

OVER9000

Add each number in the input to the total, which begins at 0. Find the first integer that brings the total to over 9 000.

Input

There is one integer per line. Each integer is between 1 and 9 999, inclusive. The input file contains at most 5 000 integers.

Output

Output the first integer within the input file that is brings the total to over 9 000.

Example

Input	Output
1456 2882 98 2432 28 455 1002 837 1938 3764 603	837