Question No # 4 : Major Element

Objective: Loop

"Major element" is a value within a series of values whose number of occurrences within the series is greater than or equal to half of the total number of values.

Your task

Write a Python program to find the major element from a series of values (between 0-9 inclusive only). NOTE: ***dictionary is not allowed***

INPUT

A single line containing a series of values, where all values are in the range of 0-9.

OUTPUT

The major element within the series.

If no major element is found, printout -1. If only two values are in the series and their number of occurrences is half/half, then no major element is found and will print out -1 also.

EXAMPLES

Input (from keyboard)	Output (on-screen)
1 1 1 1 1	1
1 1 1 2 2	1
1 1 1 2 3 4	1
1 1 1 2 3 4 5	-1
7 1 7 2 7 4 7 5	7
1 1 1 2 2 2	-1
1 2 3 4 5 6 7 8 9 0	-1
1 2 3 4 5 6 7 8 9 0 1	-1

Test Cases in Grader

Testcases will be grouped. Each group has the following criteria:

Testcases quantity	Testcase characteristics
50%	No major element found
50%	Major element found