DOMjudge sample problem
`boolfind` – 'Boolean switch search'

Problem description

We have a very long array of boolean values, and it is known that the first value is `true` and the last value `false`. You are asked to search for a position in the array where a true value is succeeded by false.

The input is as follows. The first line contains one integer: the number of testcases. Then follows for each testcase a number $2 \leq n \leq 10^9$, the length of the zero-indexed array. After that, the input depends interactively on your program's output. When you output a single line 'READ x' with x an integer between 0 and $n - 1$, a line containing either `true` or `false` will be returned, specifying the value at position x in the array. When you output a single line 'OUTPUT x', then this is taken as the answer of the position which has value `true` and is followed by `false` and the next testcase will be given.

Sample input/output

The input box contains the input, but additionally, after the array length, a line containing all values of the array with booleans represented by 0 and 1. The input (and output) after that is a sample interactive session.

Input	Output
1 5 1 1 0 1 0 false true	READ 2 READ 1 OUTPUT 1