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.

Examples

standard input	standard output
1 2 3 4 5 6 7 0	7
12 2134 43 1234 1234 2 23 0	2134
2143 13245643 12343 12231432 0	13245643
2314 2435 123 3256746 57567865 0	57567865
78 42 1 23 4 2 53 4532 45 42 53 55 43	4532
5 52 34 345 4 534 2 53 34 2345 2 4 0	
798 32 12 2384723 49827 428734 83	2384723
28772 234 234 0	
1 2 38 2 7 182 3 1283 13 9 193 2912	1923823
383 1923823 0	
123 12 321 12 3 4233 37 472 283 389	33482
29837 2372 3 18 2493 13 92 12 33482	
193 19 318 1839 0	
126 127 1 273847 291 2371 212831 23	273847
173 173 1371 371 37 173 17 31 3173	
7123 182 1893 391 3713 193 812 3194	293847
88924 28347 2347 293847 234982 1238	
47234 982 347 2384 0	

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 1
At age twelve, Musk taught himself	Blastar 1
computer programming and created	Musk 1
video game called Blastar	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 or equal 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 - the range that should be erased from the vector inclusive of a and exclusive of b.

Output

Output the size of the vector after 2 queries and its elements.

Examples

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

Note

Solve by using vector.

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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.

Examples

standard input	standard output
2	Russia
Russia Moscow	Russia
Ukraine Kiev	Ukraine
3	
Moscow	
Moscow	
Kiev	
2	kaz
kaz ast	
kyr bish	
1	
ast	
5	ad.,
	sdu
kbtu 1	kazgu
muit 2	muit
kazgu 3	
sdu 4	
enu 5	
3	
4	
3	
2	
6	tima
erken turk	rayan
magzhan kaz	rayan
timur rus	aida
aida ozbek	timur
rayan bel	magzhan
tima Tadzhik	timur
7	
Tadzhik	
bel	
bel	
ozbek	
rus	
kaz	
rus	
5	
1 2	
11 3	
111 4	1
1111 5	1
11111 6	
5	
2	
2	
2	
2	
2	
5	i
i 1	want
want 2	
in 3	Page 6 of 8
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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	Not my type
Hi my friend Asan who is very good	
friend !	
10	My type!
He likes the world as much as loves	
the universe!	

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.