Problem A. 77613.max

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

You need to find the maximum number from this set.

Input

Given a set of numbers injected by the number 0. The number 0 itself is not included in the set of numbers.

Output

Output the answer.

Example

standard input	standard output
1 2 3 4 5 6 7 0	7

Note

You must use the set.

Problem B. 77174. Simple Map Problem

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

You are given an amount of words. You should write a program which prints how many times word appears in the list.

Input

Input contains one single number N - the amount of words and N words.

Output

Output words with one number - how many times the word appeared in the list. Also, words should be ordered alphabetically. For brief understanding look for examples.

Example

standard input	standard output
14 At age twelve, Musk taught himself computer programming and created video game called Blastar	At 1 Blastar 1 Musk 1 age 1 and 1 called 1 computer 1 created 1 game 1 himself 1 programming 1 taught 1 twelve, 1 video 1

Note

Solve by using map!

Problem C. 77176. Good or not?

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

Every sunday Akerke gets letters from her friends from USA. In Akerke's opinion a good letter should contain more or equal than 7 non-repeating words. Otherwise, she will think that friend does not like her enough.

Input

Input contains a letter from one of the Akerke's friend.

Output

Output whether a letter is good or not. Print "Not good"if there is less than 7 non-repeating words in the letter. Otherwise, print "Good".

Examples

standard input	standard output
Hi Akerke	Not good
Hi Akerke what is your main focus for today	Good

Problem D. 77202. Erase vector!

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

You are given a vector of N integers. Also, you are given 2 queries. First query is a position in vector needs to be erased. Next query consists of 2 integers - range of the positions in vector which should be removed from the updated vector after first query.

Input

The first line of the input contains an integer N .The next line contains space separated N integers.The third line contains a single integer - the position of an element that should be removed from the vector. The fourth line contains two integers l and r - the range that should be erased from the vector inclusive of a and exclusive of b. It is guaranteed that $1 \leq l \leq r < n$

Output

Output elements of the vector after 2 queries.

Examples

standard input	standard output
5 3 4 2 6 7 3 2 4	3
7 1 2 3 4 5 6 7 2 3 5	1 3 7

Note

Solve by using vector.

Problem E. 77866.city

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

Rayan aka Makhambet loves to play the city game with her daughter. The daughter is very smart and he really wants to prepare for the game. For this, he wants to write a program in which a list of countries and cities of each country is given. Then the names of cities are given. For each city, specify in which country it is located.

Input

The program receives at the input the number of countries N. Next comes N lines, each line starts with the name of the country, then comes the name of the city of that country. The next line contains the number M, followed by M requests - the names of some M cities listed above.

Output

For each query, print the name of the country in which the city is located.

Example

standard input	standard output
2 Russia Moscow Ukraine Kiev 3 Moscow Moscow Kiev	Russia Russia Ukraine

Note

You must use the map.

Problem F. 77170. Longest and Shortest

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

Zharaskhan loves when people talk with each other with short words. Also, if someone speaks only with short words he becomes his favourite type of person. Determine whether a person is Zharaskhan's type or not.

Input

Input contains N number of words.

Output

Print "My type!"if the number of short word is more or equal than the number of long word. Otherwise, print "Not my type". Words may be repeated!

Examples

standard input	standard output
9 Hi my friend Asan who is very good friend !	Not my type
10 He likes the world as much as loves the universe!	My type!

Note

For first example: longest word is "friend"and it appears in the text 2 times, which is more than shortest word "is"or "my"appears in the text. In second example one of shortest words "as"appears 2 times.