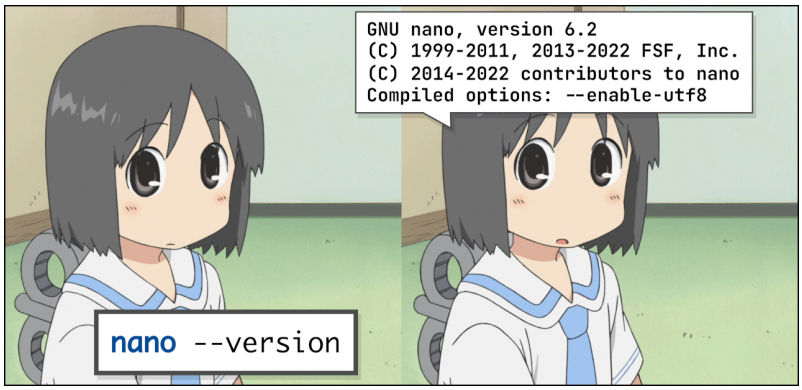
Problem C. Comedy's Not Omnipotent

Input file:	*standard input*
Output file:	*standard output*
Time limit:	3 seconds
Memory limit:	256 mebibytes



This is an interactive problem.

Vim, Emacs, and Nano are playing a guessing game. Vim secretly told Nano a **random** binary sequence $\{a_i\}$ of length n. Emacs can query Nano with a set of indices $I \subseteq \{1, 2, \ldots, n\}$. Nano will reply with $\sum_{i \in I} a_i$. Could you please help Emacs find $\{a_i\}$ in **less than** $n/2$ queries? Additionally, the total size of the sets in all queries **must not** be greater than $3n$.

Interaction Protocol

The first line of input contains an integer n.

You can use any of the following operations and write it to standard output:

1. "`?` k i_1 i_2 $\ldots$ i_k": Send a query with $I = \{i_1, i_2, \ldots, i_k\}$. The elements must be **distinct**. Nano will write the result back to standard input. There must be **less than** $n/2$ queries, and the sum of k for all queries **must not** be greater than $3n$.
2. "`=` $a_1 a_2 \ldots a_n$": Submit the binary sequence $\{a_i\}$ you found. Note that there are no spaces between a_i. Your program must exit gracefully after this operation.

Remember to **end the line** and **flush** the standard output after each operation. For example, you can use the function `fflush(stdout)` in C or C++, `System.out.flush()` in Java, `flush(output)` in Pascal, or `sys.stdout.flush()` in Python.

Example

standard input	*standard output*
4 2 1 2	? 4 1 2 3 4 ? 2 1 2 ? 2 2 3 = 0110

Note

The size $n = 10^5$ **in all tests**. The example with $n = 4$ shows the format but **will not be tested**.

There are at most 50 tests in this problem. The tests were generated randomly, but are fixed in advance. In each test, every binary sequence of length n had the probability of $1/2^n$ to be generated.