



## Problem B Majority Number

Input File: B.DAT

Program Source File: B.PAS or B.C or B.CPP

The *majority number* of a non empty sequence of  $N$  numbers is precisely that number which occurs more than  $N/2$  times in the sequence. Therefore, for a non empty sequence, there is at most one such number. For example, the sequence 3, 3, 4, 2, 4, 4, 2, 4, 4 has the majority number 4, whereas the sequence 3, 3, 4, 2, 4, 4, 2, 4 has no majority number.

A text file contains non empty sequences of long integers. Each sequence, which can be pretty long, starts with a number that specifies the number of long integers in the sequence. This number is not part of the sequence. The numbers are separated freely by white-spaces (spaces, tabs and line breaks). The data in the text file are guaranteed correct.

input	output
6	No majority number
100000 -2 56 100000 -2 56	-2
5	1000
-2 100 -2 -2 1001	
1	
1000	

Figure 1. An example of program input and output

Write a program that for each sequence of long integers read from the text file prints the majority number of the sequence. If there is no such number the message **No majority number** is printed. The results are printed on separate lines on the standard output, as illustrated in figure 1.