of N^{th} digits they made in two lines. See Sample input output for Exact format.

Input file is very large so be aware about Time Limit. At least Use faster io method.

Sample Input

5

1 3 2 5 4

Sample Output

54321

12345

Problem Setter : Kazi Sadlil Rhythm