Problem G
That's Magic !

Input : STDIN
Output : STDOUT

A magician has the following three cards:
-A red card with the integer A.
-A green card with the integer B.
-A blue card with the integer C.
He can do the following operation at most K times (K times or less)
Choose one of the three cards and multiply the written integer on it by 2.
His magic trick is successful if, after the operations, these conditions are satisfied :
The integer on the green card is strictly greater than the integer on the red card.
The integer on the blue card is strictly greater than the integer on the green card.

IN $1 \le A \le 10$ $1 \le B \le 10$ $1 \le C \le 10$ $1 \le K \le 20$

OUT Can the magician perform his trick successfully? If the magic can be successful, print "You tricked us!"; otherwise, print "Oh no!"

EX 1	INPUT	OUTPUT
	7 2 5 3	You tricked us !

The magic will be successful if, for example, he does the following operations:

First, choose the blue card. The integers on the red, green, and blue cards are now 7, 2, and 10, respectively.

Second, choose the green card. The integers on the red, green, and blue cards are now 7, 4, and 10, respectively.

Third, choose the green card. The integers on the red, green, and blue cards are now 7, 8, and 10, respectively.

NOTE Note that the input method specified in the top of this paper is the standard input(stdin). Use these bits of code according to the programming language you are using to be able to read from the stdin.
C++:

```
int myInteger;
string myString;
cin >> myInteger>> myString; // read an integer then a string
```

Java (use the following Scanner object):

```
Scanner sc = new Scanner(System.in);
int myInteger = sc.nexInt();  // read an integer
String myString = sc.next();  // read a string
sc.close();
```